IBM VSE/Enterprise Systems Architecture
VSE Central Functions

VSE/VSAM
Backup/Restore Feature Logic

Version 6 Release 3

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VSE Central Functions

IBM

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Backup/Restore Feature Logic

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> **Note!**
>
> Before using this information and the product it supports, be sure to read the general information under "Notices" on page ix.

Second Edition (December 1998)

This edition applies to Version 6 Release 3 of VSE/VSAM, which is part of VSE Central Functions, Program Number 5686-066, and to all subsequent releases and modifications until otherwise indicated in new editions.

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Preface

This logic manual provides detailed information about the VSE/VSAM Backup/Restore Feature. It is intended for persons involved in program maintenance and for system programmers who are altering the program design. It is not required for effective operation of the product.

This manual contains information supplementing that contained in the following volumes:

- *VSE/VSAM VSAM Logic,* SC33-6321.
- *VSE/VSAM Access Method Services Logic,* LY24-5195.

This manual refers to these books when appropriate; information in them is not duplicated here.

Organization of this Publication

This manual's structure differs from that of the conventional logic manual. Chapters 1, 2, and 8 should be read completely; Chapters 3 through 7 are for reference.

- "Chapter 1: Format of the Backup File" describes the records and control information present on a backup file or volume.

- "Chapter 2: General Concepts" describes processing internals. Topics include control area processing, buffer handling, and the use that BACKUP and RESTORE make of control blocks. A summary of the major operations of the BACKUP and RESTORE commands is also included.

- "Chapter 3: Control Block Structure" summarizes the use of the major control blocks used by this Feature. The control block fields are *not* documented; refer to program listings for this information.

- "Chapter 4: Module Structure" shows the module-to-module flow for BACKUP and RESTORE. It also lists all executable and non-executable modules and their functions.

- "Chapter 5: Phase Structure" lists BACKUP/RESTORE phases, their functions, and the modules in each. The phase-to-link book structure is also shown.

- "Chapter 6: Macro Directory" lists the macros used by BACKUP and RESTORE and their functions.

- "Chapter 7: Control Block Description and Format" describes the Control Block structure.

- "Chapter 8: Diagnostic Aids" lists dump points, trace tables, abort codes and a message cross-reference table. It describes how to find some of the control blocks, how to determine which module was in control at the time of failure, which condition codes were issued, and which modules can issue each message.

Prerequisite Publications

You should be familiar with the following manuals before using this publication:

- *Using VSE/VSAM Commands and Macros,* SC33-6532
- *VSE/VSAM Programmer's Reference,* SC33-6535

Summary of Changes

VSE/VSAM Backup/Restore Version 2 Release 2 lets you perform the following actions:

- Backup and restore empty objects
- Restore objects to a DASD volume of a different device type than the volume where the objects originally resided. You can move objects in the following ways:
  - From one CKD (ECKD) device to another CKD (ECKD) device
  - From one FBA device to another FBA device
  - From a CKD (ECKD) device to an FBA device
  - From an FBA device to a CKD (ECKD) device.
- Change the allocation size for the data component of an object at restoration (new DATARECORDS parameter).
- Change the index CI size at restoration (new INDEXCISIZE parameter).
- Back up VSAM files onto disk storage (and restore them)
- Write the backup files onto tape or disk in a compressed format (called "compacted"
- Restore the backup file from tape or disk and uncompact it, if compacted.

A message-to-module cross-reference has been added to this manual, indicating which Backup/Restore modules could have issued each message.

Chapter 1. Format of the Backup File

Backup File on Tape Volumes

During a backup to tape operation a labeled or unlabeled tape file is created, depending on whether or not STDLABEL was specified.

The backup file is a single-volume or multi-volume file consisting of several smaller subfiles that are separated by tapemarks and do not contain their own sets of labels. The tape marks allow skipping individual files during restoration without reading and bypassing the individual blocks of the files to be skipped. Instead, Forward Space File commands, which free the tape channel for the duration of the skip operation, are used to skip from tapemark to tapemark. Because of the interspersed tapemarks, labeled backup files cannot share a tape volume with other labeled files. The backup file, whether labeled or unlabeled, always starts at the beginning of a tape volume. Figure 1 on page 2 illustrates the physical layout of the backup file on tapes.

The VOL1, HDR1, EOV1, and EOF1 labels are present only if the STDLABEL parameter for the BACKUP command was specified (that is, the backup file is labeled).

Multi Catalog Backup to Tape

For labeled Tapes a new offer was developed, to allow Backup of multiple catalogs to tape. The Backup file of each catalog is written one after the other to tape. This concept is accomplished thru the use of the NOREWIND parameter to maintain Tape position after Backup. Figure 2 on page 3 illustrates the physical layout of a multi catalog backup on tape.

Backup File on Disk Volumes

During a backup to disk operation a backup file on disk volumes is created. A backup file on disk volumes can extend over several disk extents on several volumes. As disk devices CKD-, ECKD-, or FBA devices are usable, but all disk volumes occupied by one backup file must be of the same device type. At restoration time all extents belonging to the backup file on a backup volume are found by means of the file labels contained in the corresponding VTOC. The first extent on each volume contains the backup file directory. Following the directory the backup objects are recorded. On CKD- or ECKD-disks each object is followed by an EOF record. Therefore such an backup file cannot be processed as a normal file, but only by the VSE/VSAM Backup/Restore program. The first record in each backup file extent is a begin-of-extent (BOE) record, the last record in each full backup file extent is an end-of-extent (EOE) record. Figure 3 on page 4 illustrates the physical layout of the backup file on disk volumes.

Directory

Each volume of the backup file contains a directory that contains two time stamps, some general information concerning the backup file, and a list of all objects included in the backup file.

The directory consists of one or more fixed-size blocks that are subdivided into a header, called the *directory block header,* and a set of *directory entries.* The last directory block may only be partially filled with directory entries. The number of objects of the backup file is identical to the number of directory entries unless the creation of the backup file was prematurely terminated, in which case there may be more directory entries than objects on the backup file. The premature end of a tape resident backup file is determined from the EOT (end-of-tape) record on the last backup volume, assuming that an EOT record was

written. (An EOT is written if the BACKUP was prematurely terminated by an error other than a tape I/O error and was not canceled.) The premature end of a backup file on disk is recognized by empty directory entries, i.e., entries which contain only an object name.

The number of directory entries determines the number of directory blocks since each directory block has a fixed size of 1680 bytes on tape or 2048 bytes on disk. In the case of backup to tape the directory is preceded and followed by one tapemark.
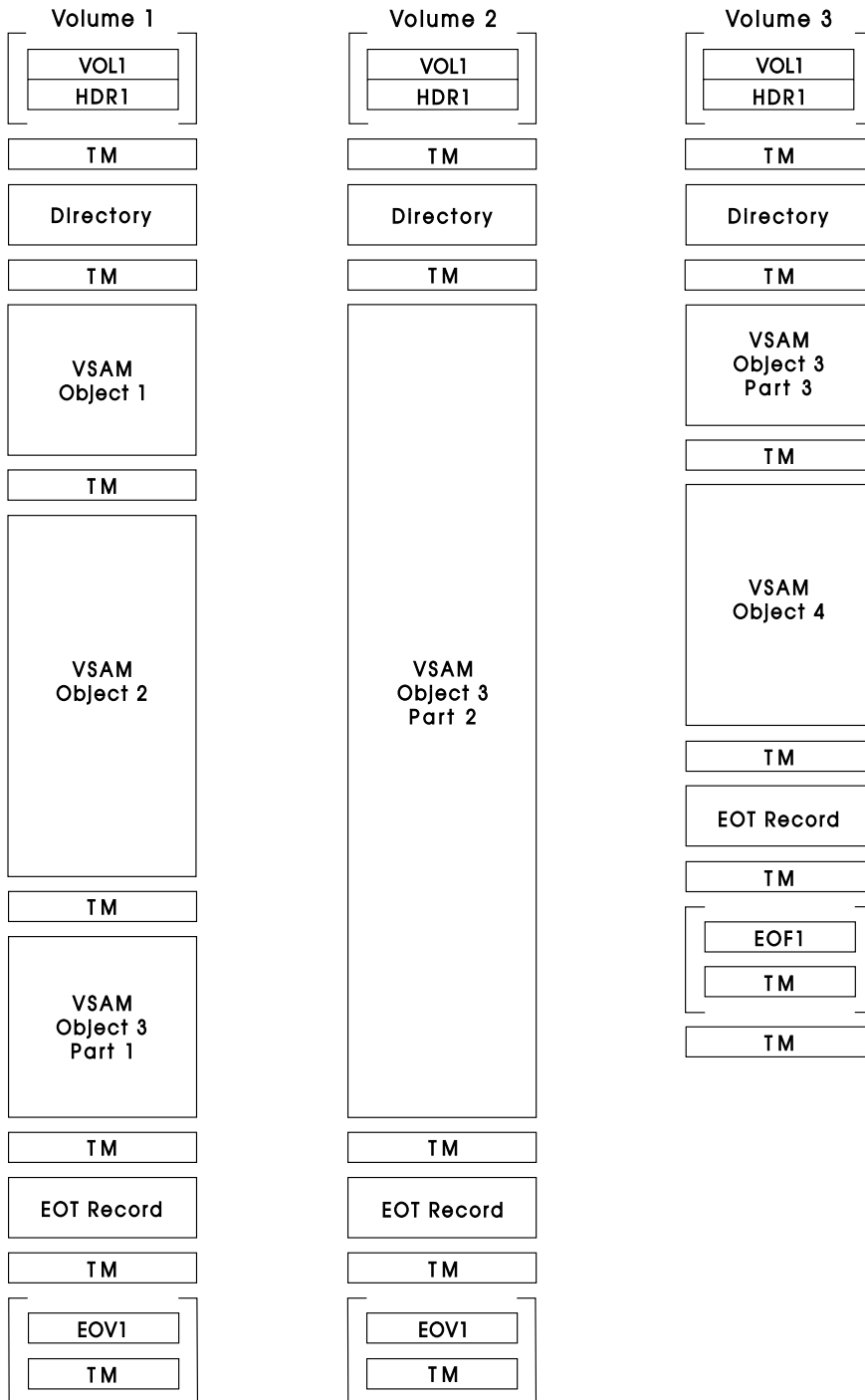
Figure 1. Format of the Backup File on Tapes

Volume 1

VOL1
HDR1

TM

Directory

TM

VSAM Object 1

TM

VSAM Object 2

TM

EOT Record

TM

EOF1
TM

HDR1

TM

Directory

TM

VSAM Object 1 Part 1

TM

EOT Record

TM

EOV1
TM

Volume 2

VOL1
HDR1

TM

Directory

TM

VSAM Object 1 Part 2

TM

VSAM Object 2

TM

EOT Record

TM

EOF1
TM

TM

first catalog backup

second catalog backup
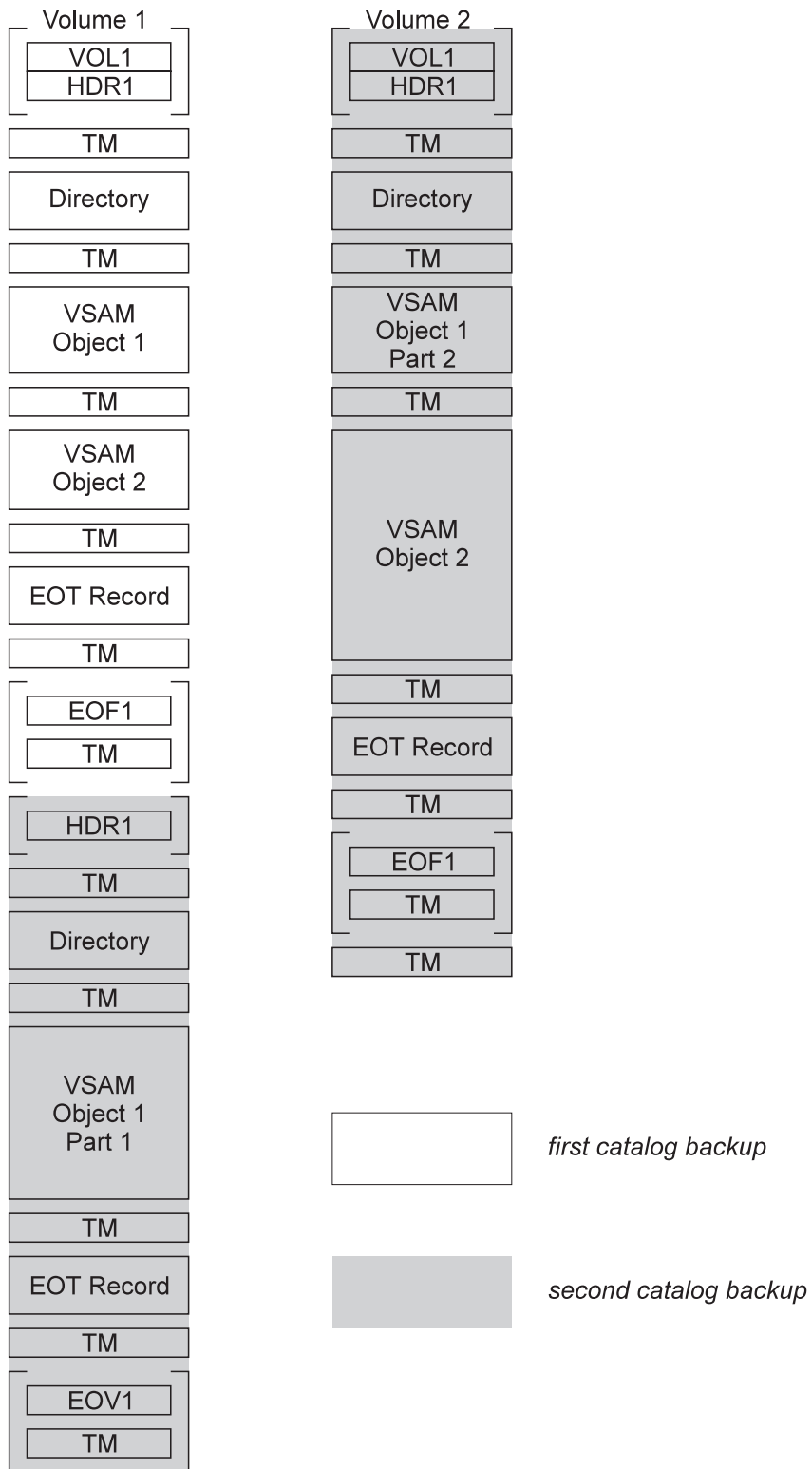
Figure 2. Format of multiple Catalog Backup on Tape

Extent 1 on volume 1

BOE	Directory	. . .

| . . . | VSAM object 1 | . . . |

| . . . | | . . . |

| . . . | EOF | . . . |

| VSAM object 2 - part 1 | . . . | EOE | EOF |

Extent 2 on volume 1

BOE	. . . VSAM object 2 - part 2

| . . . | EOE | EOF |

Extent 3 on volume 2

BOE	Directory

| VSAM object 2 - part 3 | EOF | . . . |

| . . . | VSAM object 3 | . . . |

| . . . | EOF |
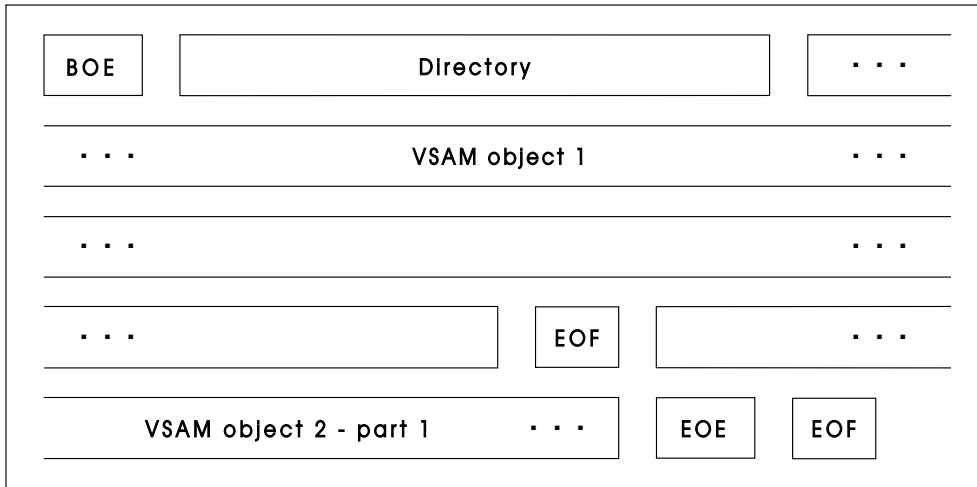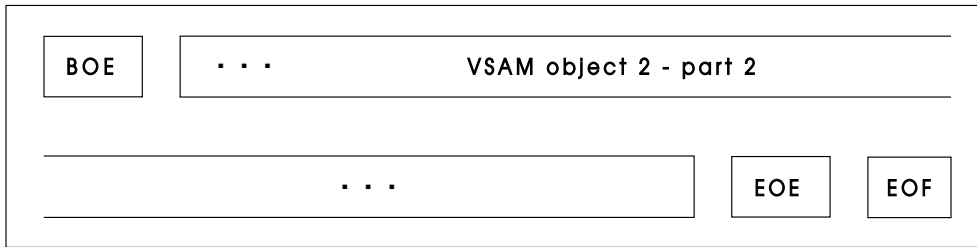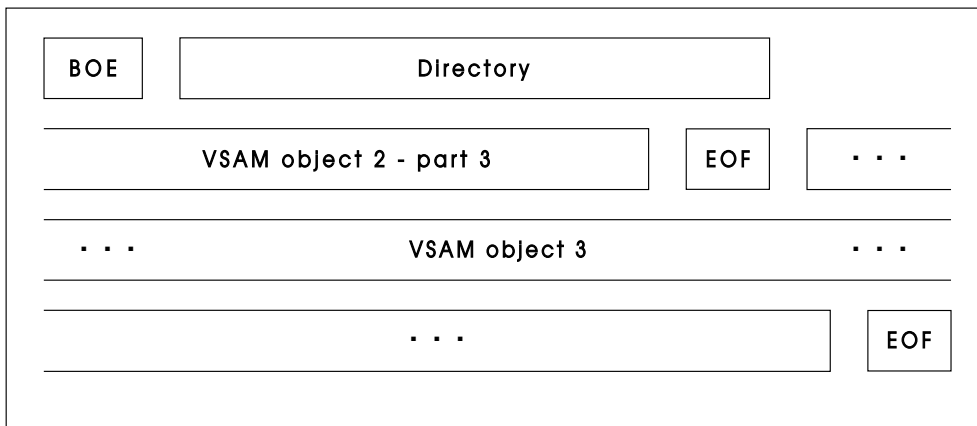
Legend: BOE - begin of extent block
        EOE - end of extent block
        EOF - record with length zero

Figure 3. Format of the Backup File on Disk

The layout of the directory is shown in Figure 4 on page 5.

```
┌─────────────────────────────────┐
│   Directory Block Header        │
│         (DBH)                   │
├─────────────────────────────────┤
│                                 │
│   Directory Entry 1             │
│                                 │
├─────────────────────────────────┤
│                                 │         Directory Block 1
│   Directory Entry 2             │
│                                 │
├─────────────────────────────────┤
│              •                  │
│              •                  │
│              •                  │
├─────────────────────────────────┤
│                                 │
│   Directory Entry n             │
│                                 │
└─────────────────────────────────┘

┌─────────────────────────────────┐
│   Directory Block Header        │
│         (DBH)                   │
├─────────────────────────────────┤
│                                 │
│   Directory Entry (n+1)         │
│                                 │
├─────────────────────────────────┤
│                                 │         Directory Block 2
│   Directory Entry (n+2)         │
│                                 │
├─────────────────────────────────┤
│              •                  │
│              •                  │
│              •                  │
├─────────────────────────────────┤
│                                 │
│   Directory Entry (2n)          │
│                                 │
└─────────────────────────────────┘

                •
                •
                •

┌─────────────────────────────────┐
│   Directory Block Header        │
│         (DBH)                   │
├─────────────────────────────────┤
│                                 │
│   Directory Entry (m-1)         │
│                                 │
├─────────────────────────────────┤
│                                 │
│   Directory Entry m             │         Directory Block p
│                                 │
├─────────────────────────────────┤
│                                 │
│                                 │
│   Free Space                    │
│                                 │
│                                 │
└─────────────────────────────────┘
```
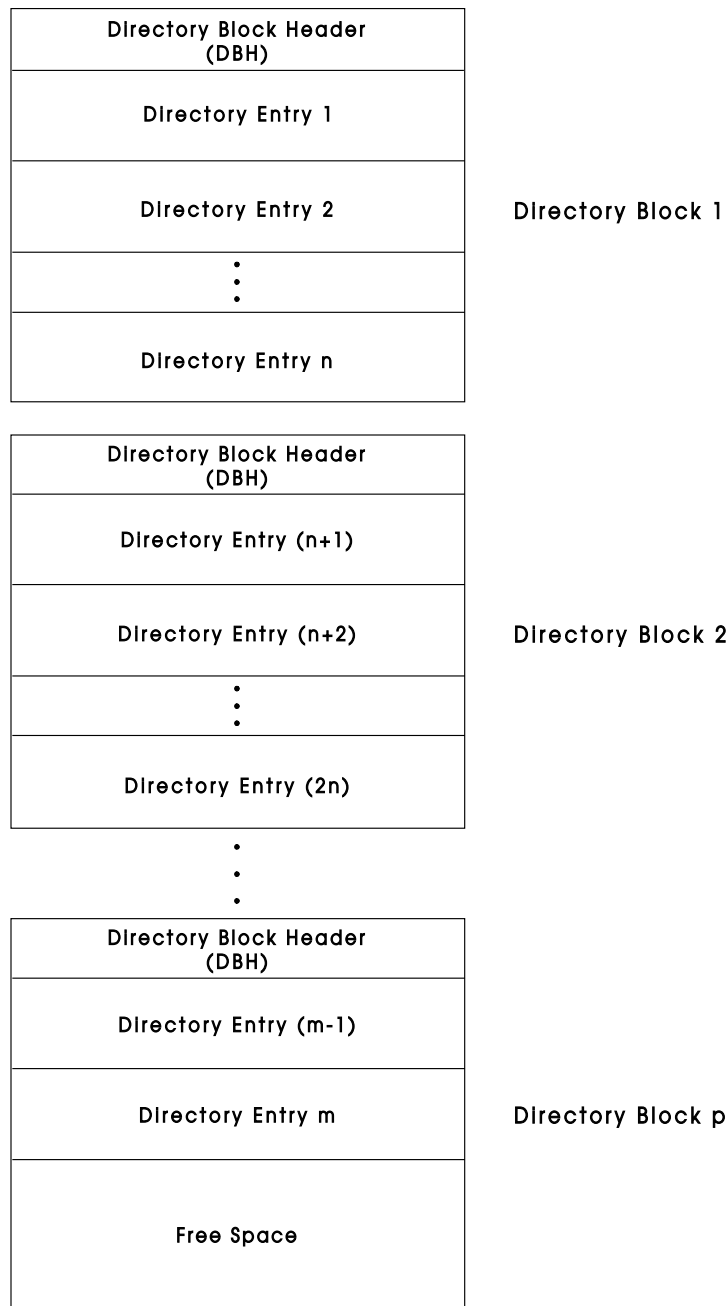
Figure 4. Layout of the Directory

Directory Block Header

Each directory block of the backup file starts with a 48-byte directory block header (DBH). The primary purpose of the directory block header is to control the space of the directory block to which it belongs. In addition, the first directory block contains information pertaining to the whole backup file and two time stamps:

– The time stamp indicating when the backup file was created (backup file creation time stamp), and

– The time stamp indicating when the particular backup volume was created (backup volume creation time stamp).

Remarks for a tape resident backup file:

The volume creation time stamp of a backup volume other than the first is identical to the volume termination time stamp (the time when volume backup was completed) contained in the EOT record of the preceding backup volume.

The backup file creation time stamp is used when random mounting is performed in order to verify that the newly mounted volume belongs to the backup file being processed.

The backup volume creation time stamp is used when an object crosses backup volumes in order to verify that the newly mounted backup volume is the exact successor of the previously mounted volume and was not tampered with.

For a disk resident backup file the backup file creation time stamp and the backup volume creation time stamps are identical.

The format of the Directory Block Header is shown in chapter 7 (IDCDFB02). Following is an overview over the logic structure.

Offset	Length	Contents
8	4	CL4 'DBH ' identifies this block as a directory block.
12	4	First directory block: volume sequence number of backup volume. Subsequent directory blocks: binary zeros.
16	6	First directory block: creation date of backup file (mmddyy or ddmmyy). Subsequent directory blocks: binary zeros.
22	4	First directory block: backup file creation time of day in time units (TUs). Subsequent directory blocks: binary zeros.
26	6	First directory block: creation date of backup volume (mmddyy or ddmmyy). Subsequent directory blocks: binary zeros.
32	4	First directory block: backup volume creation time of day in time units (TUs). Subsequent directory blocks: binary zeros.
36	2	First directory block: number of dummy blocks provided for read ahead on RESTORE. Subsequent directory blocks: binary zeros.
38	1	Flag byte (compaction indicator)
39	1	reserved (binary zeros)

Offset	Length	Contents
40	4	First directory block: total number of directory blocks for directory. Subsequent directory blocks: binary zeros.
44	4	First directory block: total number of entries in directory. Subsequent directory blocks: binary zeros.
48	4	Number of this directory block (1 for first directory block, 2 for second directory block, etc.).
52	2	Offset of free space in this directory block plus 8. (The increment of 8 is caused by the fact that directory blocks in virtual storage are preceded by 4-byte forward and backward chain pointers.)
54	2	Length of remaining free space in this directory block.

Directory Entries

The directory block header of each directory block is immediately followed by directory entries.

In general, all directory blocks except the last are completely filled with directory entries. However, this is not a necessity. The free space offset and the free space length in the directory block header completely control the space utilization of the corresponding directory block and must be used in order to determine where directory entries are in a directory block. Do not assume that a directory block is completely filled with data. Each object of the backup file has an entry in the directory.

Directory Entries for a Tape Resident Backup File: The directory entry gives the name of the object and contains, for those objects that reside or start on earlier volumes of the backup file than the volume containing the directory in question, additional information about the object:

- – The type of object,
- – The relational level of the object,
- – The starting volume sequence number of the object,
- – The starting volume serial number of the object (labeled tapes only), and,
- – The number of volumes occupied by the object, if the particular backup volume does not contain any part of the object.

The directory entries are used by RESTORE to determine if a specified object is on the backup file and to allow efficient selective restoration of objects with random volume mounting.

Directory entries for a Disk Resident Backup File: The directory entry gives the name of the object and contains the following additional information:

- – The type of the object
- – The relational level of the object
- – The extent sequence number of the first extent occupied by the object
- – The volume serial number of the first volume occupied by the object
- – The limits of the first extent occupied by the object
- – The begin and end address of the object.

The format of directory entries is mapped by the structure IDCDFB03; it looks as follows:

Offset	Length	Contents
0	44	Name of object, left-adjusted and padded with blanks.
44	1	Object type (decimal):
		0 - Object type has not yet been established.
		4 - Invalid object. The directory entry was reserved during initial creation of the directory for an object which later proved not to be a KSDS, ESDS, RRDS, SAM ESDS in CI-format, an AIX, or a path.
		8 - Erroneous object (an object that could not be backed up successfully).
		12 - Skipped object. During backup, this object was skipped due to an error condition for the base cluster or the path entry cluster (upon which the object is based) or because the object's base or path entry cluster was skipped.
		16 - The object is a KSDS.
		17 - The object is a VRDS.
		20 - The object is an ESDS.
		24 - The object is a RRDS.
		28 - The object is an AIX.
		32 - The object is a path.
		36 - The object is a SAM ESDS in control interval format.
45	1	Relational level of object on the backup file.
		Level numbers are used to express if the represented object is a dependent object (alternate index or path) of the preceding object of the backup file. A level number of 1 indicates that the object is not a dependent object of any other object of the backup file.
		A level number of 2 or 3 indicates that the object is a dependent object of the preceding object.
		A KSDS, ESDS, RRDS, or SAM ESDS always has the relational level 1. An AIX has the relational level 1 if its base cluster is not a member of the backup file. It has the level number 2 if its base cluster was also specified for backup.
		A path has the relational level 2 if it is immediately based on a cluster, or if its path entry AIX has been specified for backup without its base cluster.
		A path has the relational level 3 if directory entries are present for both its path entry AIX and the base cluster for the path entry AIX.
46	2	Tape resident backup file: Volume count (number of volumes occupied by the object, if known) Disk resident backup file: Extent count (number of extents occupied by the object)
48	4	Tape resident backup file: Starting volume sequence number of the object. A volume number of zero indicates that the object resides on this or a later volume of the backup file. Disk resident backup file: Sequence number of the first extent occupied by the object.

Offset	Length	Contents
52	6	Tape resident backup file: Starting volume serial number of the object. (Only if labeled backup file and if the object starts on an earlier backup volume; binary zeroes otherwise). Disk resident backup file: Volume serial number of the first volume occupied by the object.
The following fields only exist for a disk resident backup file:		
58	4	Low limit address of the first extent occupied by the object (cccchhhh or physical block number)
62	4	High limit address of the first extent occupied by the object (cccchhhh or physical block number)
66	5	begin address of object (cccchhhhrr or logical block number)
71	5	end address of object (cccchhhhrr or logical block number)

The length of the directory entry is 58 bytes for a tape resident backup file and 76 bytes for a disk resident backup file.

Representation of Objects

Objects on tape volumes

Each part of an object on the backup file is preceded and followed by tapemarks and starts with a header record.

The tapemarks allow you to skip objects whose restoration is not desired by means of Forward Space File commands; you do not have to read and bypass the individual blocks of the skipped data sets. Thus, the tape channel can be freed for the duration of the skip operation.

The *header record* describes which object or which part of the object follows.

The first or only part of an object whose backup could be successfully started is preceded by an *Object Header* (OHD) which basically contains the name and the catalog information for the object.

The second or any later part of an object starts with a *Continuation Header* (CHD) which indicates that the subsequent data blocks (until the next tapemark) belong to an object that started on an earlier backup volume.

An object that was recognized as invalid, for which an error occurred before its backup could be started, or whose backup was skipped, is represented by an *Error Object Header* followed by no data at all. An Error Object Header is a special form of an Object Header and allows RESTORE to recognize invalid, skipped, or erroneous objects before any restoration for them is attempted. Note that objects for which an error occurred in the midst of the backup process are preceded by a regular Object Header and not by an Error Object Header. The premature termination of their backup is recognized by the unexpected encounter of dummy records (see "Dummy Records" below) which are not followed by an EOT record.

As mentioned before, an invalid, skipped, or early-recognized erroneous object is represented by an Error Object Header (which is preceded and followed by a tapemark). In the same way, a path object or empty object (which does not include any data) is simply represented by an Object Header (preceded and followed by a tapemark) that names the path and contains the pertinent catalog information for the path.

Parts for objects with data start with an Object Header (first part) or a Continuation Header (second or later part). The header is followed by data blocks containing the actual data of the object backed up. The data blocks in turn are followed by dummy records. The dummy records, which are "short blocks," are added to each object part of a data object (KSDS, ESDS, RRDS, SAM ESDS, or AIX) to facilitate buffering and read-ahead during restoration. If they were not provided, no read-ahead of tape blocks could be done during restoration, because otherwise, at the end of a tape volume, the tape could run off the tape reel.

Figure 5 through Figure 7 summarize the representation of the individual object types on the backup file.

```
┌─────────────────────────────────────┐
│              Tapemark               │
└─────────────────────────────────────┘

┌─────────────────────────────────────┐
│                                     │
│                                     │
│                                     │
│           Object Header             │
│                                     │
│                                     │
│                                     │
└─────────────────────────────────────┘

┌─────────────────────────────────────┐
│              Tapemark               │
└─────────────────────────────────────┘
```
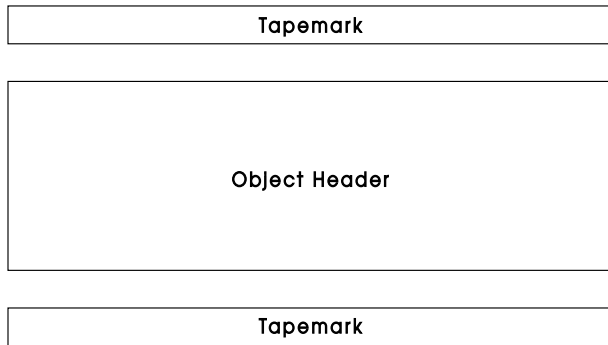
Figure 5. Representation of a Path or Empty Object

```
┌─────────────────────────────────────┐
│              Tapemark               │
└─────────────────────────────────────┘

┌─────────────────────────────────────┐          naming the object
│                                     │          and identifying it
│              Error                  │          as invalid, skipped,
│              Object                 │          or erroneous object
│              Header                 │
│                                     │
└─────────────────────────────────────┘

┌─────────────────────────────────────┐
│              Tapemark               │
└─────────────────────────────────────┘
```
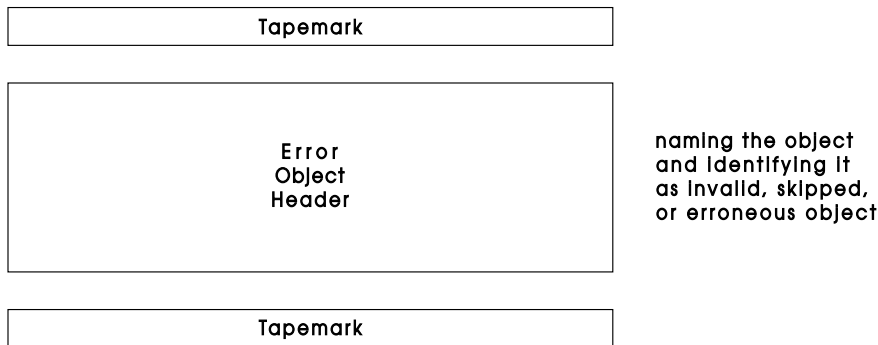
Figure 6. Representation of an Invalid, Skipped, or Early-Recognized Erroneous Object
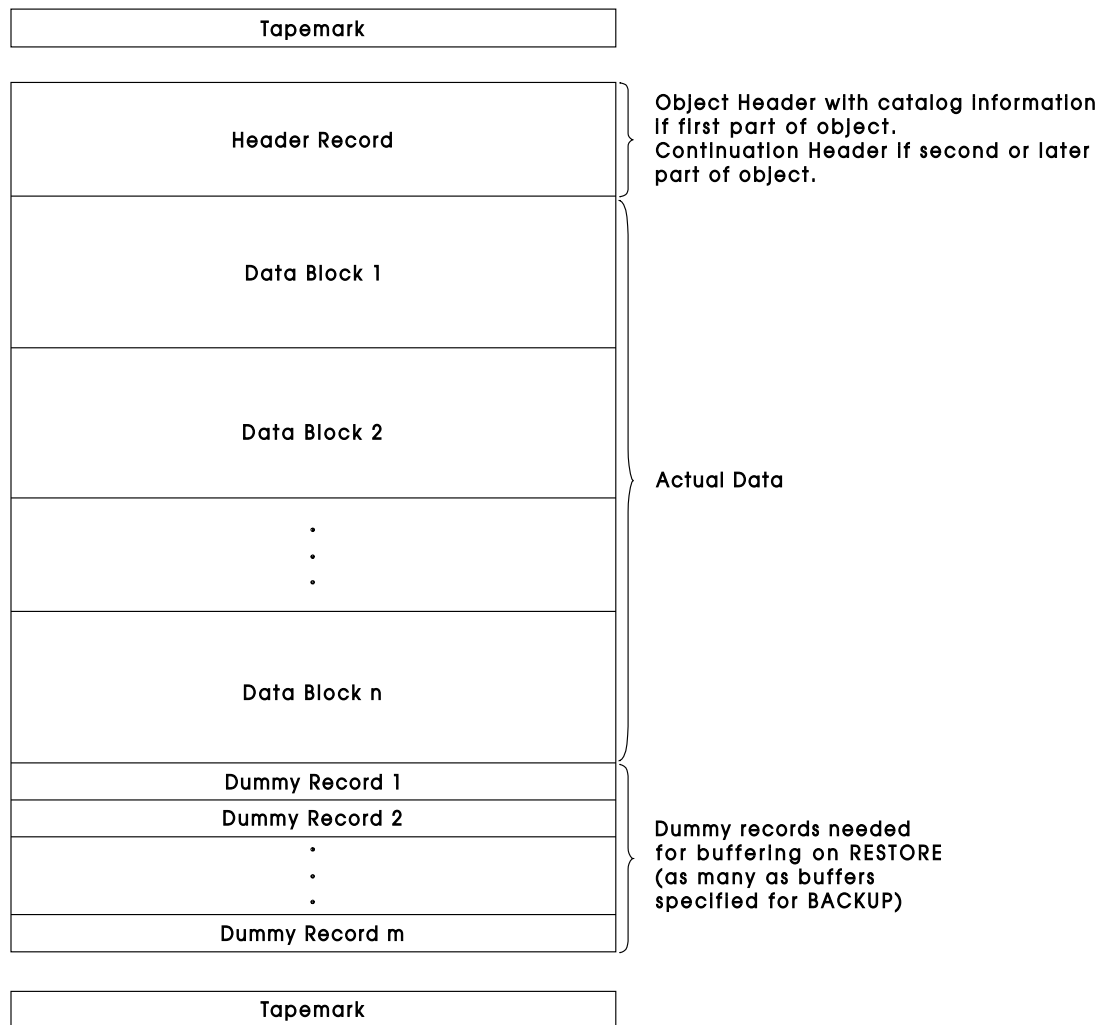
Figure 7. Representation of a Part of a Data Object

A description of the Object Header and the Error Object Header is given in a separate section.

Continuation Header: The continuation header precedes the second or any later part of an object that spans backup volumes. The continuation header indicates that the subsequent data blocks until the next tapemark belong to an object that started on an earlier backup volume.

The continuation header allows non-consecutive mounting of backup volumes on RESTORE and allows the user to mount any volume other than the first one as initial volume during restoration. If continuation headers were not provided, the first data block of an object that is continued on the mounted backup volume could be mistaken for an Object Header. Note that the data blocks of an object contain user data (which may be anything) and do not have a special identification as data blocks.

The format of the continuation header (24 bytes) is as follows:

Offset	Length	Contents
0	4	CL4 'CHD ' identification as a continuation header.
4	20	Reserved (binary zeros).

Dummy Records: Each part of a data object (KSDS, ESDS, RRDS, SAM ESDS, or AIX) on the backup file is terminated by a set of dummy records. The dummy records are "short blocks" and are provided to facilitate buffering and read-ahead during restoration. Recognition of the dummy records signals the end of the current part of the data set being restored and causes the mounting of the subsequent backup volume.

The number of dummy records is equal to the number of buffers specified (or defaulted to) on the BACKUP command. This number is recorded in the Directory Block Header of the first Directory Block on each backup volume.

The number of buffers that is allocated during restoration is never larger than the number of dummy records, and VSE/VSAM Backup/Restore never has more outstanding I/O requests for the backup file than there are buffers. Accordingly, each outstanding I/O request can be matched with a tape block so that the tape will not run off the tape reel.

The format of the dummy records (24 bytes each) is as follows:

Offset	Length	Contents
0	4	CL4 'DRD ' identifies this block as dummy record
4	20	Reserved (binary zeros)

End of Tape (EOT) Record: Each volume of the backup file is terminated with an EOT record preceded and followed by a tapemark. For a labeled backup file, the trailing tapemark is followed by an EOV1 or EOF1 label. On the last volume of the backup file, an additional tapemark follows either the trailing tapemark (for an unlabeled backup file) or the EOF1/tapemark combination (for a labeled backup file). See Figure 1 on page 2.

The presence of an EOT record indicates that processing of the mounted backup volume is complete.

The EOT record contains an identifier, an indication whether or not this is the last volume of the backup file, and the volume termination time stamp of the mounted backup volume. The volume termination time stamp is used on RESTORE when sequential tape mounting is performed. It must be identical to the volume creation time stamp contained in the first directory block header of the next sequential backup volume.

The format of the EOT record is as follows:

Offset	Length	Contents
0	4	CL4 'EOT ' identifies this block as an EOT record.
4	1	Type of EOT record: C'F' - End of backup file (last volume of the backup file). C'V' - End of backup volume (not the last volume of the backup file).
5	1	Reserved (binary zeros).
6	6	Backup volume termination date (mmddyy or ddmmyy).
12	4	Termination time of day for backup volume in time units (TUs).
16	8	Reserved (binary zeros).

Objects on Disk Volumes

Each object in the backup file is preceded by an Object Header and followed by an EOF record. If the object extends over several disk extents, the following continuation rules are observed:

1. The end of an extent is indicated by an EOE record, following the last data block recorded in the extent.

2. The first data block in the new extent is preceded by a BOE record.

3. If the new extent is the first extent on a new volume, after the BOE record and before the first data block the backup file directory is written.

The Object Header (OHC) preceding each object basically contains the name and the catalog information for the object. An object that was recognized as invalid, for which an error occurred before its backup could be started, or whose backup was skipped, is represented by an Error Object Header followed by no data at all. Note that objects for which an error occurred in the midst of the backup process are preceded by a regular Object Header and not an Error Object Header. The premature termination of their backup is recognized by the unexpected encounter of an object end (EOF record on non-FBA-disk provoking the message: IDC31340I BACKUP FILE IN ERROR).

As mentioned before, an invalid, skipped or early recognized erroneous object is represented by an Error Object Header (which is preceded and followed by an EOF record on each non-FBA-disk). In the same way the path object or empty object (which does not include any data) is simply represented by an Object Header (preceded and followed by an EOF record on each non-FBA-disk) that names the path and contains the pertinent catalog information for the path.

For object with data the Object Header is followed by data blocks containing the actual data of the object backed up. The last data block is followed by an EOF record.

A description of the Object Header and the Error Object Header is given in "Object Header" on page 14 and "Error Object Header" on page 18.

BOE Record The BOE record is the first record on each backup file extent. It precedes the second or any later part of an object that spans backup file disk extents. In the first extent of each backup volume the BOE record is followed by the backup file directory. In this case BOE record and backup file directory precede the following object header or the following data blocks.**:** The format of the BOE record (30 bytes each) is as follows:

Offset	Length	Contents
0	4	CL4'BOE ' identifies the block as an BOE record
4	6	backup file creation date (mmddyy or ddmmyy)
10	4	backup file creation time (in timer units)
14	2	sequence number of the extent
16	4	begin address of the extent (cccchhhh or physical block number)
20	4	end address of the extent (cccchhhh or physical block number)
24	2	number of directory blocks
26	4	reserved

EOE Record The EOE record is the last record in each backup file extent. It is preceded by a complete object header or by data blocks recorded for an backed up object. The backed up object can be continued in the next backup file extent. This next backup file extent must begin with a BOE record containing information corresponding to those of the EOE record.**:**   The format of the EOE record is as follows:

Offset	Length	Contents
0	4	CL4'EOE '
		identifies the block as an EOE record
4	6	backup file creation date (mmddyy or ddmmyy)
10	4	backup file creation time (in timer units)
14	2	extent sequence number of next extent
18	6	volume serial number of next extent
22	4	begin address of next extent (ccchhhh or physical block number)
26	4	end address of next extent (ccchhhh or physical block number)

EOF Record The EOF record exists only on CKD- and ECKD-disks and is a record with data length 0. On FBA disks the end of an object is recognized on the object related high limit logical block number recorded in the directory entry for the object. The FBA block corresponding to this high limit logical block number is neither written during backup nor read during restore.

Object Header

The first part of each object of the backup file that is not invalid, that has not been skipped, and that has not been recognized as erroneous before its backup, is preceded by an object header.

The purpose of the object header is to identify the object and to provide the information necessary to redefine the object in the VSAM catalog when the object is restored.

As shown in Figure 8 on page 15, the object header is logically broken into three parts:

- object header control portion
- dictionaries
- catalog information area

The individual items are described in the subsequent sections. Physically, the object header is subdivided into one or more blocks of fixed length. The block length is 1280 bytes for a tape resident backup file and 1024 for a disk resident backup file. The last block is padded with binary zeros if necessary. The physical mapping is transparent to the logical layout of the object header.
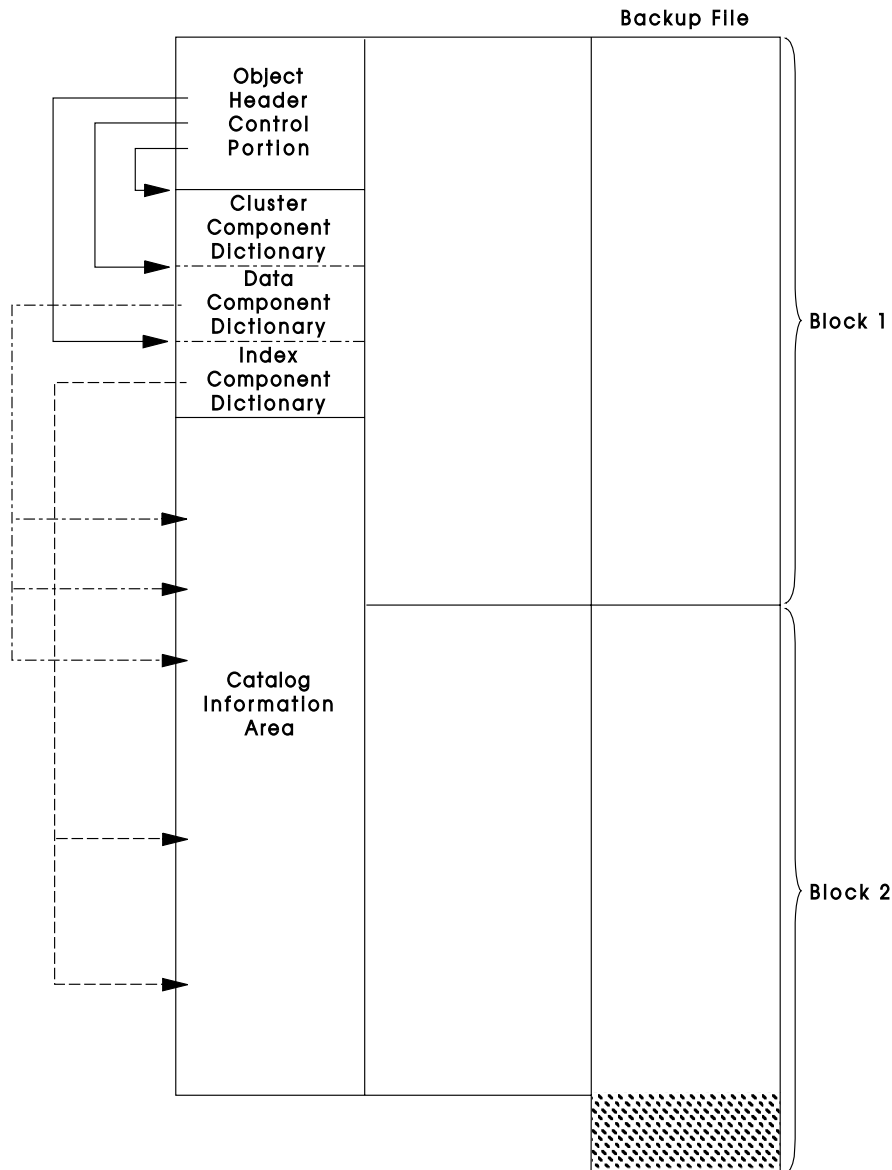
Figure 8. Object Header

Object Header Control Portion: The Object Header Control Portion contains:

  – Information about the physical mapping of this particular object header (block size, number of physical blocks on tape, actual length of the object header).

  – The type of the object and the offset to the name of the object within the catalog information area of the object header.

  – Control information about the other parts of the object header.

  – The buffer size that was used for backup (and which must be used for the restoration as well).

  – The basic physical data set characteristics that prevailed when the backup was performed and which must be preserved on restoration.

  – The data set high-used RBA as it was when the backup operation was performed.

  – The data set statistics that applied when the object was backed up and which must be transported on the backup file because they cannot be recreated during restoration without the information saved in the Object Header Control Portion.

The structure of the Object Header is mapped by IDCDFB40; the layout of the Object Header Control Portion (112 bytes) is shown below.

Offset	Length	Contents
0	4	CL4 'OHD ' identifies this block as an object header.
4	1	Type of object being described by this object header: C'C' - object header for a cluster (KSDS, ESDS, RRDS, or SAM ESDS). C'G' - object header for an alternate index. C'R' - object header for a path. Other type codes are used to differentiate an error object header (the object header for an erroneous, invalid, or skipped object) from a regular object header. These error type codes are described under the heading "Error Object Header" below.
5	1	Object header flags indicating special conditions for the object: Bit 0 = 1: The passwords for the object were suppressed during backup because the specified password was not the master password; the backup file does not contain the passwords for the object. Bit 0 = 0: The passwords were not suppressed and are contained on the backup file (assuming passwords existed). Bits 1 through 7 are reserved and set to zero.
6	2	Release indicator; set to zero.
8	4	Actual (used) length of Object Header. Padded bytes in the final Object Header block are not included.
12	4	Size of Object Header blocks (1280 bytes if on tape, 1024 bytes if on disk).
16	4	Number of blocks for this Object Header.
20	4	Offset, relative to the beginning of the Object Header, of the 44-character name of the object represented by the Object Header.
24	4	Offset of the first dictionary for the object (the dictionary containing pointers to the catalog information of the C-type, G-type, or R-type catalog record that is included in the catalog information area of the Object Header).
28	4	Offset of the catalog work area (in the catalog information area) for the component pertaining to the first dictionary.
32	4	Offset of the second dictionary (the data component dictionary) for the object if the object has a data component; otherwise zero.
36	4	Offset of the catalog work area containing the data component catalog information; zero if the object has no data component.
40	4	Offset of the third dictionary (the index component dictionary) for the object. This field is zero if the object does not have an index component.
44	4	Offset of the catalog work area containing the index component catalog information for the object; zero if the object does not have an index component.
48	4	Buffer size used for backup.

Offset	Length	Contents
52	4	VSAM physical record size for the data component of the object at backup.
56	4	Data control interval size of the object at backup.
60	4	Data control area size of the object at backup (set to zero for a SAM ESDS).
64	4	Index control interval size of the object at backup.
68	4	Data set high-used RBA of the object at backup.
72	4	Number of logical records of the object at backup.
76	4	Number of deleted records before backup.
80	4	Number of inserted records before backup.
84	4	Number of updates before backup.
88	4	Number of record retrievals before backup.
92	4	Number of free bytes for component
96	4	Number of control interval splits before backup.
100	4	Number of control area splits before backup.
104	4	Number of EXCPs for the data component before backup.
108	4	Number of EXCPs for the index component before backup.

Fields that are not applicable to an object are initialized to zero. All offsets are relative to the beginning of the Object Header.

Dictionaries: Up to three dictionaries are provided in the Object Header (see Figure 8 on page 15). The Object Header Control Portion specifies where these dictionaries are located in the Object Header.

The purpose of the dictionaries is to identify the individual pieces of catalog information in the catalog information area of the Object Header.

The first dictionary refers to the catalog information for the C-type cluster catalog record of a KSDS, an ESDS, an RRDS, or a SAM ESDS; to the catalog information for the G-type record of an alternate index; or to the catalog information for the R-type record of a path.

The second dictionary refers to the catalog information for the data component of the object, whereas the third dictionary applies to the index component catalog information. These dictionaries are only present if the object has data and index components.

The entities identified by dictionary entries are those retrieved by field or combination names through catalog Locate operations during backup. The same entities and field/combination names are used during restoration in order to redefine the object and its components in the VSAM catalog.

For each entity of catalog information for a component, the component dictionary has a "dictionary entry" of the following format:

Offset	Length	Contents
0	4	Length of catalog information.
4	4	Offset of catalog information relative to the beginning of the component's catalog work area pointed to by the Object Header Control Portion.

Each dictionary has the same set of dictionary entries. If the corresponding catalog information does not exist or is not applicable to the component, both the length and the offset fields of the dictionary entry are zero. The order of dictionary entries in a dictionary is fixed and is in the order of the catalog field and combination names listed below:

Dictionary Entry Number	Field/Combination Name
0	ENTYPE
1	ENTNAME
2	DSATTR
3	OWNERID
4	DSETCRDT
5	DSETEXDT
6	BUFSIZE
7	LRECL
8	SPACPARM
9	PASSWALL
10	LOKEYV
11	HIKEYV
12	VOLSER
13	AMDSBCAT
14	EXCPEXIT
15	RGATTR
16	Name of base cluster or path entry cluster
17	Master password of base cluster or path entry cluster

For the last two dictionary entries, no catalog field name or combination name exists.

The catalog information represented by the dictionary entries is the one located under the associated catalog field or combination name.

Catalog Information Area: The catalog information area (see Figure 8 on page 15) contains the catalog information for all components of the object as it was retrieved by means of catalog Locate operations during backup and as it is used during restoration for the definition of the object in the VSAM catalog.

The catalog information for a component is stored consecutively and corresponds to the contents of the "catalog work area" provided for and filled by the appropriate catalog Locate operation for the component. The information includes both the work area length provided to Locate and the required length returned by Locate. For an alternate index or a path, the information is augmented by the name and the master password of the base cluster or the path entry cluster.

For all objects except paths, the space allocation parameters retrieved via Locate are converted to device-independent units (RECORDS). In order to do this conversion, constants such as physical record size, blocks per track, and tracks per control area are retrieved for the data component. Because these constants are only required for conversion of allocation units at backup, they are not saved as part of the catalog information area in the backup file.

Figure 9 on page 19 shows the interaction of Object Header Control Portion, dictionary, and catalog information area.

Error Object Header

The Error Object Header constitutes a special form of an Object Header.

Because an Error Object Header represents either an invalid object, an object whose backup was skipped, or an object that was early recognized as erroneous (because it represents an object that was never restored), it is not necessary to carry the catalog information for such an object or any information that would normally be needed for restoration.

The Error Object Header merely indicates that an attempt was made to back up such an object.

The format of an Error Object Header is described below. Some fields have the same meaning as for the regular Object Header described above.
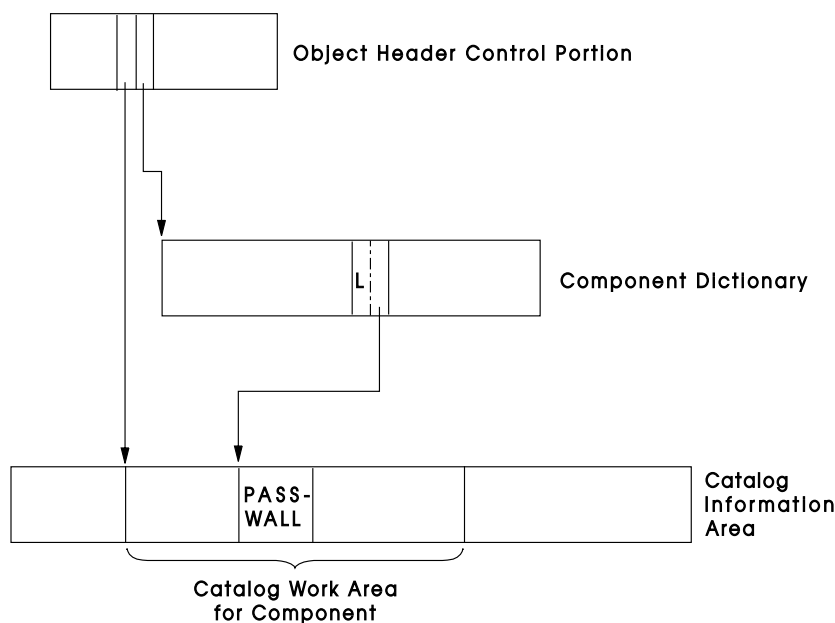
Figure 9. Interaction of Object Header Control Portion, Dictionary, and Catalog Information Area

Offset	Length	Contents
0	4	CL4 'OHD ' identification as Object Header.
4	1	Type of object being described:
		X'FF' - Object Header for an invalid object. X'FE' - Object Header for an erroneous object. X'FD' - Object Header for an object whose backup was skipped.
5	1	Reserved (binary zeros).
6	2	Release indicator; set to zero.
8	4	Actual (used) length of Error Object Header
12	4	Block size of Error Object Header (1280 bytes).
16	4	Number of blocks for this Error Object Header.
20	4	Offset, relative to the beginning of the Error Object Header, of the 44-character name of the invalid, erroneous, or skipped object within the Error Object Header
24	88	Reserved (binary zeros).
112	44	Name of invalid, erroneous, or skipped object (left-adjusted and padded with blanks as necessary).

Data Blocks of an Object in Non-Compacted Format

For data sets (KSDS, ESDS, RRDS, SAM ESDS, AIX), the Object Header is followed by *data blocks*, that is, blocks that contain the data of the object that was backed up.

With VSE/VSAM Backup/Restore, the emphasis is placed on fast transfer of VSAM data sets (data objects) to the backup file and back to disk storage, taking into account that the restoration is normally

onto the same medium as the data set was backed up from and that the basic structural data set characteristics (physical record size, control interval size, and control area size) are preserved.

In contrast with the Access Method Services EXPORT/IMPORT facility, BACKUP/RESTORE transfers the physical records of a control area (which is, as the basic allocation unit, a physically consecutive disk-storage area) in *physical sequential order* from disk to the backup file (with the BACKUP command) and back (with the RESTORE command). Control intervals are not recognized, either during the transfer or on the backup file. Physical records, however, are recognized in the transfer process. In other words, the backup function basically creates a *physical image copy* of each control area on the backup file.

Because of the physical-sequential retrieval during the backup process, it is not necessary to step through the individual index entries of a sequence-set record. Because of spanned records, however, it is not possible to reconstruct the logical sequence of the control intervals of a KSDS from the image copy of the control areas alone. Therefore, the sequence-set record of each control area is also copied onto the backup file and reinstated by the restoration operation, thereby modifying the base and horizontal relative byte addresses, the only location-dependent variables in a sequence-set record.

The data blocks of an object on the backup file contain the user data as well as the sequence-set records of a KSDS. All data blocks of an object have the same fixed size. The size is equal to the buffer size recorded in the Object Header Control Portion for the object. The size is determined from the user's BLOCKSIZE specification on the BACKUP command or calculated by the Backup/Restore program and is always chosen so that:

- It is an integral multiple of the physical record size of the data component of the object; and

- It is not smaller than the index control interval size of the index component of the object.

Data component data and sequence-set control intervals are not mixed in the same data block. A sequence-set record on the backup file occupies a whole data block, the remainder of which is padded with zeros.

The last data block of a control area is partially padded with zeros if the control area size is not an integral multiple of the block size (buffer size). SAM entry-sequenced data sets form an exception because they do not have control areas. For them, the whole data component is consecutively stored so that all data blocks (except the last) are completely filled with data.

Each data block with data from the data component of the object consists of an integral number of physical records of the data component.

In contrast with the physical-sequential processing of the physical records of a control area, the individual control areas as a whole are processed in logical sequence, that is, the sequence is determined by the horizontal relative-byte addresses of the sequence-set records for a KSDS. Because control areas are, in general, a cylinder in size, the transition from one control area to another is not a frequent operation. Therefore, for the backup procedure it is not necessary to replace the logical retrieval of control areas with a physical retrieval. In addition, logically sequential control areas are also normally stored in physical sequence, because control area splits, which would disturb the physical sequence, occur less often than control interval splits.

The ability to reorganize control areas as a whole during restoration would be lost if control areas were not backed up in their logical sequence. After the restoration, the physical and logical sequence of the control areas coincide, thus preventing arm movements on subsequent sequential processing.

Figure 10 on page 21 and Figure 11 on page 22 summarize the mapping of data objects onto the backup file.
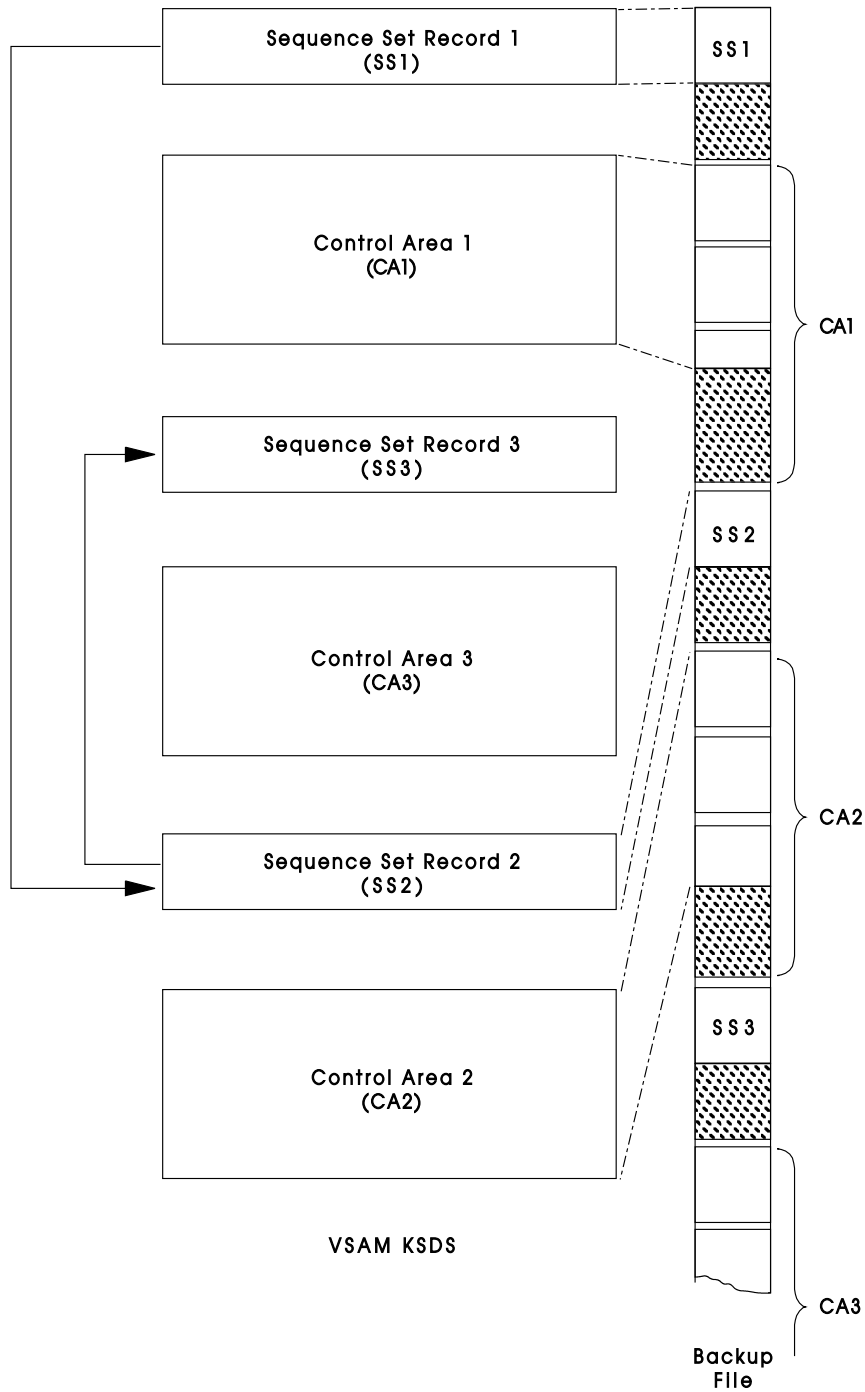
Figure 10. VSE/VSAM Backup/Restore Mapping
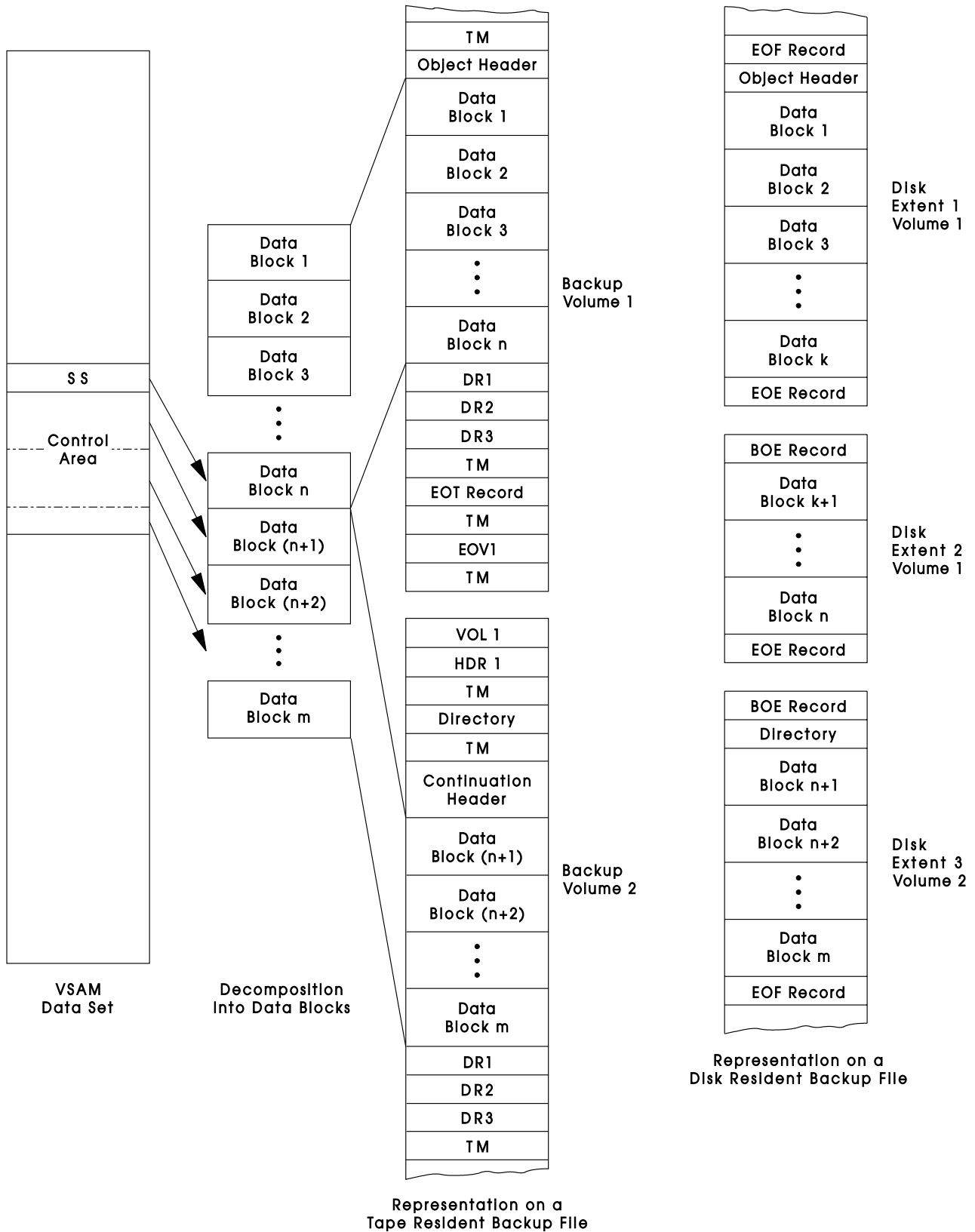
Figure 11. Transformation onto Backup File

Data Blocks of an Object in Compacted Format

If the COMPACT parameter is specified in the BACKUP command, the backed up data for each VSAM object are compacted before they are written out to the backup file. The compaction process takes place with the help of two buffer sets. The uncompacted backup data, contained in the buffers of the first buffer set are compacted and transmitted into the buffers of the second buffer set and thereafter put out. If we consider the compacted contents of a primary buffer as a 'compacted data unit', then the data blocks written out to the backup file contain compacted data units in the following way:
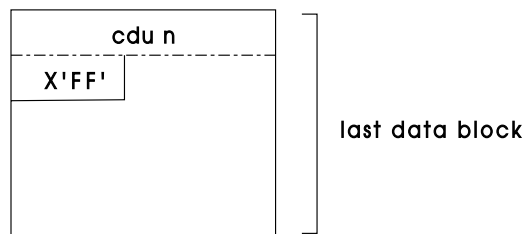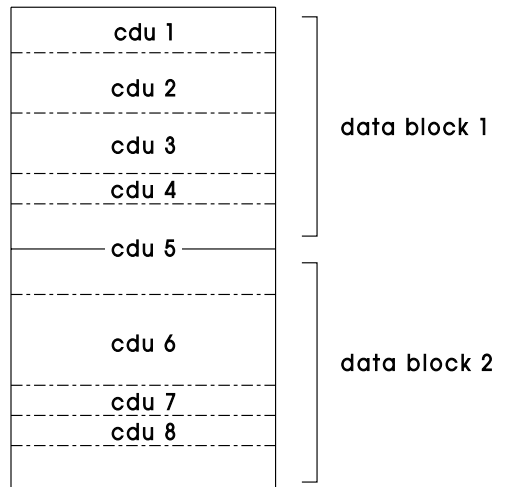
cdu = compacted data unit

The compacted data unit itself has the format:

Offset	Length	Contents
0	4	Length of compacted unit without length field
4	var.	compacted primary data block

The last compacted data unit in the last data block for an object is followed by the indicator X'FF'. In seldom cases the compacted data units can be mixed with uncompacted units which are recognized by the preceding indicator X'FE'. The indicator X'FD' following a compacted data unit terminates a data block if there are less than 4 free bytes remaining in the block. In this case the next compacted data unit is found in the next data block.

In a compacted backup file all data belonging to a backed up object including sequence set records are compacted. Data records and sequence set records are mixed in data blocks. Object headers are never compacted.

Sequence of Objects on the Backup File

The sequence of dependent objects on the backup file is important to ensure that all desired objects are actually restored and to avoid restoring objects twice.

If a cluster has alternate indexes and paths defined on top of it, the cluster is first on the backup file. It is followed by its first alternate index which, in turn, is followed by its paths. Then the second alternate index and its associated paths follow. Paths that are immediately defined over a cluster and not over an alternate index are treated in the same manner as alternate indexes with regard to their sequence on the backup file. They must follow the base cluster on which they are defined and may not be interspersed between an alternate index and its paths.

Assume that the cluster 'CLUSTER' has the following associations defined for it and recorded on the backup file:

```
                              CLUSTER
                                 |
        _____|_____
       |               |                  |               |
   alternate       alternate          alternate       alternate
     Index           Index              Index           Index
       |               |                  |               |
 VSAM.AIX.#1     VSAM.AIX.#2        VSAM.AIX.#3        PATH.#1
       |          _____|_____          |
     path        |           |         path
       |       path        path          |
       |         |           |           |
   PATH.#11  PATH.#21    PATH.#22     PATH.#31
```
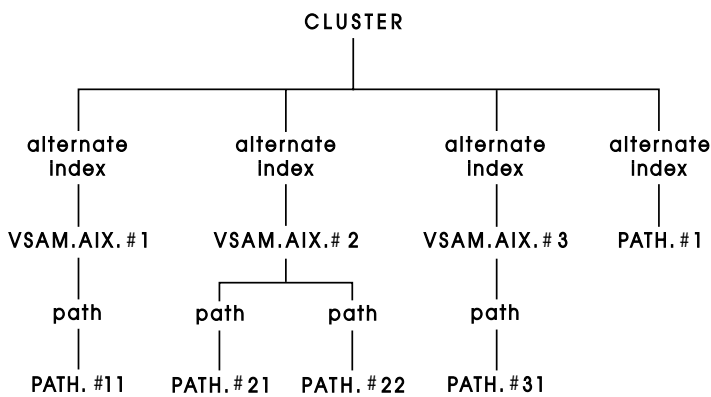
For this cluster, the sequences below are valid:

```
CLUSTER            CLUSTER
VSAM.AIX.#1        PATH.#1
PATH.#11           VSAM.AIX.#1
VSAM.AIX.#2        PATH.#11
PATH.#21    or     VSAM.AIX.#3
PATH.#22           PATH.#31
VSAM.AIX.#3        VSAM.AIX.#2
PATH.#31           PATH.#21    or
PATH.#1            PATH.#22
```

On the other hand, the sequence:

```
CLUSTER
OTHER.OBJECT
VSAM.AIX.#2
PATH.#1
PATH.#21
PATH.#22
VSAM.AIX.#3
PATH.#31
VSAM.AIX.#1
PATH.#11
```

where OTHER.OBJECT is another object of the backup file that is not dependent on CLUSTER, is not valid because:

- An object not belonging to the associations of CLUSTER (OTHER.OBJECT) has been interspersed.

- PATH.#1 separates VSAM.AIX.#2 from its associations PATH.#21 and PATH.#22.

Chapter 2. General Concepts

This chapter discusses some basic general concepts of VSE/VSAM Backup/Restore.

Restoration with File Modifications

The following file modifications are permitted at restoration:

- Moving files to a space of a different use class;

- Moving files to a volume of a different device type;

- Changing the data component allocation size for a specific file;

- Changing the index control interval size for a specific file.

Specifying a new use class has no appreciable effect on the performance of the RESTORE command or on the file's internal structure. For any of the other file modifications, however, one or more of the following attributes of the cluster is likely to change:

- CA size

- Physical record size

- Index CI size

- Space allocation size

These file modifications can result in degraded performance during RESTORE execution, changed space allocation sizes due to the new device characteristics, and additional buffers for output to disk (described below).

Physical-Sequential Processing of Control Areas

VSE/VSAM Backup/Restore transfers the physical records of a control area in *physical* sequence from disk to the backup file and back. The unit of transfer is a buffer consisting of multiple physical records. The sequence-set records of a KSDS are also copied onto the backup file. They occupy, unless the backup file is compacted, a complete unit of transfer (the remainder of which may be padded with binary zeros) and precede the data blocks for their control area on the backup file.

The mapping of objects is described in detail in Chapter 1.

Buffers

The buffers used by BACKUP and RESTORE when no file modifications (described above) are made do not depend on the control interval size and are *common for input and output*. This means that the size of the *unit of transfer is equal to the size of the backup file data block.* If not specified via the BLOCKSIZE parameter in the BACKUP command, the size of the buffer (which is equal to the amount of data transferred with a single I/O operation) is determined by Backup/Restore from the VSAM device characteristics (for example, either half a track or a track), the physical data set characteristics, and the minimum buffer size requirements for streaming depending on the backup device, e.g. requirements for streaming in the case of backup to tape or restoration from tape. Rounding to an integral multiple of the physical record size of the VSAM object that is being backed up ensures that an integral number of physical records is read during a backup operation. During restoration, the same buffer size as was used for the corresponding backup is chosen. The user can influence the buffer size via the BLOCKSIZE parameter of the

BACKUP command, but only if the specified BLOCKSIZE value is larger than the minimum assumed by VSE/VSAM Backup/Restore. The buffer size that is actually used does not necessarily coincide with the specified BLOCKSIZE value, because it is rounded to an integral number of physical records.

For processing non-compacted backup files common buffers for input and output are used (see also "Data Buffers for Compacted Backup Files" on page 31). This has the advantage that expensive data movement can be avoided and no blocking or deblocking is necessary. The data read from the VSAM device into a buffer is transferred onto the backup file (or vice versa) from the same buffer without any intermediate data movement. VSE/VSAM Backup/Restore uses its own specialized buffer and I/O management and avoids overhead by choosing the same unit of transfer for input and output operations.

When file modifications are specified during restoration, it is not possible to use common buffers for input and output because the data must be reblocked. When reblocking is required, RESTORE uses the common data buffers to handle input from the backup file. RESTORE allocates additional buffers to accommodate the new file characteristics for the output (VSAM) file. RESTORE then moves the data from the input buffers to the output buffers as it reblocks the data.

Common Data Buffers

The number of data buffers allocated by VSE/VSAM Backup/Restore is controlled via the BUFFERS parameter. Their size is calculated from the BLOCKSIZE parameter of the BACKUP command or from defaults.

In order to reduce the path length of the basic backup or restoration cycle, the data buffers pointed to by the Buffer Definition Blocks (BDB) are chained together in a loop as shown in Figure 12.

Backup/Restore Block (BRB)

```
┌─────────────────┬──────────────────┬─────────────────┐
│                 │     Buffer       │                 │
│                 │     Pool         │                 │
│                 │     Header       │                 │
│                 │     (BPH)        │                 │
└─────────────────┴──────────────────┴─────────────────┘
```

```
┌────────────────┐        ┌──────────────────────────┐
│     Buffer     │        │       Data Buffer 1      │
│   Definition   │───────▶│                          │
│     Block      │        │                          │
│       1        │        └──────────────────────────┘
└────────────────┘

┌────────────────┐        ┌──────────────────────────┐
│     Buffer     │        │       Data Buffer 2      │
│   Definition   │───────▶│                          │
│     Block      │        │                          │
│       2        │        └──────────────────────────┘
└────────────────┘

┌────────────────┐        ┌──────────────────────────┐
│     Buffer     │        │       Data Buffer n      │
│   Definition   │───────▶│                          │
│     Block      │        │                          │
│       n        │        └──────────────────────────┘
└────────────────┘
```
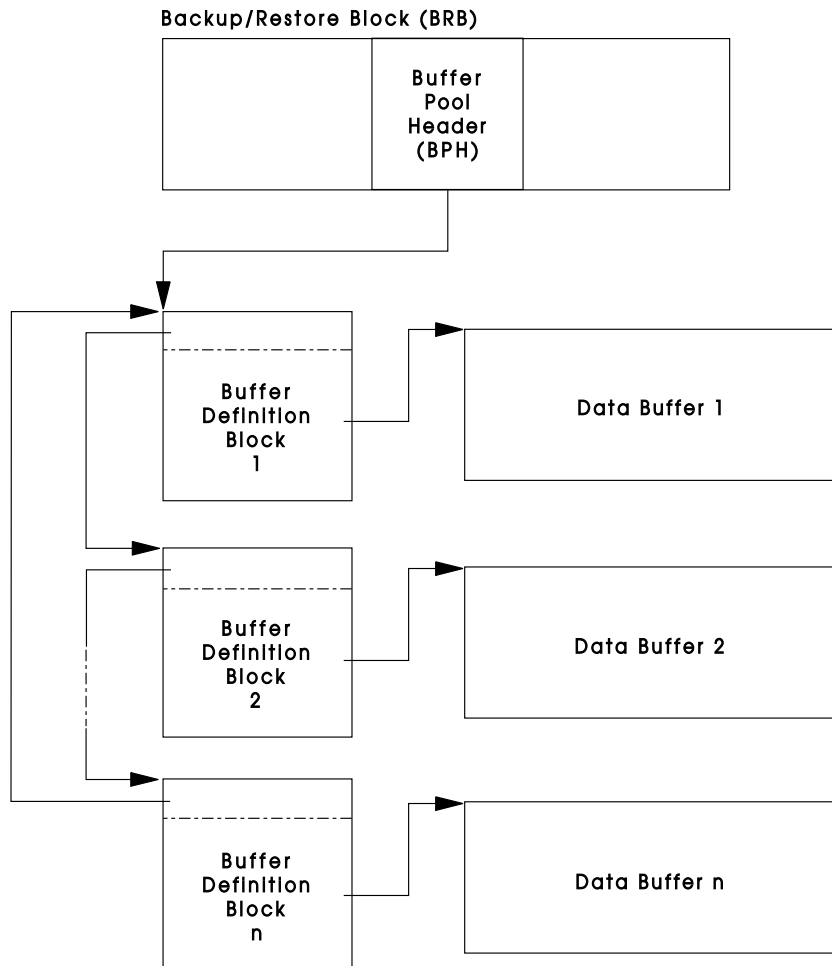
Figure 12. Data Buffer Loop

Index Buffers

During backup, index control intervals of a KSDS are read to determine the logically next control area and are immediately written onto the backup file for reconstruction of the sequence set during restoration. Therefore, no special index buffers are needed or allocated during backup.

During restoration, however, the index of a KSDS must be reconstructed, requiring longer availability of index records or rereading of index records each time an index entry has to be made.

VSE/VSAM Backup/Restore reduces rereading of index control intervals by providing three special index buffers, each of index control interval size. These buffers help to minimize the disturbance of the regular restoration cycle at the end of a control area. They are an important factor in achieving streaming during restoration.

The first index buffer is reserved for sequence set control intervals. As soon as a sequence set control interval is read (into a data buffer) from the backup file, it is copied into the sequence set buffer for further processing, and backup file I/O is immediately rescheduled for the data buffer.

The second index buffer is reserved for second-level index control intervals. In this second-level index buffer, the index entries for the current second-level index control interval are constructed. In general, the second-level index buffer is not written before it has been completely filled with index entries. Format-write requirements for nonimbedded, non-keyrange KSDSs on CKD devices, however, may require an

initial writing when the first sequence set control interval, represented by the second-level index record, is to be written.

The third index buffer is reserved for all higher-than-second-level index operations. Index control intervals are read into this buffer and written out as required. As long as the data set does not have more than three index levels, VSE/VSAM Backup/Restore will not perform any index read operations. The current third-level index control interval is kept in the third index buffer and written only if filled or if format-write considerations on CKD devices require an initial writing. Note that third-level index operations are infrequent and higher-than-third-level operations are rare.

By providing the three index buffers, VSE/VSAM Backup/Restore minimizes index I/O operations.

The index buffers are controlled by Index Buffer Blocks (XBB), as shown in Figure 13.
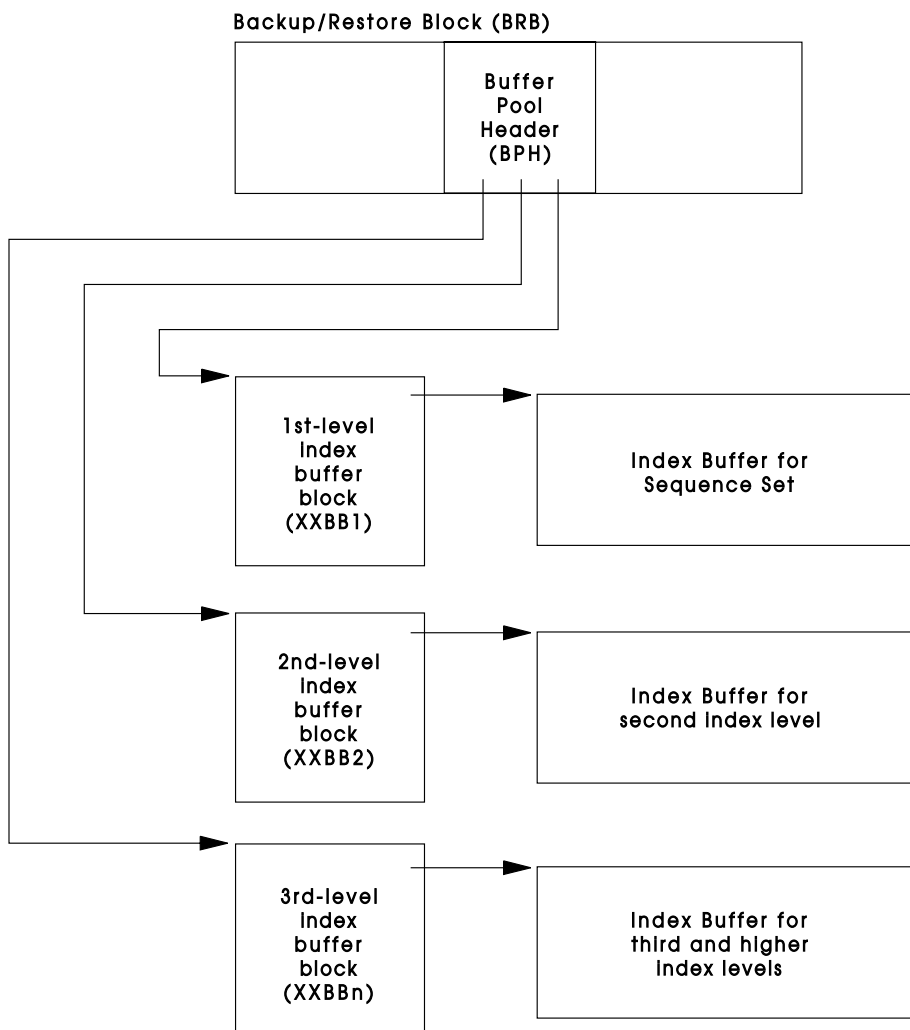
Figure 13. Index Buffer for RESTORE

Output Buffers for Restoration with File Modification

Restoration with file modification (described above) requires up to three additional buffers. These buffers are used only for output to disk; consequently, they have no associated tape channel programs. The preformat buffer is used for KSDS, ESDS, and RRDS to write "empty" control intervals to fill out control areas that are not full. For a KSDS, these empty CIs are used to restore the CA free space percentage to the file. An empty control interval for an RRDS is a control interval with empty record slots. For other files, an empty control interval consists of all zeros, except for a CIDF initialized with the length of the free space. No preformat buffer is used for a SAM ESDS.

The sequential write buffer is used for writing reblocked portions of the output file as they are encountered in ascending sequential order in the input. The size of the sequential write buffer is determined by rounding up the size of the common data buffer to an integral multiple of the new data CI size. This is done so that no more disk I/O operations are required (for data encountered sequentially) than would be required for a restoration without file modification.

The random write buffer is used only for a KSDS. It contains control intervals that must be inserted into the sequentially written data at a point prior to the current sequential position in the file.

These output buffers are shown in Figure 14 on page 32.

Data Buffers for Compacted Backup Files

For processing (creation or restoration) compacted backup files the usage of common data buffers for input and output operations is not possible because compaction or decompaction of data requires the data being moved from input (source) to output (destination) buffers. Instead of n common data buffers for a non-compacted backup file n input and n output buffers are required for the processing of the compacted backup file. Additionally an auxiliary or overflow buffer is necessary for composing or decomposing compacted data units. Therefore the buffer number value n, specified by the user or assumed by the Backup/Restore program for a non-compacted backup file is internally replaced by the value 2n+1, if a compacted backup file is to be created (backup) or to be restored (restore). n must be equal or greater than 3.

Caused by compaction or decompaction work and data moving for processing a compacted backup file more CPU time is required, but I/O time and space on the backup volumes is spared.

Channel Programs per Buffer

Each common data buffer has its own set of input and output channel programs to allow complete independence in the I/O scheduling of the individual buffers. In this way, several I/O requests for the backup file can be present in the channel queue at the same time, even if another backup file I/O request is still being executed. This allows, for example, the EXCP instruction for a second backup file buffer to be issued before the I/O interrupt of the first backup file buffer has occurred, and the SIO request for the second backup file buffer can be issued immediately following the interrupt for the first I/O operation.

When file modifications are specified, each output data buffer has its own VSAM write channel program; no backup file related channel programs are provided for these buffers.
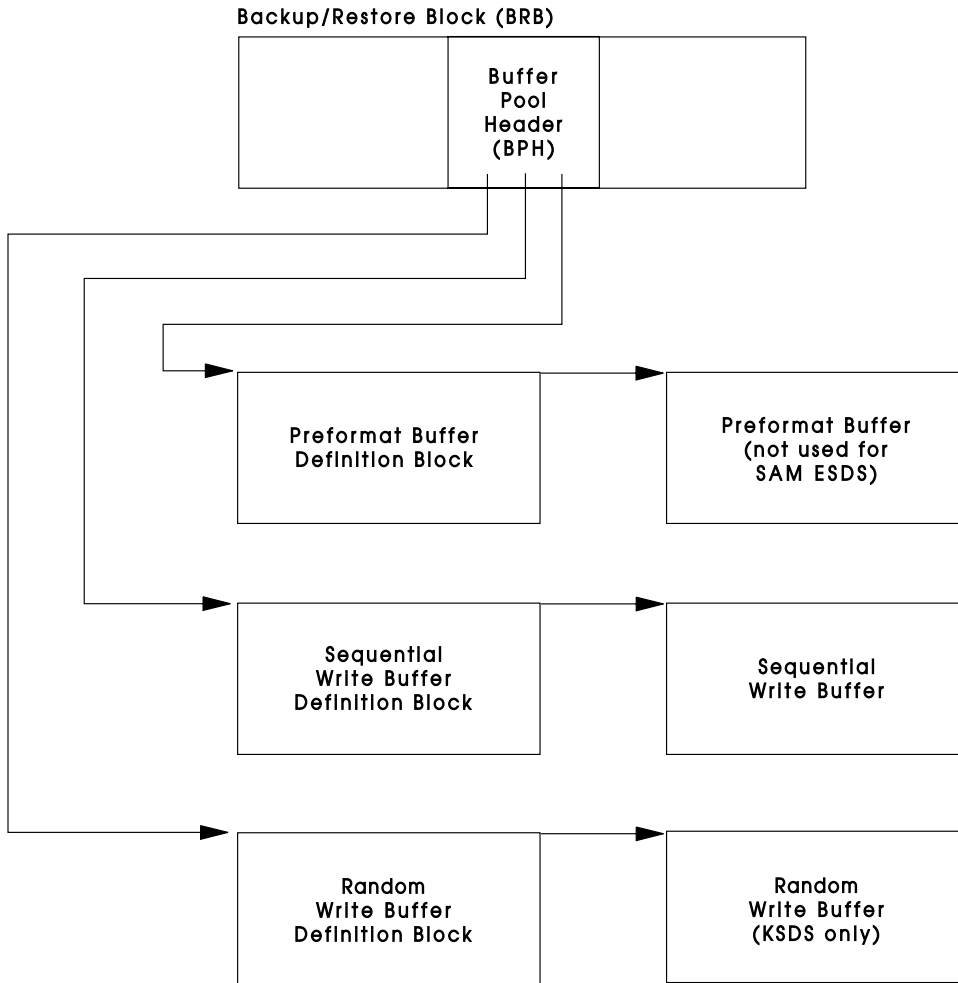
Figure 14. Output Data Buffers for RESTORE with File Modification

Pregenerated Channel Programs for Backup/Restore

In order to reduce the path length between two successive SIOs for the backup file to a minimum, both the input and output channel programs for the individual buffers are not built dynamically for each EXCP instruction, but rather are "pregenerated" when Backup/Restore begins, (built only once before the general backup or restoration loop is entered). Only trivial modifications of the channel programs occur in the loop, such as the updating of the seek address for disk related channel programs. Channel programs for a tape resident backup file are never changed.

Buffer Management Concepts

For a time-critical device in a multiprogramming environment, partition priorities play a role in buffer management. The following sections describe the effects of priorities on the buffer management for backup to tape. Similar considerations also apply for restoration from tape if the backup file is non-compacted.

For the subsequent discussion, the following definitions are assumed:

- The *lowest-priority partition* in the system at any particular moment is the partition whose processing can be interrupted by all other partitions in the system, if the resources they are waiting for become available.

- The *highest-priority partition* in the system at any particular moment is the one that can interrupt any other partition if the resource it is waiting for becomes available.

- *Reinstruction* is the issuing of an SIO instruction before completion of the previous SIO in order to facilitate streaming.

Lowest-Priority Partition

Processing of the lowest-priority partition can be interrupted at any time by any other partition. However, if processing is interrupted, it is very likely that the point of reinstruction of the time-critical device will be missed, so that streaming may not be achieved. In addition, if the lowest-priority partition suspends its processing and waits for the completion of an I/O operation, the whole system remains in a wait state until either a higher-priority partition or the lowest-priority partition becomes ready again.

Therefore, the following must be true for VSE/VSAM Backup/Restore to operate effectively in the lowest-priority partition:

- The path between two successive EXCP instructions for a time-critical device must be as short as possible in order to reduce the likelihood of an interruption by a higher-priority partition.

- When the lowest-priority partition gets control, it must make optimum use of the time it gets by placing as many I/O requests as possible for the time-critical device into the channel queue. If it is able to put n I/O requests for the time-critical device into the channel queue during the execution of one I/O operation, the period that lasts until the next I/O request must be put into the channel queue will be n times the I/O time for the data transfer of one buffer of the time-critical device, instead of the single I/O operation time. Consequently, an interruption by a higher-priority partition may be sustained more easily without missing the point of reinstruction.

- The disk operation should be completed as fast as possible so that the time available for issuing the corresponding tape EXCP request for the buffer is as large as possible. If the time available for the scheduling of the tape request is small, the point of reinstruction is easily missed if control is lost to a higher-priority partition or to the Supervisor (for the handling of interrupts for other partitions).

VSE/VSAM Backup/Restore buffer management allows the user to specify the number of buffers and schedules as many tape I/O requests as possible in accordance with that number before a WAIT request is issued for the completion of a tape I/O operation. With one disk I/O operation, only one buffer is read, as described in the last bulleted item above.

The path length between two successive EXCP instructions is extremely short.

Figure 15 on page 34 illustrates the effectiveness of this buffer management for four buffers.

Figure 15. VSE/VSAM Backup/Restore Buffer Management
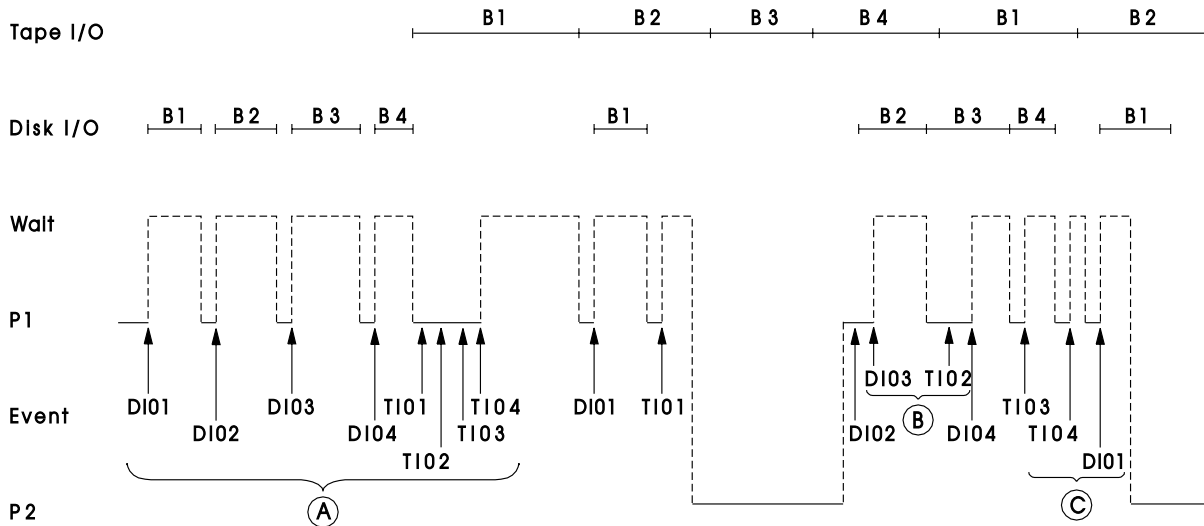
Legend:

Bn   =   buffer n
DIOn =   disk I/O request for buffer n
TIOn =   tape I/O request for buffer n
P1   =   the partition in which the VSAM backup operation is performed
P2   =   a second partition

Explanation:

A: Initial filling of buffers with VSAM data and subsequent writing.

B: If an empty buffer is available, a disk I/O request is issued
      before the tape I/O request for the preceding buffer.

C: If no empty buffer is available, the tape I/O request for the
      preceding buffer is issued before the completion of a previous
      tape request.

Highest-Priority Partition

The buffering strategy described in the preceding section must be reevaluated for the highest-priority parti-
tion. Unlike the lowest-priority partition, the highest-priority partition obtains control whenever it needs it
and does not wait for I/O completion or for the availability of a shared resource. If the highest-priority
partition uses extensive buffering as described above, the speed of the slowest device (the tape device, in
the case of a backup operation to tape) becomes the limiting factor, so that, eventually, all buffers for the
slowest device become scheduled and can be refilled only one by one as they become available after the
completion of the I/O operations scheduled for the slowest device.

Because the highest-priority partition automatically receives control when an I/O operation that it is being
waited for is completed, it is generally not necessary to provide more buffers (for the highest-priority parti-
tion) than are absolutely necessary to meet the time-critical condition. However, an imbalance in the I/O
usage by lower-priority partitions may require additional buffers to be used for the highest-priority partition.

The buffer management for VSE/VSAM Backup/Restore allows the user to specify the number of common
data buffers so that he can tune the space requirements for buffers in accordance with the priority of the
partition in which he runs his VSE/VSAM Backup/Restore.

Restoration with file modification is not considered as performance-critical as normal restoration. There-fore, RESTORE does not consistently reinstruct time-critical devices in the required time. Buffer manage-ment is also more limited in that there is no flexibility in the number of special output data buffers when file modifications are required.

Locate Area

As described before, each volume of the backup file contains a directory listing all objects that will be contained on the backup file. The directory must be constructed before the first object is backed up. Generic names must be expanded to the set of entrynames they represent, and a determination must be made of which alternate indexes and paths must be backed up (automatically) because their base clusters or path entry AIXes are backed up.

In order to determine the set of objects for a generic name or to find the automatically backed up associ-ations of an object, it is necessary to retrieve at least the cluster (type C), alternate index (type G), or path (type R) catalog records of the objects being backed up before the first object is backed up. This catalog information is required later when the object header that precedes the object on the backup file is to be constructed.

In order to not have to locate the catalog information for an object twice, VSE/VSAM Backup/Restore keeps the catalog information for the object in the *locate area* (see Figure 16). The locate area is an area in virtual storage consisting of multiple blocks that are chained together by forward and backward chain pointers.
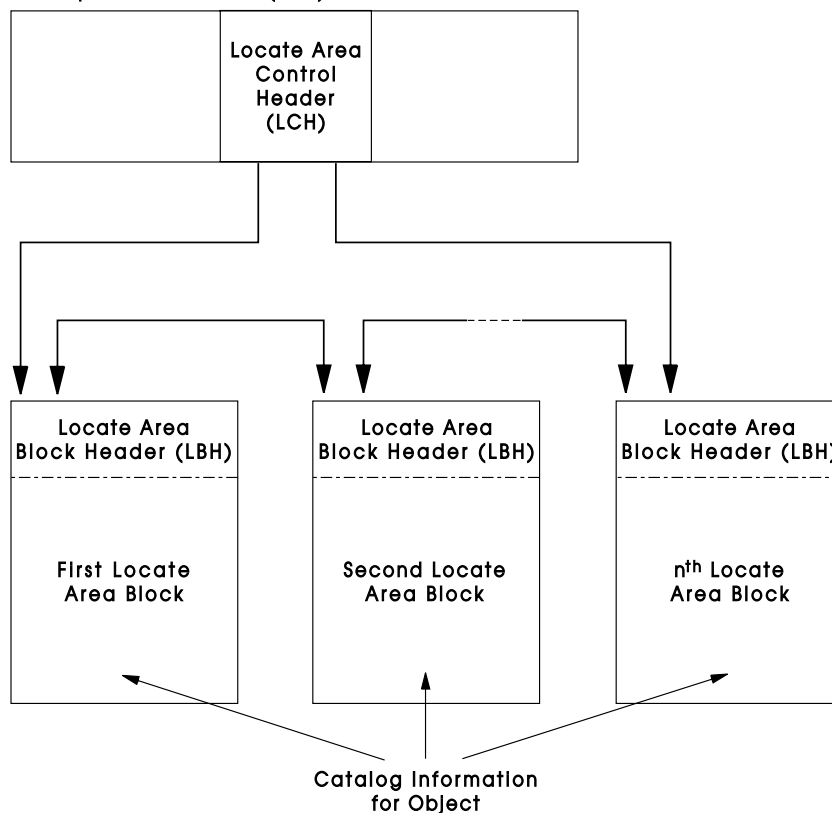
Figure 16. Locate Area

The individual blocks of the locate area are allocated on an as-needed basis. If only one block is required, only one is allocated. VSE/VSAM Backup/Restore limits the total size for the locate area to 32K bytes. The size, however, can be arbitrarily changed by changing the field LCHMLS in the locate area control header (LCH) which is part of the Backup/Restore Block, the major control block for VSE/VSAM Backup/Restore.

If the locate area becomes full during directory construction, construction of the directory continues, but only the absolutely necessary catalog information is retrieved for the remaining objects to be backed up. Their catalog information must be located again when space is available in the locate area or when the information is needed to construct the object header.

After all entries with catalog information in the locate area have been backed up, the locate area is reset to "empty" (marked as available but not freed), and the locate area is filled with catalog information for the next set of objects to be backed up. This process is repeated until all objects have been backed up.

Internal Directory Entries

As described in the previous section, catalog information for an object (directory entry) is retrieved when the directory is constructed and is kept in the locate area if space is available. Otherwise, the object's catalog information must be located again when locate area space becomes available.

In order to not have to reread the catalog high-key-range record for an object when its catalog information is read to construct the object header, VSE/VSAM Backup/Restore keeps the control interval (CI) number of the low-keyrange record for the object in the *internal directory entry* for the object. The internal directory entries are extensions of the *external directory entries* that are recorded on the backup file. The internal directory entries are not written onto the backup file because they only contain information that is relevant for the backup operation for the object but is neither characteristic of the object nor relevant to the restoration of the object.

In virtual storage, the external and internal directory entries are allocated as shown in Figure 17.

Backup/Restore Block (BRB)
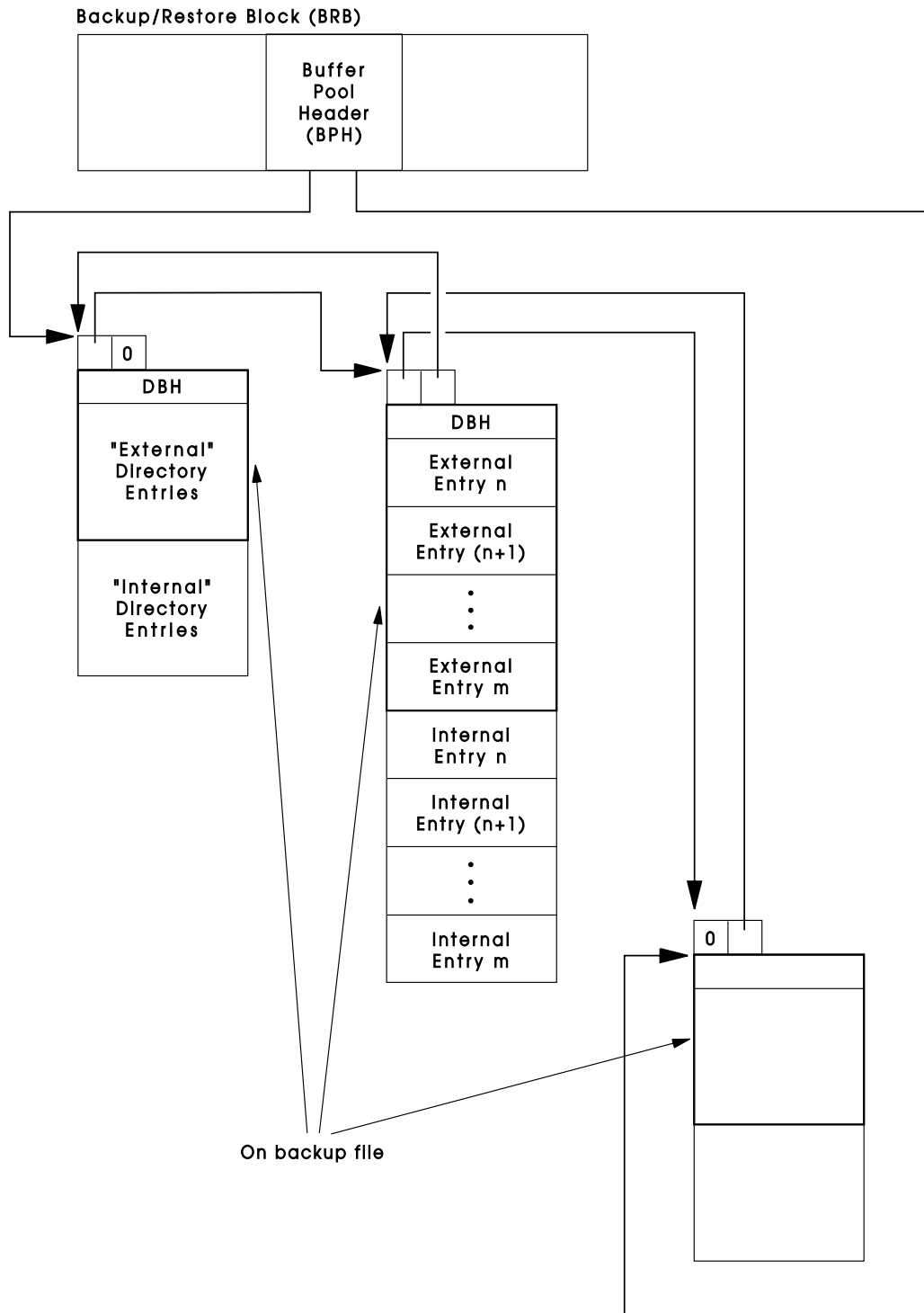
Figure 17. External and Internal Directory Entries

The internal directory entry contains the control interval number of the C-type, G-type, or R-type catalog record for the object represented by the external directory entry. It also contains the address of the associated catalog information in the locate area, if present, and a pointer to the password to be used when locating the catalog information for the object.

Volume List

At the end of a backup to tape operation, VSE/VSAM Backup/Restore prints the Backup Volume Cross Reference (BVCR) and the Backup Object Cross Reference (BOCR) listings. Both listings contain the volume sequence numbers and, for labeled backup files, the volume serial numbers of the individual backup volumes.

The volume sequence numbers are in ascending order, as assigned by VSE/VSAM Backup/Restore for reference purposes and in messages during restoration. The first backup volume has the volume sequence number one.

In order to print the volume serial numbers in the cross reference listings, VSE/VSAM Backup/Restore must gather the volume serial numbers as the individual backup volumes are mounted during backup and must keep them until the cross reference listings are printed.

VSE/VSAM Backup/Restore stores the volume serial numbers of the backup volumes into the *volume list* which consists of a set of virtual storage blocks, allocated as needed and chained by forward and backward chain pointers (see Figure 18 on page 39). The volume serial numbers are stored in the sequence of the associated volume sequence numbers.

All blocks of the volume list have the same fixed length of 128 bytes. The size can be changed to any value by changing the field VLBNVLE (the number of entries in a volume list block) in the dummy section describing the layout of the volume list.

A volume list is also created and maintained if a backup to disk operation is performed. In this case the volume list contains one volume list block for each disk volume occupied by the backup file. The volume list block contains information necessary for updating the backup file directory recorded on the volume. This information comprises a directory block address allocation table, containing main storage and disk address for each directory block, and a channel program usable for updating a single directory block on the volume. The first volume list block contains additionally a formatting write channel program suitable to write the whole backup file directory to a backup file volume. This channel program is updated and reexecuted for each new disk volume occupied by the backup file. Each time a VSAM object is backed up successfully, the actual updated directory block is written out to all backup file volumes by executing the update write channel programs contained in the existing volume list blocks. The volume list blocks for the disk volumes are also chained together by forward and backward chain pointers, but they are variable in length depending on the backup file device type and the size of the backup file directory.

Extent List

The extent list is created each time a disk resident backup file is processed. The list contains one entry for each disk extent occupied by the backup file. In this entry extent describing information (volume serial number, extent sequence number and extent limits) is gathered. During backup to disk the extent list has the same function as the volume list for a backup to tape operation: At the end of the backup process it allows printing out the Backup Extent Cross Reference Listing (BECR) and the Backup Object Cross Reference Listing (BOCR). The contents of the extent list itself are also printed out in a third listing. During restore from disk the extent list is built by Open and describes the backup file extents available for the restoration process. If the starting backup file extent for a VSAM object to be restored (description is taken from the object related directory entry) cannot be found in the extent list, the object is not restorable. The extent list blocks have a fixed length of 328 bytes (backup) or 368 bytes (restore) and are chained together by forward and backward chain pointers.
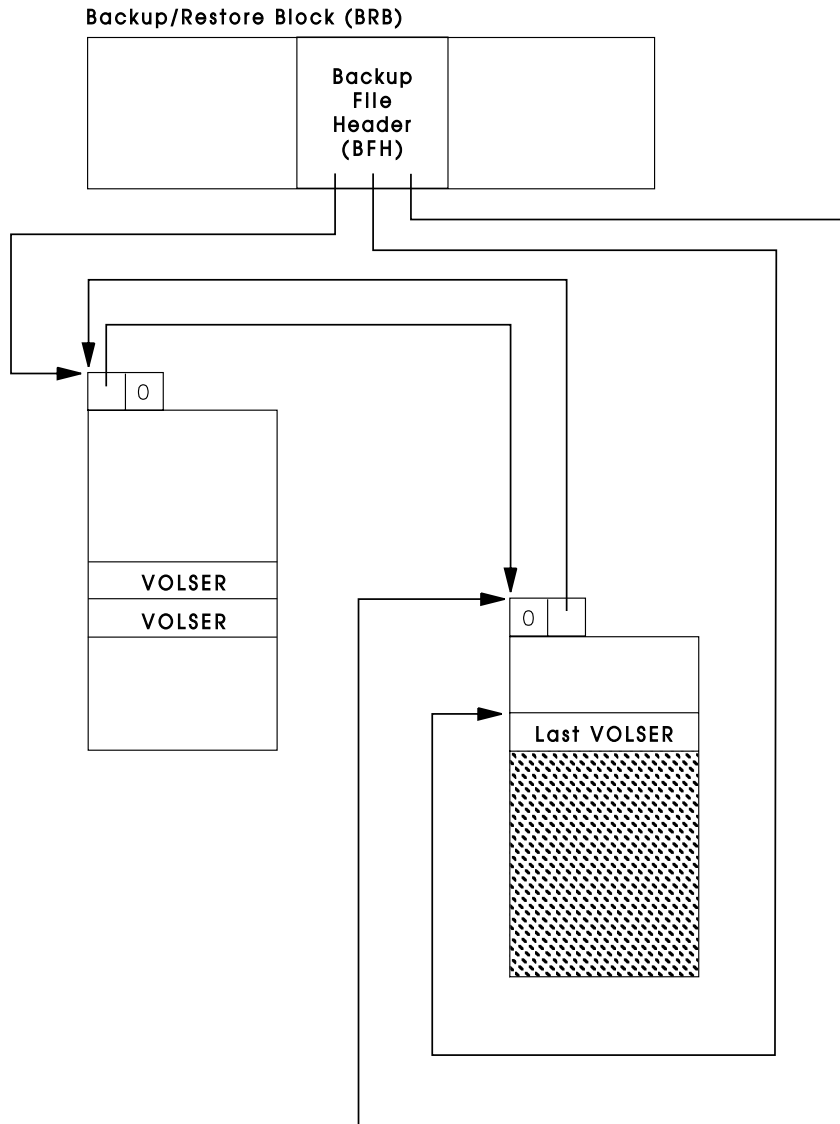
Figure 18. Volume List for a Backup to Tape Operation

Restore Member List

The user does not have to specify the individual objects he wants to restore on the RESTORE command. He can use generic names where possible. Furthermore, some of the objects of the backup file are restored automatically without user specification. (Alternate indexes are restored along with their base cluster; paths are restored with their path entry cluster.) In addition, objects of the backup file can be excluded from restoration via the EXCLUDE parameter.

Therefore, the list of objects to be restored does not necessarily coincide with the list of objects specified in the command. Nor does it coincide with the list of entries in the directory. It is a subset of the directory entries.

Before any object of the backup file is restored, VSE/VSAM Backup/Restore constructs a list called the *restore member list* (or *restore list*), which contains one entry for each object that is actually restored (see Figure 19). The entries are ordered in the sequence the objects are restored.
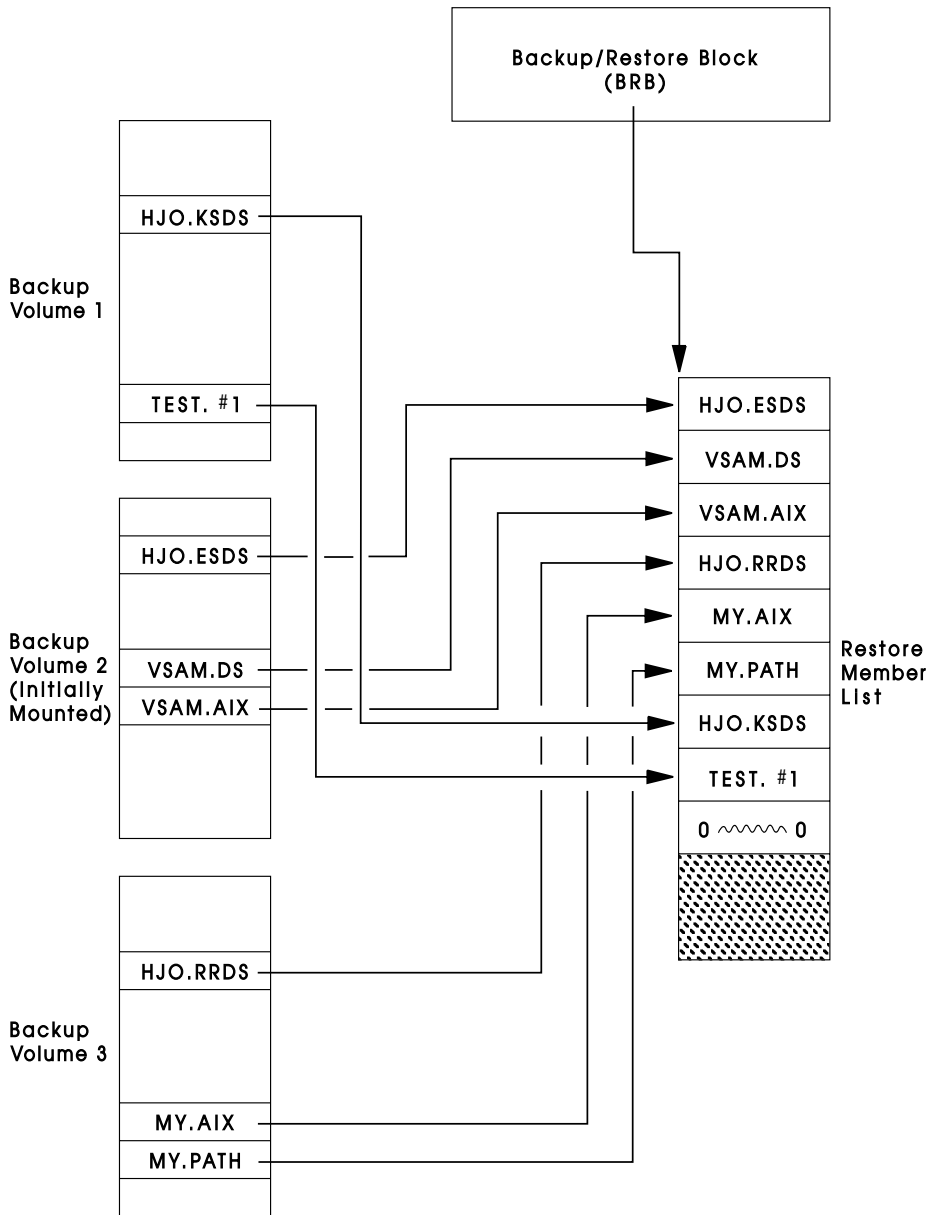
Figure 19. Restore Member List (RML)

The order in which the objects are restored depends on which volume is mounted first and is as follows:

- The objects of the initially mounted backup volume are restored first. They are first in the restore member list.

- Next are the objects of the backup volumes that follow (higher volume sequence numbers) the initially mounted backup volume. Their restoration sequence and sequence in the restore member list is the same as it is on the backup file.

- Last are the objects of the backup volumes that precede (lower volume sequence numbers) the initially mounted backup volume. Again their restoration sequence and sequence in the restore member list is the same as it is on the backup file.

One exception should be mentioned:

If an alternate index to be restored starts on the initially mounted (or a later) backup volume, but its base cluster starts on a backup volume that *precedes* the initially mounted backup volume, this alternate index

is not restored before the base cluster is restored, and its entry in the restore member list follows the entry for the base cluster. The same exception applies to paths. Note that, in such a case, some of the backup volumes may have to be mounted twice.

The following general rules apply:

- Associations are always restored after the object they are based upon has been restored.

- The entries of associations in the restore member list always follow the restore member list entries for the objects the associations are based upon.

The restore member list is a consecutive list in virtual storage. The end of the list is indicated by an entry of zeros. The virtual storage allocated for the restore member list is chosen so that an entry for each object in directory plus a zero-entry would fit.

Each entry in the restore member list contains:

- A pointer to the associated directory entry that contains more information about the object.

- A pointer to the best-fit entry for the object in the object list of the RESTORE command. The best-fit entry is the one whose local modifications, like the VOLUMES specification, are to be applied to the object when it is defined in the catalog.

- A pointer to the entry of the object list of the RESTORE command whose password specification is to be used when an appropriate object with the same entryname is to be deleted from the catalog during restoration. In general, the password pointer is the same as the best-fit entry. For automatically restored associations, it may, however, be different (no best-fit entry).

The format of the restore member list entry is illustrated in Figure 20 on page 42.

```
RESTORE OBJECTS ( -
         (*) -
         (ABC/PASSWD (VOLUMES(XZY001))) -
         )
```
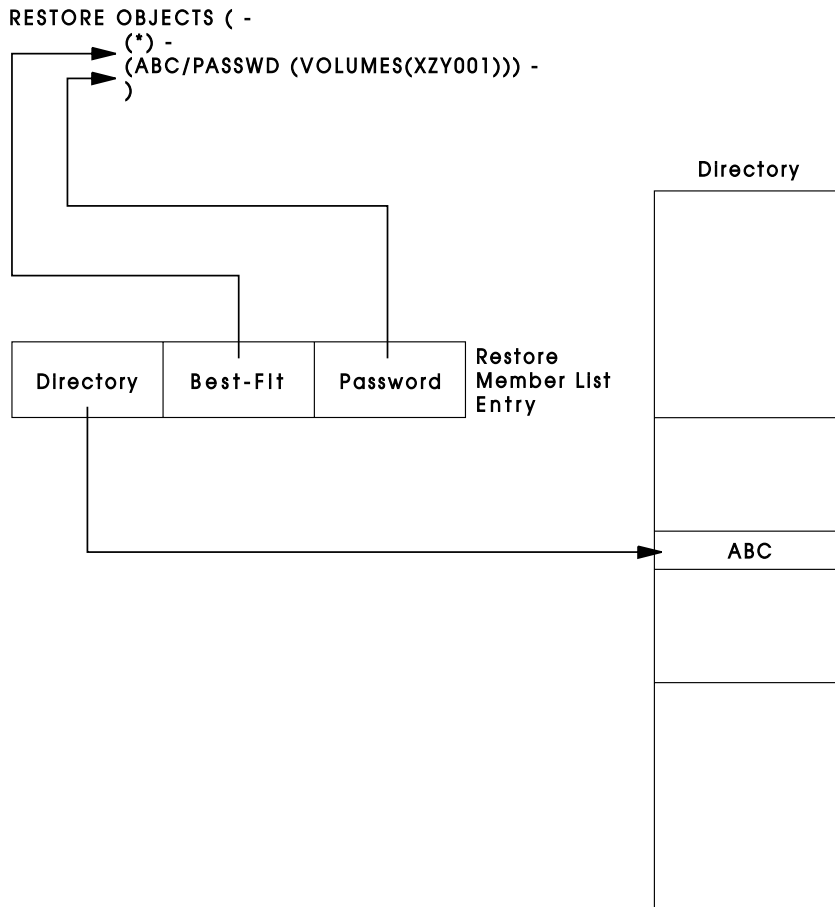

Figure 20. Restore Member List Entry

Index Information Blocks

VSE/VSAM Backup/Restore avoids time-consuming index-search operations in determining the location of and in reading higher-level index control intervals when an index entry has to be made.

During restoration, VSE/VSAM Backup/Restore provides an Index Information Block (XIB) for each potential index level. The index information block contains the relative byte address of the last index control interval of the appropriate index level so that the last index CI can be read immediately.

In addition, the index information block contains front-compression accumulators that allow simple calculation of the front-compression of an index entry from the front-compression of the section entries of the next lower level without performing an index decompression.

Essentially, the following rules apply for the calculation of front-compression:

- The front-compression of a regular index entry on level n is equal to the minimum of the front-compressions of the section entries of the index control interval of level n-1 represented by the index entry.

- The front-compression of a section entry of level n is equal to the minimum of the front-compressions of all index entries of the level n contained in the section in question.

These minimal values can be calculated easily as a by-product of the index construction on the next lower level. Accordingly, it is only necessary to determine the front-compressions on level one by decompression of the sequence set section entries and comparison with the high-key of the previous sequence

set control interval. All higher-level front-compressions can be derived from the front-compressions on the sequence set level.

Because a VSAM data set is limited to 2^{32} bytes and the minimum control interval size is 512 bytes, there may be at most 2^{23} sequence set entries. Hence there will not be more than 23 index levels, provided at least two index entries fit into an index control interval. For the minimum index control interval size of 512 bytes, the key size should be not larger than 234 bytes. For larger index control interval sizes greater than 512, more than two index entries will fit.

The above considerations show that in nearly all cases the virtual storage required for the index information blocks will be less than 5K bytes.

In virtual storage, the index information blocks are allocated consecutively and can be indexed by means of the index level number. Sufficient space is allocated for the potential (in accordance with the key and index control interval size) maximum number of index levels plus one. The extra index information block is provided in order to allow the same index processing for all index levels, including the highest possible level.

The format of the index information blocks is shown in Figure 21.

Backup/Restore Block (BRB)
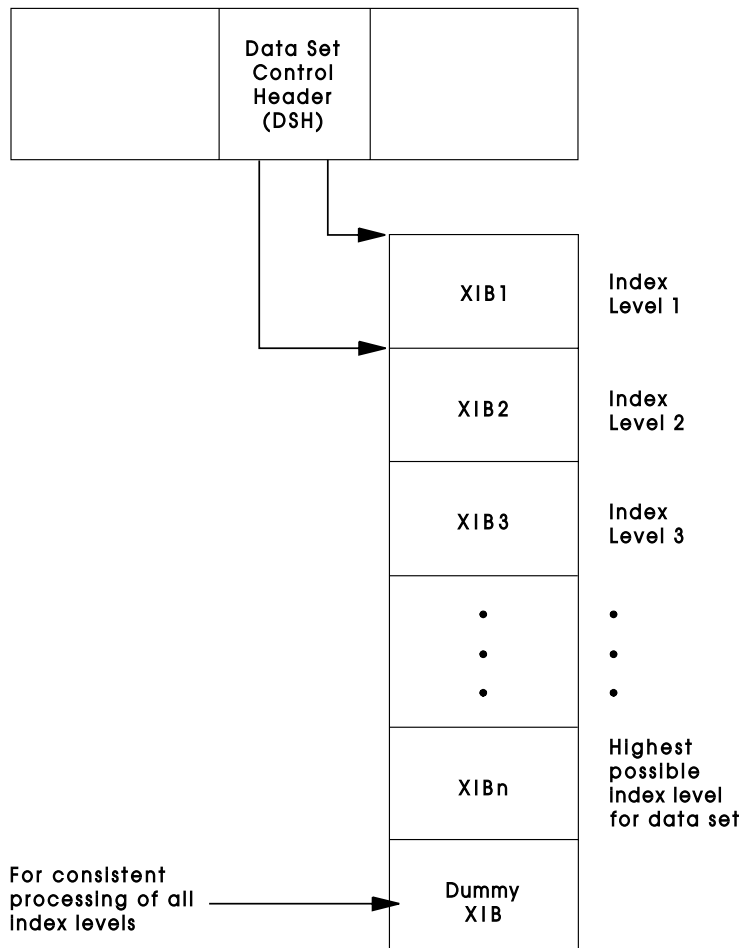
Figure 21. Index Information Blocks

Backup and Restore Catalog Areas

Unlike the Access Method Services EXPORT and IMPORT commands, VSE/VSAM Backup/Restore does not acquire virtual storage each time a Catalog Parameter List (CTGPL), a Catalog Field Vector Table (CTGFV), or a Catalog Field Parameter List (CTGFL) is needed for catalog access.

The CTGPLs, CTGFVs, and CTGFLs required for catalog access are known to VSE/VSAM Backup/Restore in advance. They are pre-assembled and loaded (reentrant), when BACKUP or RESTORE command execution begins.

The catalog areas for BACKUP are contained in the Backup Catalog Area (BCA), and those for RESTORE are contained in the Restore Catalog Area (RCA), both of which are pointed to by the Backup/Restore Block.

Major Operations of the BACKUP Command

After the Access Method Services Executive transfers control to the BACKUP Functional Support Routine (FSR), the following basic operations are performed:

1. The Backup/Restore Block and the backup catalog area are loaded in a reentrant manner.

2. The correctness of the generic names in the BACKUP command is checked.

3. The directory is constructed:

   – Generic names are expanded to the set of entrynames they represent.

   – The associations of objects are automatically included.

   – Objects that are excluded from backup via the EXCLUDE parameter are not included in the directory.

4. In parallel with directory construction, the locate area is filled, as far as possible, with catalog information for the objects in the directory.

5. The backup file is opened and the directory is written onto the first backup volume.

6. The objects corresponding to the directory entries are backed up one by one. The backup process includes the following steps:

   a. It is ensured that the catalog information for the object to be backed up is contained in the locate area. If it is not, the locate area is refilled with the catalog information for the next set of objects.

   b. For a path, the object header is written onto the backup file.

   This is all that is done for a path. For non-path objects, steps c - g are also performed:

   c. The object is opened for input. If OPEN indicates the object is empty, only step e is performed.

   d. The buffer pool for the object's backup is constructed.

   e. The Object Header for the object is written onto the backup file.

   f. The object is copied onto the backup file.

   g. After the backup operation, the object is closed.

7. After all objects have been backed up, the Backup Cross Reference Listings are printed:

   a. Volume Cross Reference Listing (BVCR) after backup to tapes
      Extent Cross Reference Listing (BECR) after backup to disk
   b. Backup Object Cross Reference Listing (BOCR)
   c. Extent List (only after backup to disk)

8. The backup file is closed.

9. All allocated resources are released.

10. Control is transferred back to the Access Method Services Executive.

The BACKUP FSR invokes various subfunctions in order to perform the above actions.

Major Operations of the RESTORE Command

After the Access Method Services Executive transfers control to the RESTORE FSR, the following basic operations take place:

1. The Backup/Restore Block and the restore catalog area are loaded in a reentrant manner.

2. The correctness of the generic names in the RESTORE command is checked.

3. The backup file is opened and the directory is read.

4. The restore member list is created containing one entry for each object to be restored in the sequence the objects are restored. Restoration starts with the mounted volume and wraps around at the end of the backup file. Associations are never restored before the object they are based upon has been restored.

   Objects excluded from restoration via the EXCLUDE parameter of the RESTORE command are not in the restore member list.

5. The objects selected by the restore member list are restored one by one. The following steps are performed for each object:

   a. The backup file is searched for the object. If the backup file is tape resident, the proper backup volume is mounted if it has not yet been mounted.

   b. The Object Header for the object is read.

   c. The object is defined in the VSAM catalog. An existing object with the same entryname is deleted before the definition. All local or global define modifications are applied.

   If the object is a path or an empty object, this is all that is done. For other objects, steps d - h are also performed.

   d. The object is opened for output.

   e. The buffer pool consisting of data buffers and, for a KSDS, three index buffers, is constructed.

   f. For a KSDS, the necessary number of index information blocks is provided.

   g. The object is restored. The index of a KSDS is reconstructed in the restoration process.

   h. The object is closed after it has been restored.

6. The backup file is closed and all allocated resources are released.

7. Control is transferred back to the Access Method Services Executive.

The RESTORE FSR invokes various subfunctions in order to perform the above actions.

Chapter 3. Control Block Structure

Figure 22 on page 49 shows the basic control block structure for VSE/VSAM Backup/Restore. Most of the control blocks are discussed in previous sections and, therefore, are just summarized here.

Backup/Restore Block (BRB): The Backup/Restore Block (BRB) is the major control block for VSE/VSAM Backup/Restore. It consists of eight sub-control blocks that control the resources used by VSE/VSAM Backup/Restore.

The sub-control blocks of the Backup/Restore Block are:

- Directory Control Header (DCH),
- Locate Area Control Header (LCH),
- VSAM Data Set Work Area (VDW),
- Data Set Control Header (DSH),
- Buffer Pool Header (BPH),
- Backup File Header (BFH), and
- Tape Command Parameter List (TCP),
- Backup File Parameter Area (BPA).

Besides these sub-blocks, the Backup/Restore Block contains pointers to

- the Restore Member List (RML),
- the Backup Catalog Area (BCA), and
- the Restore Catalog Area (RCA).

In addition, the Backup/Restore Block contains work areas and a register save area pool for registers saved by the subfunctions invoked by the BACKUP FSR or the RESTORE FSR.

The Backup/Restore Block is always pointed to by register 13 and starts with a standard 72-byte save area for use by functions invoked by VSE/VSAM Backup/Restore (such as VSAM Open, Close, or Record Management).

The individual control blocks within the BRB are briefly described below.

Directory Control Header (DCH): A sub-block of the BRB controlling the virtual storage version of the directory. It contains directory block and entry pointers and counts.

Locate Area Control Header (LCH): A sub-block of the BRB controlling the Locate Area. It contains locate area block pointers and usage information.

VSAM Data Set Work Area (VDW): A sub-block of the BRB containing an ACB and related password and data set name areas used for opening an object to be backed up or restored. In addition, it contains the necessary call information to OPEN and CLOSE in order to provide reentrancy.

Data Set Control Header (DSH): A sub-block of the BRB containing the data set characteristics and additional object-related control information necessary for the backup or restoration of an object.

The DSH has three sub-blocks called Component Definition Blocks (CDB) describing the characteristics of the individual components of a VSAM data set. The CDBs are:

– the Data Component Definition Block (DCDB),

– the Sequence Set Component Definition Block (SSCDB), and

– the High-Level Index Component Definition Block (HXCDB).

VSE/VSAM Backup/Restore has different CDBs for the sequence set and the high-level index set in order to support mixed-architecture indexes.

The DSH also points to the index information blocks used for the reconstruction of the index during restoration.

The structure of the DSH is illustrated in Figure 23 on page 50.

Buffer Pool Header (BPH): A sub-block of the BRB controlling buffer usage by VSE/VSAM Backup/Restore. It contains user-specified buffer options, buffer pool characteristics, and pointers to the first Buffer Definition Block (BDB) and Index Buffer Blocks (XBB).

Backup File Header (BFH): A sub-block of the BRB controlling the backup file. It contains the backup file and backup volume creation times, the volume sequence and volume serial numbers of the current backup volume, and pointers to the volume list for labeled backup files.

Tape Command Parameter List (TCP): A sub-block of the BRB containing a CCB, channel programs, and data areas for special tape (backup file) requests such as writing an EOT record or continuation header.

Backup File Parameter Area (BPA): A sub-block containing the OPEN/CLOSE interface, an IORB, a sample channel program, parameters and indicators for handling a disk resident backup file, furthermore containing a compaction or decompaction work area for handling a compacted backup file.

Additional control blocks used by Backup/Restore are described below:

Directory Block Header (DBH): The header preceding each directory block and controlling the space utilization of the directory block.

Locate Area Block Header (LBH): The header preceding each locate area block and controlling the space utilization of the locate area block.

Index Information Block (XIB): A control block used to keep positioning and front-compression information for a particular index level.

Buffer Definition Block (BDB): A control block controlling an individual data buffer in contrast to the total buffer pool. Besides pointers to the associated buffer and to the next buffer definition block in the "buffer loop," it contains IORBs, seek count fields, define-extent and locate parameter lists, and pointers to the disk and tape channel programs for the buffer.

Index Buffer Block (XBB): A control block controlling an individual index buffer for index restoration. It contains pointers to the associated index buffer and its pregenerated disk channel programs. In addition, it contains an IORB and work areas for the channel programs.

Volume List Block for Backup to Tape (VLB): A block of the volume list that contains the volume serial number of labeled backup volumes during backup.

Backup/Restore Block
(BRB)

Restore Member List (RML)

Volume Character Table (VCT)

Function Data Table (FDT)

Global Data Table (FDT)

Backup Catalog Area (BCA)

Restore Catalog Area (BCA)

Directory Control Header (DCH)

Locate Area Control Header (LCH)

Buffer Pool Header (BPH)

Backup File Header (BFH)

Tape Command Parameter (TCP)

Backup File Parameter Area (BPA)

VSAM Data Set Work Area (VDW)

Data Set Control Header (DSH)

Directory Block Header (DBH)

Locate Area Block Header (LBH)

Buffer Definition Block (BDB)

Volume List Block (VLB/VLD)

Index Inform. Block (XIB)

Directory Block Header (DBH)

Locate Area Block Header (LBH)

Buffer Definition Block (BDB)

Volume List Block (VLB/VLD)

Index Inform. Block (XIB)

Index Inform. Block (XIB)

Sequence Set Index Buffer BL (XBB1)

Extent List Block (ELB)

Security Level Index Buffer BL (XBB1)

Extent List Block (ELB)

High- Level Index Buffer BL (XBB1)

Figure 22. Basic Control Block Structure

Volume List Block for Backup to Disk (VLD):   A block of the volume list that contains information necessary for writing or updating the backup file directory recorded on a specific backup volume.

Extent List Block (ELB):   A block of the extent list containing describing information for the disk extents occupied by a disk resident backup file.
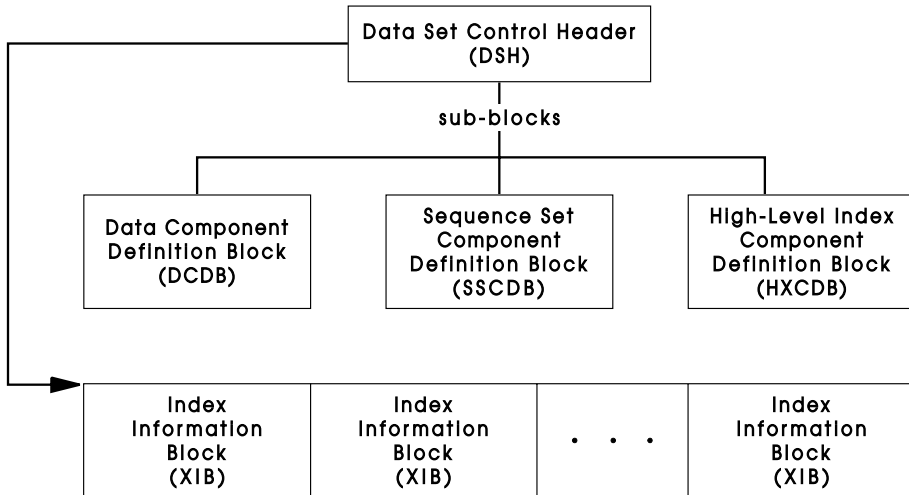
Figure 23. Structure of the Data Set Control Header

Restore Member List (RML):   The expanded list of objects to be restored by the execution of a RESTORE command. The entries are in the same order as the corresponding objects are restored.

Volume Characteristics Table (VCT):   A chain of blocks containing an entry for each VSAM volume for which Backup has done a locate-by-volume-serial-number to find tracks-per-cylinder for conversion of allocation units. The use of this table lets Backup avoid repeated locates for the same volume.

Backup Catalog Area (BCA):   A control block containing all the fields, work areas, Catalog Parameter Lists, and Catalog Field Parameter Lists required for catalog access during backup.

Restore Catalog Area (RCA):   A control block containing all the fields, work areas, Catalog Parameter Lists, Catalog Field Vector Tables, and Catalog Field Parameter Lists required for catalog access during restoration.

Function Data Table (FDT):   A parameter list constructed by the Access Method Services Reader/Interpreter and passed by the Access Method Services Executive to the BACKUP or RESTORE FSR. It contains the internal representation of the parameters specified by the user on the BACKUP or RESTORE command.

Global Data Table (GDT):   A parameter list passed by the Access Method Services Executive to the function support routine and containing pointers to the Access Method Services service functions (such as UPRINT) and to the inter-module and intra-module trace tables.

Chapter 4. Module Structure

VSE/VSAM Backup/Restore is divided into a set of small, self-contained subfunctions with only minimal, well-defined interaction with surrounding functions. Maintainability is enhanced by this strict structuring because each function can be understood by itself.

Each function occupies one module.

Flow of Control

The functions (modules) of VSE/VSAM Backup/Restore always return control to the calling function so that the flow of control can be represented by a tree structure. Following is the flow of control for the BACKUP or RESTORE commands.

```
Access Method Services executive
      BACKUP
      BACKUP FSR (IDCBPFSR)
            message handler (IDCBPMSH)
            command analyzer (IDCBPCMA)
                  message handler (IDCBPMSH)
            directory build (IDCBPDYB)
                  open VSAM catalog (IDCBPOVC)
                        obtain object name (IDCBPOON)
                              convert RBA (IDCBPCRB)
                                    IKQEDX
                                    IKQEOV
                  scan exclusion list (IDCBPSXL)
                  locate VSAM object (IDCBPLVO)
                        scan exclusion list (IDCBPSXL)
                        build locate entry (IDCBPBLE)
                              convert allocation units (IDCBPCAU)
                              add locate entry (IDCBPALE)
                        add directory entry (IDCBPADE)
                        search directory (IDCBPSRD)
                        move directory entry (IDCBPMDE)
                        obtain object name (IDCBPOON)
                        locate VSAM object (IDCBPLVO)
                        message handler (IDCBPMSH)
                  message handler (IDCBPMSH)
            backup open for magnetic tape (IDCBPBPO)
            backup open for disk (IDCBPDKO)
                  write special record (IDCBPWSR)
                  write directory on disk (IDCBPWDI)
            secure locate entry (IDCBPSLE)
                  reset locate entry (IDCBPRSL)
                  locate VSAM object (IDCBPLVO)
            VSAM open (IDCBPVOP)
                  build RPSTAB (IDCBPBDR)
            build backup buffers (IDCBPBBF)
            write object header to magnetic tape (IDCBPWOH)
                  backup EOV (IDCBPBPV)
                  message handler (IDCBPMSH)
```

```
        write object header to disk (IDCBPWHD)
              write special record (IDCBPWSR)
              write sequential (IDCBPWSQ)
                    write special record (IDCBPWSR)
              message handler (IDCBPMSH)
        backup data set (IDCBPBDS)
              write special record (IDCBPWSR)
              write sequential (IDCBPWSQ)
                    write special record (IDCBPWSR)
                    write directory on disk (IDCBPWDI)
                    compact data (IDCBPDNC)
              next backup volume (IDCBPNBV)
                    backup EOV (IDCBPBPV)
              convert RBA (IDCBPCRB)
                    IKQEDX
                    IKQEOV
              data disk read (IDCBPDDR)
              data disk wait (IDCBPDDW)
        VSAM close (IDCBPVCL)
        write directory on disk (IDCBPWDI)
        backup close for magnetic tape (IDCBPBPC)
              message handler (IDCBPMSH)
              print XREF (IDCBPPXL)
                    directory sort (IDCBPDYS)
                    message handler (IDCBPMSH)
        backup close for disk (IDCBPDKC)
              message handler (IDCBPMSH)
              print XREF (IDCBPPXD)
                    directory sort (IDCBPDYS)
                    message handler (IDCBPMSH)
        remove buffers (IDCBPRVB)
        remove locate area (IDCBPRVL)
        remove directory (IDCBPRVD)
  RESTORE
  RESTORE FSR (IDCRTFSR)
        message handler (IDCBPMSH)
        command analyzer (IDCBPCMA)
              message handler (IDCBPMSH)
        restore open for magnetic tape (IDCRTRTO)
        restore open for disk (IDCRTSKO)
        build restore list (IDCRTBRL)
              scan exclusion list (IDCBPSXL)
        mount specific (IDCRTMTS)
              restore open (IDCRTRTO)
              operator (IDCRTOPI)
        read object header from magnetic tape (IDCRTROH)
              mount next (IDCRTMTN)
                    operator (IDCRTOPI)
              mount later (IDCRTMTL)
                    restore open (IDCRTRTO)
                    mount specific (IDCRTMTS)
                          restore open (IDCRTRTO)
                          operator (IDCRTOPI)
                    operator (IDCRTOPI)
        read object header from disk (IDCRTTHD)
              read sequential from backup file (IDCRTRSQ)
```

```
          define object (IDCRTDFO)
                build FVT (IDCRTBFV)
                delete VSAM object (IDCRTDVO)
                        message handler (IDCBPMSH)
                message handler (IDCBPMSH)
          VSAM open (IDCBPVOP)
                build RPSTAB (IDCBPBDR)
          build restore buffers (IDCRTBBR)
          build XIB (IDCRTBDX)
          restore data set (IDCRTRDS) or remap data set (IDCRTMDS)
```

Call IDCRTRDS for a basic restoration or IDCRTMDS if file modifications (restoration to volume of different device type or DATARECORDS or INDEXCISIZE specified) are required. These two paths are described on the following pages. After one of these two paths is completed, control returns to the main line for VSAM close processing.

```
          VSAM close (IDCBPVCL)
          delete VSAM object (IDCRTDVO)
                message handler (IDCBPMSH)
          remove XIB (IDCRTRVX)
          remove buffers (IDCBPRVB)
          restore close for magnetic tape (IDCRTRTC)
          restore close for disk (IDCRTDKC)
```

Basic Restoration

```
          restore data set (IDCRTRDS)
                read sequential from backup file (IDCRTRSQ)
                        decompact backup data (IDCRTDDC)
                get extent (IDCRTGEX)
                        IKQNEX
                restore EOV (IDCRTREV)
                        mount next (IDCRTMTN)
                                operator (IDCRTOPI)
                convert RBA (IDCBPCRB)
                        IKQEDX
                        IKQEOV
                data disk write (IDCRTDWR)
                disk write wait (IDCRTDWW)
                add control area (IDCRTACA)
                        get next index record (IDCRTGNX)
                                get extent (IDCRTGEX)
                                        IKQNEX
                        write index (IDCRTWRX)
                                convert RBA (IDCBPCRB)
                                        IKQEDX
                                        IKQEOV
                        read index (IDCRTRDX)
                                convert RBA (IDCBPCRB)
                                        IKQEDX
                                        IKQEOV
                        get extent (IDCRTGEX)
                                IKQNEX
                        write SEOF (IDCRTWRS)
                                convert RBA (IDCBPCRB)
                                        IKQEDX
                                        IKQEOV
```

```
                             data disk write (IDCRTDWR)
                             data write wait (IDCRTDWW)
                             write index (IDCRTWRX)
                                     convert RBA (IDCBPCRB)
                                             IKQEDX
                                             IKQEOV
                 close index (IDCRTCLX)
                       write SEOF (IDCRTWRS)
                             convert RBA (IDCBPCRB)
                                     IKQEDX
                                     IKQEOV
                             data disk write (IDCRTDWR)
                             data write wait (IDCRTDWW)
                             write index (IDCRTWRX)
                                     convert RBA (IDCBPCRB)
                                             IKQEDX
                                             IKQEOV
                       write index (IDCRTWRX)
                             convert RBA (IDCBPCRB)
                                     IKQEDX
                                     IKQEOV
                 write SEOF (IDCRTWRS)
                       convert RBA (IDCBPCRB)
                             IKQEDX
                             IKQEOV
                       data disk write (IDCRTDWR)
                       data write wait (IDCRTDWW)
                       write index (IDCRTWRX)
                             convert RBA (IDCBPCRB)
                                     IKQEDX
                                     IKQEOV
```

Return to the main line on page 52 for VSAM close processing. **Restoration with File Modification**

```
         remap data set (IDCRTMDS)
               read sequential from backup file (IDCRTRSQ)
                     decompact backup data (IDCRTDDC)
               get extent (IDCRTGEX)
                     IKQNEX
               restore EOV (IDCRTREV)
                     mount next (IDCRTMTN)
                             operator (IDCRTOPI)
               convert RBA (IDCBPCRB)
                     IKQEDX
                     IKQEOV
               data disk write (IDCRTDWR)
               data write wait (IDCRTDWW)
               remap sequence set (IDCRTMSS)
                     get extent (IDCRTGEX)
                             IKQNEX
                     add control area (IDCRTACA)
                             get next index record (IDCRTGNX)
                                     get extent (IDCRTGEX)
                                             IKQNEX
                             write index (IDCRTWRX)
                                     convert RBA (IDCBPCRB)
                                             IKQEDX
                                             IKQEOV
```

```
                        read index (IDCRTRDX)
                                convert RBA (IDCBPCRB)
                                        IKQEDX
                                        IKQEOV
                        get extent (IDCRTGEX)
                                IKQNEX
                        write SEOF (IDCRTWRS)
                                convert RBA (IDCBPCRB)
                                        IKQEDX
                                        IKQEOV
                                data disk write (IDCRTDWR)
                                data write wait (IDCRTDWW)
                                write index (IDCRTWRX)
                                        convert RBA (IDCBPCRB)
                                                IKQEDX
                                                IKQEOV
        preformat (IDCRTPFO)
              convert RBA (IDCBPCRB)
                      IKQEDX
                      IKQEOV
close index (IDCRTCLX)
        write SEOF (IDCRTWRS)
                convert RBA (IDCBPCRB)
                        IKQEDX
                        IKQEOV
                data disk write (IDCRTDWR)
                data write wait (IDCRTDWW)
                write index (IDCRTWRX)
                        convert RBA (IDCBPCRB)
                                IKQEDX
                                IKQEOV
        write index (IDCRTWRX)
                convert RBA (IDCBPCRB)
                        IKQEDX
                        IKQEOV
write SEOF (IDCRTWRS)
        convert RBA (IDCBPCRB)
                IKQEDX
                IKQEOV
        data disk write (IDCRTDWR)
        data write wait (IDCRTDWW)
        write index (IDCRTWRX)
                convert RBA (IDCBPCRB)
                        IKQEDX
                        IKQEOV
```

Summary of Executable Modules

IDCBPADE **Add Directory Entry**
Acquires the space for a directory entry in a directory block and allocates new directory blocks as necessary.

IDCBPALE **Add Locate Entry**
Acquires the space for a Locate Entry (catalog information for the Object Header) in the Locate Area.

IDCBPBBF **Build Backup Buffers**
Constructs the buffers, Buffer Definition Blocks, and buffer channel programs for the backup of an object.

IDCBPBDR **Build RPSTAB**
Builds a sector number table for RPS devices to allow fast access to sector numbers during backup or restoration.

IDCBPBDS **Back Up Data Set**
Performs the actual backup of a data set.

IDCBPBLE **Build Locate Entry**
Constructs the Locate Entry (catalog information for the Object Header) in the Locate Area.

IDCBPBPC **Backup Close for a Tape Resident Backup File**
Closes the backup file after backup and causes the printing of the cross-reference listings.

IDCBPBPO **Backup Open for a Tape Resident Backup File**
Opens the backup file for output and constructs channel programs for writing the directory and the dummy records; writes the directory onto the first backup volume; initializes the volume list.

IDCBPBPV **Backup EOV**
Writes an EOT-record onto the current backup volume, mounts the next backup volume, and writes the directory onto it; extends the volume list.

IDCBPCAU **Convert Allocation Units**
Converts space allocation specifications (TRACKS or CYLINDERS, as retrieved from the catalog) to device-independent units (RECORDS) to be saved in the tape backup file.

IDCBPCMA **Command Analyzer**
Checks the correctness of any generic name in the object or exclusion list of the BACKUP or RESTORE command.

IDCBPCRB **Convert RBA**
Converts an RBA into a disk address.

IDCBPDDR **Data Disk Read**
Modifies the disk read channel program for a buffer and schedules the reading of a buffer from an object to be backed up.

IDCBPDDW **Data Disk Wait**
Completes a disk read operation scheduled by the Data-Disk-Read Function.

IDCBPDKC **Backup Close for a Disk Resident Backup File**
Closes the backup file after backup and causes the printing of the cross-reference listings.

IDCBPDKO **Backup Open for a Disk Resident Backup file**
Opens the backup file for output, constructs channel programs for writing single records (BOE-, EOE-records) and backup file directory; writes BOE record and directory to the first backup file extent; initializes volume and extent list.

IDCBPDNC **Backup File Compaction Routine**
Compacts all backup file data before writing it out.

IDCBPDYB **Directory Build**
Builds a directory from the BACKUP command object list, the exclusion list, and the VSAM

catalog. In parallel, the Locate Area is filled with catalog information for the objects to be backed up.

IDCBPDYS   **Directory Sort**
Sorts the directory by object name.

IDCBPFSR   **BACKUP Function Support Routine**
Basic module invoked by the Access Method Services Executive; directs the flow of control during the BACKUP command execution.

IDCBPLVO   **Locate VSAM Object**
Obtains the catalog information for an object, builds a directory entry for it, and stores its catalog information in the Locate Area.

IDCBPMDE   **Move Directory Entry**
Moves an existing entry of the directory to the end of the directory.

IDCBPMSH   **Message Handler**
Prepares any message to be printed during BACKUP or RESTORE command execution for printing by the Access Method Services UPRINT.

IDCBPNBV   **Next Backup Volume**
Writes the dummy record terminating a part of a data object, calls backup EOV to mount the next backup volume, and writes a Continuation Header for object being backed up.

IDCBPOON   **Obtain Object Name**
Obtains the true name and the master password of a cluster, alternate index, or path record whose control interval number has been specified.

IDCBPOVC   **Open VSAM Catalog**
Opens the VSAM Catalog as regular data set for input.

IDCBPPXD   **Print XREF for a Disk Resident Backup File**
Assembles and prints the Backup Extent Cross-Reference, the Backup Object Cross-Reference and the Extent List.

IDCBPPXL   **Print XREF for a Tape Resident Backup File**
Assembles and prints the Backup Volume and the Backup Object Cross Reference listings.

IDCBPRSL   **Reset Locate Area**
Resets the Locate Area to empty so that it can be refilled with catalog information.

IDCBPRVB   **Remove Buffers**
Releases and frees the virtual storage for the buffer pool for BACKUP or RESTORE.

IDCBPRVD   **Remove Directory**
Frees the virtual storage acquired for the backup file directory.

IDCBPRVL   **Remove Locate Area**
Frees the virtual storage acquired for the Locate Area and for catalog work areas.

IDCBPSLE   **Secure Locate Entry**
Ensures that the Locate Area contains the catalog information for the next object to be backed up. If not, it refills the Locate Area with the catalog information.

IDCBPSRD   **Search Directory**
Searches the directory for a specified object name.

IDCBPSXL   **Scan Exclusion List**
Scans the exclusion list of BACKUP or RESTORE command to determine if an object is to be excluded from backup or restoration.

IDCBPVCL   **VSAM Close**
Closes an object after backup or restoration.

IDCBPVOP   **VSAM Open**
Opens an object to be backed up or to be restored for input or output; constructs the Data Set Control Header for the object.

IDCBPWDI   **Write Backup File Directory**
Writes and updates the backup file directory on each volume

occupied by a disk resident backup file.

IDCBPWHD   **Write Object Header to Disk**
Writes Object Header for an object being backed up to disk.

IDCBPWOH   **Write Object Header to Tape**
Writes the Object Header for an object being backed up to tape.

IDCBPWSQ   **Sequential Write for Backup File**
Writes a filled buffer to a tape or disk resident backup file, compacting the backup file data if requested.

IDCBPWSR   **Write Special Records**
Writes BOE_, EOE- and EOF-records for a disk resident backup file.

IDCRTACA   **Add Control Area**
Writes the sequence set record for a control area and constructs the higher-level index entries for the control area.

IDCRTBBR   **Build Restore Buffers**
Constructs the buffers, Buffer Definition Blocks, Index Buffer Blocks, and buffer channel programs for the restoration of an object.

IDCRTBDX   **Build XIB**
Constructs the Index Information Blocks for the index reconstruction of an object to be restored.

IDCRTBFV   **Build FVT**
Builds a field vector table and the associated field parameter lists for a component necessary for the redefinition of an object.

IDCRTBRL   **Build Restore List**
Builds the Restore Member List (a list of all objects to be restored).

IDCRTCLX   **Close Index**
Issues and completes any outstanding index I/O operation after the restoration of a key-sequenced data set. Initiates the

writing of all necessary software-ends-of-file.

IDCRTDDC   **Backup File Decompaction Routine**
Decompacts backup file data read in from a compacted backup file.

IDCRTDFO   **Define Object**
Defines an object in the VSAM catalog during restoration.

IDCRTDKC   **Restore Close for a Disk Resident Backup File**
Closes the disk resident backup file after completion or termination of the RESTORE command.

IDCRTDKO   **Restore Open for a Disk Resident Backup File**
Opens the backup file for input and reads the directory from the first allocated backup volume.

IDCRTDVO   **Delete VSAM Object**
Deletes an old version of a VSAM object to be restored.

IDCRTDWR   **Data Disk Write**
Modifies the disk channel program for a data buffer and schedules the disk write operation for the data buffer during restoration.

IDCRTDWW   **Data Write Wait**
Completes a disk write operation scheduled by the Data-Disk-Write Function.

IDCRTFSR   **RESTORE Function Support Routine**
Basic module invoked by the Access Method Services Executive; controls the flow during the RESTORE command execution.

IDCRTGEX   **Get Extent**
Obtains an extent for an object being restored.

IDCRTGNX   **Get Next Index Record**
Obtains disk space and an index buffer for the next index record and initializes it.

IDCRTMDS   **Remap Data Set**
Performs actual restoration of a data set when file modification

(moving files to volume of different device type, or DATARECORDS or INDEXCISIZE specified) is required.

IDCRTMSS   **Remap Sequence Set**
Reconstructs sequence set records when file modification (moving files to volume of different device type, or DATARECORDS or INDEXCISIZE specified) is required.

IDCRTMTL   **Mount Later**
Mounts the next or any later volume of the backup file during restoration.

IDCRTMTN   **Mount Next**
Mounts the next backup volume during restoration.

IDCRTMTS   **Mount Specific**
Mounts a specified volume of the backup file.

IDCRTOPI   **Operator Interaction**
Issues any messages to the operator during restoration.

IDCRTPFO   **Preformat**
Preformats one or more empty CIs to use as free space within a CA.

IDCRTRDS   **Restore Data Set**
Performs the actual restoration of a data set when no file modification is required.

IDCRTRDX   **Read Index**
Reads an index control interval into an index buffer for third- or higher-level index.

IDCRTREV   **Restore EOV**
Handles the transition to the next backup volume when the end of a backup volume is reached during the restoration of an object.

IDCRTRHD   **Read Object Header from Disk**
Reads the Object Header for a specified object, disk address of which is taken from the corresponding directory entry.

IDCRTROH   **Read Object Header from Tape**
Scans the backup file for a specified object and reads the Object Header for it.

IDCRTRSQ   **Sequential Read from Backup File**
Reads backup file data from tape or disk, decompacting the data if necessary and moving it to the actual buffer provided by the restore data set routine.

IDCRTRTC   **Restore Close for a Tape Resident Backup File**
Closes the backup file after completion or termination of the RESTORE command for a Tape Resident Backup File.

IDCRTRTO   **Restore Open for a Tape Resident Backup File**
Opens the backup file for input and reads the directory of the mounted backup volume.

IDCRTRVX   **Remove XIB**
Frees the virtual storage acquired for Index Information Blocks.

IDCRTWRS   **Write SEOF**
Writes a software-end-of-file (SEOF) for a data set being restored.

IDCRTWRX   **Write Index**
Schedules the writing of an index buffer.

Summary of Non-Executable Modules

VSE/VSAM Backup/Restore includes modules that do not contain executable code but rather tables or pregenerated control blocks which are loaded at execution time, or which punch link books for the individual phases of VSE/VSAM Backup/Restore. The following is a list of these modules.

IDCBPBCA **Backup Catalog Area**
Pregenerated Backup Catalog Area containing all work areas, catalog parameter lists, field parameter lists, and channel programs for catalog access during the execution of the BACKUP command.

IDCBPBRB **Backup/Restore Block**
Pregenerated Backup/Restore Block; all fields initialized as required for the execution of BACKUP or RESTORE commands.

IDCBPBST **Buffersize Table**
Contains the tables necessary to determine the (optimal) buffersize to be used for the backup of an object.

IDCBPDNT Compaction Tables
Contains all tables used by the compaction algorithm implemented in the compaction routine IDCBPDNC.

IDCBPIOM **I/O Module**
Contains the DTFMT, MTMOD, and DTFCN declarations used for the opening, closing, and end-of-volume handling of the backup file or for operator messages.

IDCCDBP **Backup Command Descriptor**
Contains the command descriptor to be used by the Access Method Services Reader/Interpreter to analyze a BACKUP command and to construct the appropriate Function Data Table.

IDCCDRT **Restore Command Descriptor**
Contains the command descriptor to be used by the Access Method Services Reader/Interpreter to analyze a RESTORE command and to construct the appropriate Function Data Table.

IDCCMZ3 **IDCTSBP0 Link Book**
Punches phase, include, entry, and end statements for the link book for phase IDCTSBP0, which contains the static text entries for VSE/VSAM Backup/Restore.

IDCCMZ4 **IDCBP01 Link Book**
Punches phase, include, entry, and end statements for the link book for phase IDCBP01, which contains the functional support routines for the BACKUP command.

IDCCMZ5 **IDCBP02 Link Book**
Punches phase, include, entry, and end statements for the link book for phase IDCBP02, which contains the pregenerated Backup/Restore Block, the Backup Catalog Area, and the Restore Catalog Area.

IDCCMZ6 **IDCBP03 Link Book**
Punches phase, include, entry, and end statements for the link book for phase IDCBP03, which contains the buffersize table for VSE/VSAM Backup/Restore.

IDCCMZ7 **IDCCDBP Link Book**
Punches phase, include, entry, and end statements for the link book for phase IDCCDBP, which contains the command descriptor for the BACKUP command.

IDCCMZ8 **IDCRT01 Link Book**
Punches phase, include, entry, and end statements for the link book for phase IDCRT01, which contains the functional support routines for the RESTORE command.

IDCCMZ9 **IDCCDRT Link Book**
Punches phase, include, entry, and end statements for the link book for phase IDCCDRT, which contains the command descriptor for the RESTORE command.

IDCCMZ0 **Link Book for Compaction/Decompaction Phases**
Punches phase, include, entry and end statements for the link book used for building the compaction/decompaction phases IDCBPDNC, IDCRTDDC, IDCBPDNT and IDCRTDDT.

IDCRTDDT **Decompaction Tables**
Contains all tables used by the decompaction algorithm imple-

mented in the decompaction routine IDCRTDDC.

IDCRTRCA **Restore Catalog Area**
Pregenerated Restore Catalog Area containing all work areas, catalog parameter lists, field vector tables, and field parameter lists required for catalog access during the execution of the RESTORE command.

IDCTSBP0 **Backup/Restore Static Text Module**
Contains the format structures for the VSE/VSAM Backup/Restore messages to be printed by means of the Access Method Services UPRINT function.

Chapter 5. Phase Structure

VSE/VSAM Backup/Restore consists of eleven phases used by the BACKUP and RESTORE commands as follows:
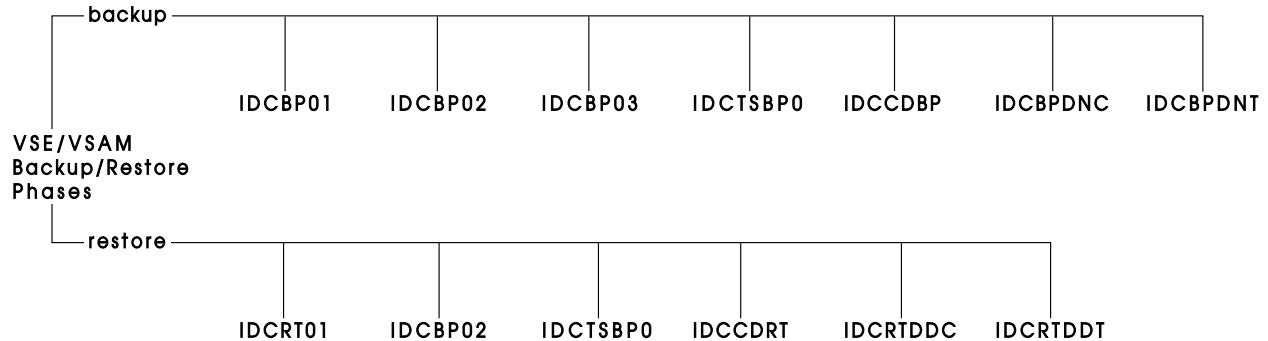
IDCBP01	**BACKUP FSR**
	Contains all executable modules for the BACKUP command.
IDCBP02	**Pregenerated Control Blocks**
	Contains the pregenerated control blocks and nonreentrant I/O routines for the BACKUP and RESTORE commands.
IDCBP03	**Buffersize Tables**
	Contains the buffersize tables used during backup.
IDCCDBP	**BACKUP Command Descriptor**
	Contains the command descriptor to be used by the Access Method Services Reader/Interpreter to analyze a BACKUP command and to construct the appropriate Function Data Table.
IDCCDRT	**RESTORE Command Descriptor**
	Contains the command descriptor to be used by the Access Method Services Reader/Interpreter to analyze a RESTORE command and to construct the appropriate Function Data Table.
IDCRT01	**RESTORE FSR**
	Contains all executable modules for the RESTORE command.
IDCTSBP0	**Backup/Restore Static Text**
	Contains the format structures for the messages issued by VSE/VSAM Backup/Restore.
IDCBPDNC	Compaction Routine
	Contains the executable code of the compaction routine.
IDCBPDNT	Compaction Tables
	Contains the compaction tables used by the compaction routine.
IDCRTDDC	Decompaction Routine
	Contains the executable code of the decompaction routine.
IDCRTDDT	Decompation Tables
	Contains the decompaction tables used by the decompaction routine.

Phase-to-Module Relationship

This section lists which modules belong to the individual phases for VSE/VSAM Backup/Restore. They
are listed in the order in which they are included at link-edit.

Phase Name	Module Name	Phase Name	Module Name
IDCBP01	IDCBPFSR		
	IDCBPMSH	IDCRT01	IDCRTFSR
	IDCBPSLE		IDCBPMSH
	IDCBPVOP		IDCRTROH
	IDCBPBDR		IDCRTRHD
	IDCBPVCL		IDCRTRSQ
	IDCBPWDI		IDCRTDFO
	IDCBPBBF		IDCRTBFV
	IDCBPCAU		IDCRTDVO
	IDCBPWOH		IDCBPVOP
	IDCBPWHD		IDCBPBDR
	IDCBPBDS		IDCBPVCL
	IDCBPWSQ		IDCRTBBR
	IDCBPWSR		IDCRTRCP
	IDCBPDDR		IDCRTBDX
	IDCBPDDW		IDCRTRDS
	IDCBPCRB		IDCRTDWR
	IDCBPNBV		IDCRTDWW
	IDCBPBPV		IDCBPCRB
	IDCBPLVO		IDCRTACA
	IDCBPSXL		IDCRTWRX
	IDCBPBLE		IDCRTGNX
	IDCBPALE		IDCRTRDX
	IDCBPOON		IDCRTWRS
	IDCBPRSL		IDCRTGEX
	IDCBPCMA		IDCRTCLX
	IDCBPDYB		IDCRTREV
	IDCBPADE		IDCRTPFO
	IDCBPSRD		IDCRTMDS
	IDCBPMDE		IDCRTMSS
	IDCBPOVC		IDCRTMTN
	IDCBPBPO		IDCRTOPI
	IDCBPDKO		IDCRTMTL
	IDCBPBPC		IDCRTMTS
	IDCBPDKC		IDCRTRTO
	IDCBPPXL		IDCRTDKO
	IDCBPPXD		IDCBPCMA
	IDCBPDYS		IDCRTBRL
	IDCBPRVB		IDCBPSXL
	IDCBPRVL		IDCRTRVX
	IDCBPRVD		IDCBPRVB
			IDCRTRTC
IDCBPO2	IDCBPBRB		IDCRTDKC
	IDCBPBCA		
	IDCBPIOM	IDCTSBP0	IDCTSBP0
	IDCRTRCA		
		IDCCDBP	IDCCDBP
IDCBP03	IDCBPBST		
		IDCCDRT	IDCCDRT
IDCBPDNC	IDCBPDNC		
		IDCRTDDC	IDCRTDDC
IDCBPDNT	IDCBPDNT		

Phase Name	Module Name
IDCRTDDT	IDCRTDDT

Phase-to-Link Book Relationship

This section lists the link books for VSE/VSAM Backup/Restore and the phases that can be linked by means of the individual link books. In order to not have to relink unnecessary phases of VSE/VSAM Backup/Restore in case of a required fix, a separate link book is provided for each phase.

Phase Name	Link Book Name
IDCTSBP0	IDCCMZ3
IDCBP01	IDCCMZ4
IDCBP02	IDCCMZ5
IDCBP03	IDCCMZ6
IDCCDBP	IDCCMZ7
IDCRT01	IDCCMZ8
IDCCDRT	IDCCMZ9

For the compaction/decompaction phases a common link book is provided:

Phase Name	Link Book Name
IDCBPDNC	IDCCMZ10
IDCBPDNT	
IDCRTDDC	
IDCRTDDT	

Chapter 6. Macro Directory

VSE/VSAM Backup/Restore has the following macros:

IDCDFB00   **Backup/Restore Block (BRB)**
Generates a dummy section or actual code for the Backup/Restore Block.

IDCDFB01   **Directory Control Header (DCH)**
Generates a dummy section or actual code for the Directory Control Header.

IDCDFB02   **Directory Block Header (DBH)**
Generates a dummy section of the Directory Block Header.

IDCDFB03   **Directory Entries (DE)**
Generates dummy sections of the external (EDE) and internal (IDE) directory entries.

IDCDFB04   **Locate Area Control Header (LCH)**
Generates a dummy section or actual code for the Locate Area Control Header.

IDCDFB05   **Locate Area Block Header (LBH)**
Generates a dummy section for the Locate Area Block Header.

IDCDFB06   **Data Set Control Header (DSH)**
Generates a dummy section or actual code for the Data Set Control Header.

IDCDFB07   **Component Definition Block (CDB)**
Generates a dummy section or actual code for a Component Definition Block, which is part of the Data Set Control Header.

IDCDFB08   **Buffer Pool Header (BPH)**
Generates a dummy section or actual code for the Buffer Pool Header.

IDCDFB09   **Buffer Definition Block (BDB)**
Generates a dummy section for the Buffer Definition Block.

IDCDFB10   **Request Control Section (RCS)**
Generates a dummy section or actual code for Request Control Sections, which are part of the Buffer Definition Block.

IDCDFB11   **Index Buffer Block (XBB)**
Generates a dummy section for the Index Buffer Block.

IDCDFB12   **Backup File Header (BFH)**
Generates a dummy section or actual code for the Backup File Header.

IDCDFB13   **Tape Command Parameter List (TCP)**
Generates a dummy section or actual code for the Tape Command Parameter List.

IDCDFB14   **VSAM Data Set Work Area (VDW)**
Generates a dummy section or actual code for the VSAM Data Set Work Area.

IDCDFB15   **Volume List (VL)**
Generates dummy sections for the layouts of a Volume List Block (VLB) and a Volume List Entry (VLE).

IDCDFB16   **Channel Command Word (CCW)**
Generates a dummy section and equates for a channel command word.

IDCDFB17   **DTFMT Layout (DTF)**
Generates a dummy section for the layout of a DTFMT.

IDCDFB18   **Volume Label (VOL1)**
Generates a dummy section for the layout of a VOL1 label.

IDCDFB19   **I/O Module Header (IOH)**
Generates a dummy section for the layout of the header portion of the module IDCBPIOM.

IDCDFB20   **GENL Parameter List (GENL)**
Generates a dummy section for the GENL parameter list to be used for a LOAD macro with TEXT=NO.

IDCDFB21 **Fix List (FXL)**
Generates a dummy section for the fix list to be used during the construction of the buffer pools for BACKUP and RESTORE.

IDCDFB22 **Inter-Module Trace Table (MTT)**
Generates a dummy section describing the layout of the Access Method Services Inter-Module Trace Table.

IDCDFB23 **Map Data Set Work Area (MWK)**
Generates a dummy section of the work area used by IDCRTMDS and IDCRTMSS during restoration of a data set when file modifications are made (moving files to volume of different device type, or specification of DATARECORDS or INDEXCISIZE).

IDCDFB24 **Map Volume Characteristics Table (VCT)**
Generates a dummy section describing the structure of the Volume Characteristics Table blocks and entries.

IDCDFB25 **Backup File Parameter Area (BPA)**
Generates a dummy section describing the structure of the Backup File Parameter Area.

IDCDFB26 **Extent List (EL)**
Generates dummy sections for the layouts of an Extent List Block (ELB) and an Extent List Entry (ELE)

IDCDFB27 **Volume List Block (VLD)**
Generates a dummy section describing the structure and parts of a Volume List Block as used for a disk resident backup file.

IDCDFB28 **End of Extent Record (EOE record)**
Generates a dummy section describing the layout of the EOE record.

IDCDFB29 **Begin of Extent Record (BOE record)**
Generates a dummy section

describing the layout of the BOE record.

IDCDFB30 **Backup Catalog Area (BCA)**
Generates a dummy section or actual code for the Backup Catalog Area.

IDCDFB31 **Restore Catalog Area (RCA)**
Generates a dummy section or actual code for the Restore Catalog Area.

IDCDFB32 **Locate Control List (LCL)**
Generates a dummy section or actual code for the Locate Control List, a sub-structure of the Backup Catalog Area.

IDCDFB33 **Define Control List (DCL)**
Generates a dummy section or actual code for the Define Control List, a sub-structure of the Restore Catalog Area.

IDCDFB34 **Catalog Parameter List (CTGPL)**
Generates a dummy section or actual code for a Catalog Parameter List.

IDCDFB35 **Catalog Field Vector Table (CTGFV)**
Generates a dummy section or actual code for a Catalog Field Vector Table.

IDCDFB36 **Catalog Field Parameter List (CTGFL)**
Generates a dummy section or actual code for a Catalog Field Parameter List.

IDCDFB37 **Catalog Cluster Record (CCR)**
Generates a dummy section for the layout of a catalog cluster record.

IDCDFB38 **Extension Record (EXR)**
Generates a dummy section for the layout of a catalog extension record.

IDCDFB39 **Group Occurrence Pointer (GOP)** Generates a dummy section for the layout of a Group Occurrence Pointer.

IDCDFB40   **Object Header (OHD)**
Generates dummy sections for the elements of the Object Header, such as Object Header Control Portion (OHC), the Object Header Catalog Dictionary (OCD), or the entries of the Catalog Information Area.

IDCDFB41   **Dummy Record (DRD)**
Generates a dummy section for the layout of a dummy record.

IDCDFB42   **Restore Member List Entry (RLE)**
Generates a dummy section for the layout of a Restore Member List Entry.

IDCDFB43   **Index Information Block (XIB)**
Generates a dummy section for the layout of an Index Information Block.

IDCDFB44   **Index Header (XHD)**
Generates a dummy section for the layout of the header of an index record.

IDCDFB45   **Parameter List for Sequential Read or Write (SQP)**
Generates a dummy section describing the layout of the parameter list for sequential read or sequential write backup file requests.

IDCDFB46   **DTFPH Layout (DTFPH)**
Generates a dummy section for the layout of a DTFPH suitable for a disk resident backup file.

IDCDFB47   **Directory Read Work Area (DWA)**
Generates a dummy section for the layout of a Directory Read Work Area for a disk resident backup file.

IDCDFB50   **Function Data Table (FDT)**
Generates dummy sections for the layout of the elements of the Function Data Table for the BACKUP and RESTORE commands.

IDCDFB60   **Message Codes (MSC)**
Generates equates for all internal message codes and condition

codes used by VSE/VSAM Backup/Restore.

IDCDFB70   **Module Initialization**
Generates code for the module initialization of all VSE/VSAM Backup/Restore modules.

IDCDFB71   **Module Termination**
Generates code for the termination of all VSE/VSAM Backup/Restore Modules.

IDCDFB72   **Error Code Setting**
Generates code for the setting of the internal error codes and the condition codes used by VSE/VSAM Backup/Restore.

IDCDFB73   **Execute I/O**
Generates code for the issuance of an EXCP.

IDCDFB74   **Wait I/O**
Generates code for waiting for the completion of an I/O operation.

IDCDFB75   **Re-Entrant Load**
Generates code for the re-entrant loading of the phase IDCBP02 containing the Backup/Restore Block, the Backup Catalog Area, the Restore Catalog Area, and the DTF I/O modules.

IDCDFB76   **Convert Time**
Converts the time of day and the date into printable format.

IDCDFB77   **Convert RBA**
Generates code for RBA conversion (IDCBPCRB).

IDCDFB78   **Next Backup Volume**
Generates code for the Next-Backup-Volume function (IDCBPNBV).

IDCDFB79   **Restore EOV**
Generates code for the Restore-EOV function (IDCRTREV).

IDCDFB80   **Message Handler**
Generates code for the Message Handler function (IDCBPMSH).

IDCDFB81   **Add Control Area**
Generates code for the Add-
Control-Area function
(IDCRTACA).

IDCDFB82   **Write Actual Buffer to Backup
File**
Generates code for writing the
actual backup file buffer to the
backup file by means of the
sequential write routine
IDCBPWSQ.

IDCDFB82   **Wait for a Write Buffer**
Generates code for waiting on a
write buffer, passed to the
sequential write routine before.

IDCDFB84   **Read a Block from Backup File**
Generates code for reading in a
data block from the backup file by
means of the sequential read
routine IDCRTRSQ.

IDCDFB85   **Wait for a Read Buffer**
Generates code for waiting on a
read buffer, passed to the
sequential read routine buffer.

Chapter 7. Control Block Description and Format

Backup/Restore Block (BRB):

VSE/VSAM BACKUP/RESTORE - IDCDFB00: The Backup/Restore Block (BRB) is the major control block used by the access method services commands backup and restore. Besides save areas and work areas, the BRB contains several subcontrol blocks which manage the resources the Backup and Restore commands are concerned with.

The BRB contains the following control blocks:

```
                                                on offset:
  - Directory Control Header          (DCH)    260 (X'104')
  - Locate Area Control Header        (LCH)    308 (X'134')
  - Buffer Pool Header                (BPH)    332 (X'14C')
  - Backup File Header                (BFH)    484 (X'1E4')
  - Tape Command Parameter List       (TCP)    584 (X'248')
  - Backup File Parameter Area        (BPA)    792 (X'318')
  - Begin of Extent Record            (BOE)   1008 (X'3F0')
  - End of Extent Record              (EOE)   1040 (X'410')
  - Data Set Control Header           (DSH)   1896 (X'768')
  - VSAM Data Set Work Area           (VDW)   2268 (X'8DC')
  - VSAM Open/Close Invocation Interface (VDI) 2824 (X'B08')
```

Offsets					
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUC-TURE			

VSE/VSAM BACKUP/RESTORE - IDCDFB00 - 5686-03704(C69)
5746-AM2(C69) COPYRIGHT IBM CORP 1991
LICENSED MATERIAL - PROGRAM PROPERTY OF IBM
BACKUP/RESTORE BLOCK (BRB)
THE BACKUP/RESTORE BLOCK (BRB) IS THE MAJOR CONTROL
BLOCK USED BY THE ACCESS METHOD SERVICES COMMANDS
BACKUP, RESTORE AND VSAMCOPY. BESIDES SAVE AREAS AND
WORK AREAS, THE BRB CONTAINS SEVERAL SUB-CONTROL
BLOCKS WHICH MANAGE THE RESOURCES THE NAMED COMMANDS
ARE CONCERNED WITH.

Offsets					
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUC-TURE		BRB	

STANDARD SAVE AREA
THE BACKUP/RESTORE BLOCK CONTAINS A STANDARD 72-BYTE
SAVE AREA TO BE USED WHEN OTHER SERVICES ARE INVOKED
WHICH REQUIRE A STANDARD SAVE AREA TO BE PROVIDED.
THIS SAVE AREA IS NOT USED BY THE BACKUP, RESTORE
OR VSAMCOPY FUNCTIONAL SUBROUTINES THEMSELVES

0	(0)	CHAR-ACTER	72	BRBSAREA (0)	STANDARD SAVE AREA
0	(0)	SIGNED	4		
4	(4)	ADDRESS	4	BRBSADDR	ADDR(CALLER'S SAVE AREA)
8	(8)	SIGNED	4		
12	(C)	SIGNED	4	BRBSAVE (15)	REGISTER SAVE AREA

Dec	Hex	Type	Len	Name (Dim)	Description
		BACKUP/RESTORE BLOCK IDENTIFIER			
72	(48)	CHAR-ACTER	4	BRBID	BACKUP/RESTORE BLOCK IDENTIFIER
		SIZE OF BACKUP/RESTORE BLOCK AND RELATED ITEMS			
76	(4C)	SIGNED	4	BRBSIZE	SIZE OF BRB AND RELATED ITEMS
		INTERNAL BACKUP/RESTORE SAVE AREA POOL POINTERS THE BACKUP/RESTORE BLOCK CONTAINS A SAVE AREA POOL FOR THE USAGE BY THE INDIVIDUAL FUNCTIONAL MODULES OF THE BACKUP, RESTORE AND VSAMCOPY COMMANDS. THE SAVE AREA POOL IS ORGANIZED AS A STACK. THE CURRENT STACK POSITION MUST BE UPDATED WHENEVER REGISTERS ARE STORED INTO THE SAVE AREA POOL. IT MUST POINT TO THE NEXT AVAILABLE POSITION IN THE SAVE AREA POOL BEFORE ANOTHER FUNCTION IS INVOKED. AT THE END OF THE PROCESSING OF A FUNCTION, THE CURRENT POOL POSITION MUST BE RESET AGAIN AFTER THE CALLER'S REGISTERS HAVE BEEN RESTORED AGAIN.					
80	(50)	ADDRESS	4	BRBNSA	NEXT FREE POOL POSITION
		RETURN CODE AND ERROR INFORMATION AREA ACCUMULATED NUMBER OF ERRORS AND ALLOWED MAXIMUM NUMBER OF NON-TERMINATING ERRORS					
84	(54)	CHAR-ACTER	4	BRBERRCT (0)	ERROR COUNTS
84	(54)	SIGNED	2	BRBERCNT	ACCUMULATED NUMBER OF ERRORS
86	(56)	ADDRESS	2	BRBMXERR	MAX NUMBER OF NON-TERMINATING ERRORS
		..1.		BRBERMAX	"32" MAX NUMBER OF ALLOWED ERRORS
		ERROR RETURN INFORMATION			
88	(58)	CHAR-ACTER	24	BRBRTN (0)	RETURN CODE FIELD
		ERROR IDENTIFICATION SET BY BACKUP/RESTORE/VSAMCOPY FUNCTIONS					
88	(58)	CHAR-ACTER	8	BRBERRID (0)	ERROR IDENTIFICATION
		LAST AND MAXIMUM CONDITION CODE SET BY BACKUP/RESTORE/VSAMCOPY FUNCTIONS					
88	(58)	CHAR-ACTER	2	BRBCC (0)	CONDITION CODES
88	(58)	BITSTRING	1	BRBLCC	LAST CONDITION CODE
89	(59)	BITSTRING	1	BRBMCC	MAXIMUM CONDITION CODE
		ERROR RETURN CODE SET BY BACKUP/RESTORE/VSAMCOPY FUNCTIONS					
90	(5A)	BITSTRING	1	BRBERC	ERROR RETURN CODE
		BACKUP/RESTORE/VSAMCOPY FUNCTIONS MODULE IDENTIFICATION					
91	(5B)	CHAR-ACTER	4	BRBMID	MODULE IDENTIFIER
		IDENTIFICATION OF ERRONEOUS OBJECTS				
95	(5F)	CHAR-ACTER	9	BRBOBJID (0)	OBJECT IDENTIFICATION
95	(5F)	CHAR-ACTER	1	BRBOBTYP	OBJECT TYPE
96	(60)	ADDRESS	4	BRBDSN1	ADDR OF FILE-ID FOR 1ST OBJECT
100	(64)	ADDRESS	4	BRBDSN2	ADDR OF FILE-ID FOR 2ND OBJECT
		ERROR IDENTIFICATION BY INVOKED SERVICE FUNCTION					

Dec	Hex	Type	Len	Name (Dim)	Description
104	(68)	CHAR-ACTER	8	BRBSFEID (0)	SERVICE FUNCTION ERROR IDENTIFICAT'N
104	(68)	SIGNED	4	BRBSFE	SERVICE FUNCTION ERROR RETURN CODE
108	(6C)	SIGNED	2	BRBFBFLG	SERVICE FUNCTION REASON CODE
110	(6E)	CHAR-ACTER	2	BRBFDBK	SERVICE FUNCTION MODULE NAME

REQUEST TYPE CODE

Dec	Hex	Type	Len	Name (Dim)	Description
112	(70)	BITSTRING	1	BRBREQ	REQUEST TYPE CODE
		.... .1..		BRBBUP	"4" BACKUP REQUEST TYPE CODE
		.... 1...		BRBRST	"8" RESTORE REQUEST TYPE CODE
		.... ..1.		BRBCOPY	"2" VSAMCOPY REQUEST TYPE CODE

BACKUP FILE CHARACTERISTIC

Dec	Hex	Type	Len	Name (Dim)	Description
113	(71)	BITSTRING	1	BRBCHAR	BACKUP FILE CHARACTERISTIC
		1...		BRBDISK	"128" BACKUP FILE ON DISK
		.1..		BRBCMPR	"64" COMPRESSED BACKUP FILE

REQUEST TYPE CODE 2

Dec	Hex	Type	Len	Name (Dim)	Description
114	(72)	BITSTRING	1	BRBREQ2	REQUEST TYPE CODE 2
		1...		BRBVIN	"128" 1 - REQUEST FOR INPUT DS 0 - REQUEST FOR OUTPUT DS
115	(73)	BITSTRING	1		NOT USED

ACCESS METHOD SERVICES EXECUTIVE PARAMETER LIST

Dec	Hex	Type	Len	Name (Dim)	Description
116	(74)	ADDRESS	4	BRBAMSPL	ADDRESS OF EXECUTIVE PARM LIST
120	(78)	CHAR-ACTER	8	BRBGFDT (0)	POINTERS TO GDT AND FDT
120	(78)	ADDRESS	4	BRBGDT	ADDRESS OF GLOBAL DATA TABLE
124	(7C)	ADDRESS	4	BRBFDT	ADDRESS OF FUNCTION DATA TABLE

UPRINT PARAMETER LISTS
WHEN ISSUING A UPRINT MACRO, A PARAMETER LIST MUST
BE PROVIDED POINTING TO THE GLOBAL DATA TABLE (GDT)
AND TO A DYNAMIC DATA STRUCTURE WHICH DETERMINES
AND MODIFIES THE MESSAGE TO BE PRINTED

Dec	Hex	Type	Len	Name (Dim)	Description
128	(80)	CHAR-ACTER	12	BRBUPL (0)	UPRINT PARAMETER LIST
128	(80)	ADDRESS	4		ADDRESS OF GLOBAL DATA TABLE
132	(84)	ADDRESS	4		ADDRESS OF UPRINT PRINT POINTER
136	(88)	BITSTRING	1		END OF LIST INDICATOR
137	(89)	ADDRESS	3		ADDRESS OF ADDRESS OF DARGLIST
140	(8C)	ADDRESS	4	BRBUPPRT	PRINT POINTER (MUST BE ZERO)
144	(90)	ADDRESS	4	BRBPDDS	ADDRESS OF DYNAMIC DATA STRUCTURE
148	(94)	BITSTRING	44	BRBDDS	DYNAMIC DATA STRUCTURE (DARGLIST)

UESTA PARAMETER LISTS
WHEN ISSUING A UESTA MACRO, A PARAMETER LIST MUST BE
PROVIDED POINTING TO THE GLOBAL DATA TABLE (GDT), THE
PRINT FILE NAME, AND TO A PAGE CONTROL ARGUMENT LIST
CONTAINING THE DESIRED PAGE CONTROL SPECIFICATIONS

Dec	Hex	Type	Len	Name (Dim)	Description
192	(C0)	CHAR-ACTER	12	BRBUEPL (0)	UESTA PARAMETER LIST
192	(C0)	ADDRESS	4		ADDRESS OF GLOBAL DATA TABLE
196	(C4)	ADDRESS	4		ADDRESS OF UESTA PRINT POINTER
200	(C8)	BITSTRING	1		END OF LIST INDICATOR
201	(C9)	ADDRESS	3		PAGE CONTROL ARGUMENT LIST ADDRESS
204	(CC)	ADDRESS	4	BRBUEPRT	UESTA PRINT POINTER (MUST BE ZERO)

URESET PARAMETER LIST
WHEN ISSUING A URESET MACRO, A PARAMETER
LIST MUST BE PROVIDED POINTING TO THE GLOBAL
DATA TABLE (GDT) AND TO THE PRINT FIELD NAME

Dec	Hex	Type	Len	Name (Dim)	Description
208	(D0)	CHAR-ACTER	8	BRBURPL (0)	URESET PARAMETER LIST

Dec	Hex	Type	Len	Name (Dim)	Description
208	(D0)	ADDRESS	4		ADDRESS OF GLOBAL DATA TABLE
212	(D4)	BITSTRING	1		END OF LIST INDICATOR
213	(D5)	ADDRESS	3		ADDRESS OF URESET PRINT POINTER
216	(D8)	ADDRESS	4	BRBURPRT	URESET PRINT POINTER (MUST BE ZERO)

ADDRESS OF CATALOG CONTROL AREAS
FOR THE ACCESS TO THE CATALOG, TWO CATALOG CONTROL AREAS
ARE PROVIDED WHICH CONTAIN ACBS, RPLS, CATALOG PARAMETER
LISTS (CPL), FIELD PARAMETER LISTS (FPL), FIELD VECTOR
TABLES (FVT), AND I/O AREAS NECESSARY FOR THE CATALOG
ACCESS. THE FIRST AREA, THE BACKUP CATALOG AREA (BCA),
IS USED BY THE BACKUP OR VSAMCOPY COMMAND FOR SOURCE
CATALOG ACCESSES. THE SECOND AREA, THE RESTORE CATA-
LOG AREA (RCA), IS USED BY THE RESTORE OR VSAMCOPY
COMMAND FOR DESTINATION CATALOG ACCESSES.

Dec	Hex	Type	Len	Name (Dim)	Description
220	(DC)	ADDRESS	4	BRBBCA	"V(IDCBPBCA)" ADDRESS OF BACKUP CATALOG AREA
224	(E0)	ADDRESS	4	BRBRCA	"V(IDCRTRCA)" ADDRESS OF RESTORE CATALOG AREA

VOLUME CHARACTERISTICS LIST ANCHOR
DURING EXECUTION OF THE BACKUP COMMAND A LIST OF
VOLUME SERIAL NUMBERS AND THEIR CORRESPONDING
TRACKS-PER-CYLINDER CONSTANT IS KEPT FOR ALL VOLUMES
FROM WHICH A COMPONENT HAS BEEN BACKED UP. THE
TRACKS-PER-CYLINDER CONSTANT IS RETRIEVED VIA CATLG
LOCATE AND SAVED IN THE VOLUME CHARACTERISTICS LIST
TO AVOID REPEATED LOCATES FOR THE SAME VOLUME.
NOTE THAT THIS POINTER IS AT THE SAME OFFSET AS THE
RESTORE MEMBER LIST POINTER SINCE THEIR FUNCTIONS
ARE MUTUALLY EXCLUSIVE.
DURING EXECUTION OF THE VSAMCOPY COMMAND THIS LIST
IS ALSO CREATED AND USED.

Dec	Hex	Type	Len	Name (Dim)	Description
228	(E4)	ADDRESS	4	BRBVCL (0)	VOLUME CHARACTERISTICS LIST ANCHOR

RESTORE MEMBER LIST INFORMATION
DURING EXECUTION OF THE RESTORE COMMAND, A LIST OF
ALL OBJECTS TO BE RESTORED IS CONSTRUCTED. THIS LIST
IS CALLED THE RESTORE MEMBER LIST (RML). THIS SECTION
OF THE BACKUP/RESTORE BLOCK CONTAINS THE CONTROL
INFORMATION FOR THE RESTORE MEMBER LIST

Dec	Hex	Type	Len	Name (Dim)	Description
228	(E4)	ADDRESS	4	BRBRML	ADDRESS OF RESTORE MEMBER LIST
232	(E8)	SIGNED	4	BRBLRML	LENGTH OF RESTORE MEMBER LIST

OBJECT HEADER WORK AREA INFORMATION
ONE (BACKUP) OR TWO (RESTORE) WORK AREAS ARE USED
TO WRITE OR READ THE OBJECT HEADER DESCRIBING AN
OBJECT ON THE BACKUP FILE. THE OBJECT HEADER WORK
AREAS CONTAIN CHANNEL PROGRAMS FOR WRITING OR
READING THE OBJECT HEADER AS WELL AS I/O AREAS

Dec	Hex	Type	Len	Name (Dim)	Description
236	(EC)	CHAR-ACTER	20	BRBOHW (0)	OBJECT HEADER WORK AREA POINTERS
236	(EC)	ADDRESS	4	BRBOHWA1	ADDRESS OF 1ST OBJ HDR WORK AREA
240	(F0)	SIGNED	4	BRBOHWL1	LENGTH OF 1ST OBJ HDR WORK AREA
240	(F0)	SIGNED		BRBOHL	"2048" INITIAL LENGTH OF OBJECT HDR WORKA
244	(F4)	ADDRESS	4	BRBOHWA2	ADDRESS OF 2ND OBJ HDR WORK AREA
248	(F8)	SIGNED	4	BRBOHWL2	LENGTH OF 2ND OBJ HDR WORK AREA
252	(FC)	ADDRESS	4	BRBOHD	ADDRESS OF OBJECT HEADER

ADDRESS OF I/O MODULE
THIS FIELD CONTAINS THE ADDRESS OF THE I/O MODULE
WHICH CONTAINS THE DTFS, THE LOGIC MODULES, AND
THE I/O AREAS FOR THE NON-REENTRANT IOCS FUNCTIONS

Dec	Hex	Type	Len	Name (Dim)	Description
256	(100)	ADDRESS	4	BRBIOM	"V(IDCBPIOM)" ADDRESS OF I/O MODULE

VSE/VSAM BACKUP/RESTORE - IDCDFB01 - 5686-03704(C69)
5746-AM2(C69) COPYRIGHT IBM CORP 1991
LICENSED MATERIAL - PROGRAM PROPERTY OF IBM
DIRECTORY CONTROL HEADER (DCH)
THE DIRECTORY CONTROL HEADER (DCH) IS PART OF THE
BACKUP/RESTORE BLOCK (BRB) AND CONTROLS THE BACKUP
FILE DIRECTORY AS A WHOLE. IT CONTAINS INFORMATION
PERTAINING TO THE TOTAL DIRECTORY

Dec	Hex	Type	Len	Name (Dim)	Description
260	(104)	SIGNED	4	DCH (0)	DIRECTORY CONTROL HEADER

DESCRIPTIVE DIRECTORY INFORMATION

Dec	Hex	Type	Len	Name (Dim)	Description
260	(104)	CHAR-ACTER	4	DCHBL (0)	DIRECTORY BLOCK LENGTHS
260	(104)	SIGNED	2	DCHTBL	LGTH OF TOTAL DIRECT. BLOCK
262	(106)	SIGNED	2	DCHEBL	LENGTH OF EXT.BLOCK PORTION
264	(108)	SIGNED	4	DCHEDEL	LENGTH OF EXT. DIRECT.ENTRY
268	(10C)	SIGNED	4	DCHIDEL	LENGTH OF INT. DIRECT.ENTRY

DIRECTORY COUNTS

Dec	Hex	Type	Len	Name (Dim)	Description
272	(110)	CHAR-ACTER	8	DCHCNT (0)	DIRECTORY COUNTS
272	(110)	SIGNED	4	DCHBCT	TOTAL DIRECTORY BLOCKS
276	(114)	SIGNED	4	DCHECT	TOTAL DIRECTORY ENTRIES

DIRECTORY POINTERS

Dec	Hex	Type	Len	Name (Dim)	Description
280	(118)	CHAR-ACTER	28	DCHPTRS (0)	DIRECTORY POINTERS
280	(118)	ADDRESS	4	DCHFDB	ADDR(1ST DIRECTORY BLOCK)
284	(11C)	CHAR-ACTER	12	DCHCEP (0)	CURRENT ENTRY POINTERS
284	(11C)	ADDRESS	4	DCHCDB	ADDR(CURRENT DIRECTORY BLOCK)
288	(120)	CHAR-ACTER	8	DCHCDE (0)	CURRENT DIR ENTRY ADDRESSES
288	(120)	ADDRESS	4	DCHCEDE	ADDR(CURRENT EXTERNAL DIR ENTRY)
292	(124)	ADDRESS	4	DCHCIDE	ADDR(CURRENT INTERNAL DIR ENTRY)
296	(128)	CHAR-ACTER	12	DCHLEP (0)	LAST ENTRY POINTERS
296	(128)	ADDRESS	4	DCHLDB	ADDR(LAST DIRECTORY BLOCK)
300	(12C)	CHAR-ACTER	8	DCHLDE (0)	LAST DIR ENTRY ADDRESSES
300	(12C)	ADDRESS	4	DCHLEDE	ADDR(LAST EXTERNAL DIR ENTRY)
304	(130)	ADDRESS	4	DCHLIDE	ADDR(LAST INTERNAL DIR ENTRY)

DCH EQUATES

Dec	Hex	Type	Len	Name (Dim)	Description
304	(130)	SIGNED		TBLDISK	"2368"
304	(130)	SIGNED		EBLDISK	"2056"
304	(130)	SIGNED		TBLTAPE	"2048"
304	(130)	SIGNED		EBLTAPE	"1688"
	..11			DCHLEN	"*-DCH" LENGTH OF DCH

VSE/VSAM BACKUP/RESTORE - IDCDFB04 - 5745-SC-AMS(G74)
5746-AM2(G74) COPYRIGHT IBM CORP 1980
LICENSED MATERIAL - PROGRAM PROPERTY OF IBM
LOCATE AREA CONTROL HEADER (LCH)
THE LOCATE AREA CONTROL HEADER (LCH) IS PART OF THE
BACKUP/RESTORE BLOCK (BRB) AND CONTROLS THE LOCATE
AREA WHICH IS USED TO HOLD CATALOG INFORMATION FOR
THE INDIVIDUAL OBJECTS BEING BACKED UP. THE LCH IS
REQUIRED ONLY FOR BACKUP OPERATIONS AND CONTAINS
INFORMATION ABOUT THE LOCATE AREA AS A WHOLE. IT
ALSO CONTAINS POINTERS TO SPECIFIC LOCATE AREA
BLOCKS AND ENTRIES

Dec	Hex	Type	Len	Name (Dim)	Description
308	(134)	SIGNED	4	LCH (0)	LOCATE AREA CONTROL HEADER

Dec	Hex	Type	Len	Name (Dim)	Description
					LOCATE AREA BLOCK LENGTH
308	(134)	SIGNED	2	LCHBL	LENGTH OF LOCATE AREA BLOCK
					LOCATE AREA STATUS THE LOCATE AREA STATUS INDICATES WHETHER OR NOT THE LOCATE AREA IS FILLED UP COMPLETELY
310	(136)	BITSTRING	1	LCHST	LOCATE AREA STATUS
		....		LCHRST	"B'00000000'" RESET LOCATE AREA STATUS MASK
		1...		LCHFULL	"B'10000000'" LOCATE AREA FULL INDICATOR
311	(137)	BITSTRING	1		UNUSED
					LOCATE AREA SPACE SUMMARY THIS PART OF THE LCH CONTAINS THE MAXIMUM SIZE THE LOCATE AREA IS ALLOWED TO REACH AS WELL AS THE SIZE OF THE TOTAL VIRTUAL SPACE THAT HAS BEEN ACQUIRED FOR THE LOCATE AREA UP TO NOW
312	(138)	CHAR-ACTER	8	LCHSPS (0)	LOCATE AREA SPACE SUMMARY
312	(138)	SIGNED	4	LCHALS	ACCUMULATED LOCATE AREA SIZE
316	(13C)	SIGNED	4	LCHMLS	MAXIMUM LOCATE AREA SIZE
					LOCATE AREA POINTERS
320	(140)	CHAR-ACTER	12	LCHPTRS (0)	LOCATE AREA POINTERS
320	(140)	ADDRESS	4	LCHFLB	ADDRESS OF 1ST LOCATE AREA BLOCK
324	(144)	ADDRESS	4	LCHLLB	ADDRESS OF LAST LOCATE AREA BLOCK
328	(148)	ADDRESS	4	LCHNLB	ADDRESS OF BLOCK FOR NEXT ENTRY
					LCH EQUATES
		...1 1...		LCHLEN	"*-LCH" LENGTH OF LCH
					VSE/VSAM BACKUP/RESTORE - IDCDFB08 - 5686-03704(C69) 5746-AM2(C69) COPYRIGHT IBM CORP 1991 LICENSED MATERIAL - PROGRAM PROPERTY OF IBM BUFFER POOL HEADER (BPH) THE BUFFER POOL HEADER (BPH) IS PART OF THE BACKUP/RESTORE BLOCK (BRB). IT CONTROLS THE BUFFERS USED FOR BACKUP OR RESTORATION PURPOSES. THE BPH CONTAINS INFORMATION CHARACTERIZING THE TOTAL SET OF BUFFERS AND THEIR CHANNEL PROGRAMS. IT ALSO CONTAINS ADDRESSABILITY INFORMATION FOR THE BUFFER POOL AND SOME INDIVIDUAL BUFFERS
332	(14C)	SIGNED	4	BPH (0)	BUFFER POOL HEADER
					USER-SUPPLIED BUFFER SPECIFICATIONS THIS SECTION OF THE BPH CONTAINS THE BUFFER CHARACTERISTICS SPECIFIED BY THE USER IN THE BACKUP OR RESTORE COMMAND OR VIA THE UPSI BYTE. IF THE USER DID NOT SPECIFY A PARAMETER, THE APPROPRIATE DEFAULT IS STORED
332	(14C)	CHAR-ACTER	8	BPHUSV (0)	USER-SPECIFIED VALUES
332	(14C)	SIGNED	4	BPHBLSZ	SPECIFIED BLOCKSIZE
336	(150)	SIGNED	2	BPHBFRS	SPECIFIED NUMBER OF BUFFERS
338	(152)	BITSTRING	1	BPHOPTN	SPECIFIED OPTIONS
		1...		BPHFIX	"B'10000000'" BUFFER FIX OPTION
		1		BPHREMAP	"B'00000001'" BUFFER POOL WAS CONSTRUCTED FOR REMAPPING DATA SET
339	(153)	BITSTRING	1		NOT USED
					ADDRESS OF BUFFER-SIZE TABLE THE BUFFER-SIZE TABLE IS USED TO CALCULATE THE OPTIMAL OR DEFAULT BUFFER SIZE TO BE USED FOR THE BACKUP OF AN OBJECT
340	(154)	ADDRESS	4	BPHBSTAB	ADDRESS OF BUFFER SIZE TABLE

Dec	Hex	Type	Len	Name (Dim)	Description
					NEXT BUFFER SIZE
					FOR BACKUP, THIS FIELD CONTAINS THE BUFFER SIZE
					FOR THE NEXT OBJECT TO BE BACKED UP. THIS BUFFER
					SIZE WAS CALCULATED FROM THE USER-SPECIFIED VALUES
					AND THE DISK AND TAPE DEVICE CHARACTERISTICS.
					FOR RESTORATION, THIS FIELD CONTAINS THE BUFFER
					SIZE FOR THE NEXT OBJECT TO BE RESTORED. THIS
					BUFFER SIZE WAS OBTAINED FROM THE OBJECT HEADER
					ON THE BACKUP FILE
344	(158)	SIGNED	4	BPHNBFSZ	NEXT BUFFER SIZE
					CHARACTERISTICS OF EXISTING BUFFER POOL
					THIS SECTION DESCRIBES THE CHARACTERISICS OF THE
					BUFFERS AND THE DISK AND TAPE CHANNEL PROGRAMS FOR
					THE EXISTING BUFFER POOL
348	(15C)	CHARACTER	64	BPHBPC (0)	BUFFER POOL CHARACTERISTICS
					ACTUAL BUFFER SIZE AND NUMBER OF BUFFERS
348	(15C)	SIGNED	4	BPHBFSZ	ACTUALLY USED BUFFER SIZE
352	(160)	SIGNED	2	BPHNBFR	ACTUALLY USED NUMBER OF BUFFERS
354	(162)	SIGNED	2	BPHNBFR2	NUMBER OF BUFFERS IN SECOND BUFFER CHAIN
					DATA COMPONENT BUFFER POOL CHARACTERISTICS
356	(164)	CHARACTER	16	BPHBPCDT (0)	DATA BUFFER POOL CHARACTERISTICS
356	(164)	SIGNED	4	BPHNPBDT	NUMBER OF DATA BLOCKS PER BUFFER
360	(168)	CHARACTER	12	BPHDCCDT (0)	DATA COMPONENT CHARACTERISTICS
360	(168)	CHARACTER	8	BPHBCCDT (0)	BASIC DATA COMPONENT CHARACTERISTICS
360	(168)	BITSTRING	1	BPHDVTDT	DATA COMPONENT DEVICE TYPE
		1...		BPHFBMDT	"B'10000000'" FBM DEVICE
		.1..		BPHCKDDT	"B'01000000'" CKD DEVICE
		..1.		BPHRPSDT	"B'00100000'" RPS DEVICE
		.... 1...		BPHECKDT	"B'00001000'" ECKD DEVICE
361	(169)	BITSTRING	3		NOT USED
364	(16C)	ADDRESS	4	BPHPBSDT	DATA COMPONENT PHYSICAL BLOCK SIZE
368	(170)	ADDRESS	4	BPHBPIDT	BLOCK OFFSET DUE TO IMBEDDED SS
					SEQUENCE SET BUFFER POOL CHARACTERISTICS
372	(174)	CHARACTER	20	BPHBPCSS (0)	SEQUENCE SET POOL CHARACTERISTICS
372	(174)	CHARACTER	8	BPHBCCSS (0)	BASIC SS CHARACTERISTICS
372	(174)	BITSTRING	1	BPHDVTSS	SEQUENCE SET DEVICE TYPE
		1...		BPHFBMSS	"B'10000000'" FBM DEVICE
		.1..		BPHCKDSS	"B'01000000'" CKD DEVICE
		..1.		BPHRPSSS	"B'00100000'" RPS DEVICE
		.... 1...		BPHECKSS	"B'00001000'" ECKD DEVICE
373	(175)	BITSTRING	1	BPHXOPSS	SEQUENCE SET OPTIONS
		1...		BPHREPSS	"B'10000000'" SEQUENCE SET RECORDS REPLICATED
374	(176)	BITSTRING	2		NOT USED
376	(178)	ADDRESS	4	BPHPBSSS	SEQUENCE SET PHYSICAL BLOCK SIZE
380	(17C)	SIGNED	4		MUST BE ZERO
384	(180)	SIGNED	4	BPHRPFSS	REPLICATION FACTOR
388	(184)	SIGNED	4	BPHBCVSS	NUMBER OF SS BLOCKS PER CNV
					HIGH-LEVEL INDEX BUFFER POOL CHARACTERISTICS
392	(188)	CHARACTER	20	BPHBPCHX (0)	HIGH-LEVEL INDEX POOL CHARS
392	(188)	CHARACTER	8	BPHBCCHX (0)	BASIC HIGH-LEVEL INDEX CHAR'ICS
392	(188)	BITSTRING	1	BPHDVTHX	HIGH-LEVEL INDEX DEVICE TYPE

Dec	Hex	Type	Len	Name (Dim)	Description
		1...		BPHFBMHX	"B'10000000'" FBM DEVICE
		.1..		BPHCKDHX	"B'01000000'" CKD DEVICE
		..1.		BPHRPSHX	"B'00100000'" RPS DEVICE
		.... 1...		BPHECKHX	"B'00001000'" ECKD DEVICE
393	(189)	BITSTRING	1	BPHXOPHX	HIGH-LEVEL INDEX OPTIONS
		1...		BPHREPHX	"B'10000000'" REPLICATED INDEX
394	(18A)	BITSTRING	2		NOT USED
396	(18C)	ADDRESS	4	BPHPBSHX	HIGH-LEVEL INDEX PHYSICAL BLOCK SIZE
400	(190)	SIGNED	4		MUST BE ZERO
404	(194)	SIGNED	4	BPHRPFHX	REPLICATION FACTOR
408	(198)	SIGNED	4	BPHBCVHX	NUMBER OF INDEX SET BLOCKS PER CNV

BUFFER POOL ADDRESSABILITY
THIS SECTION OF THE BPH CONTAINS THE ADDRESS OF THE
BUFFER POOL, ITS LENGTH, AND THE ADDRESS OF THE
BUFFER DEFINITION BLOCK (BDB) OF THE FIRST BUFFER
OF THE BUFFER POOL. IT ALSO CONTAINS THE ADDRESSES
OF THE INDEX BUFFER BLOCKS FOR THE SEQUENCE SET
BUFFER, THE 2ND-LEVEL INDEX BUFFER AND THE HIGH-
LEVEL INDEX BUFFER USED BY THE RESTORATION FUNCTION.
FOR A COMPRESSED BACKUP FILE THE BUFFER POOL CONTAINS
TWO BUFFER CHAINS, ONE CHAIN OF I/O BUFFERS AND ONE
CHAIN OF TRANSIT BUFFERS. FOR THIS CASE THE BUFFER
POOL HEADER CONTAINS ALSO THE ADDRESS OF THE FIRST
BUFFER OF THE SECOND CHAIN.

Dec	Hex	Type	Len	Name (Dim)	Description
412	(19C)	CHAR-ACTER	68	BPHADRS (0)	BUFFER POOL ADDRESABILITY
412	(19C)	CHAR-ACTER	36	BPHPOOL (0)	BUFFER POOL DESCRIPTION
412	(19C)	CHAR-ACTER	12	BPHPFXL (0)	PARAMETER LIST FOR PFIX/PFREE
412	(19C)	ADDRESS	4	BPHPADR	ADDR(BUFFER POOL)
416	(1A0)	ADDRESS	4	BPHFLN	LENGTH(FIXED PART OF BUFFER POOL)-1
420	(1A4)	BITSTRING	4		END OF PFIX/PFREE PARAMETER LIST
424	(1A8)	SIGNED	4	BPHPLN	LENGTH(BUFFER POOL)
428	(1AC)	ADDRESS	4	BPHFBDB	ADDR(BDB OF 1ST BUFFER IN POOL)
432	(1B0)	ADDRESS	4	BPHFBDB2	ADDR(BDB OF 1ST BUFFER IN SECOND CHAIN)
436	(1B4)	ADDRESS	4	BPHDSOF	ADDR(BDB FOR SOFTWARE-END-OF-FILE)
440	(1B8)	ADDRESS	4	BPHPFBDB	ADDR(BDB FOR PREFORMATTING FOR RESTORE WITH RE-MAP)
444	(1BC)	ADDRESS	4	BPHRABDB	ADDR(BDB FOR RANDOM WRITE FOR RESTORE WITH RE-MAP)
448	(1C0)	ADDRESS	4	BPHSQBDB	ADDR(BDB FOR SEQUENTIAL WRITE FOR RESTORE WITH RE-MAP)
452	(1C4)	CHAR-ACTER	32	BPHXBB (0)	XBBS OF INDEX BUFFERS
452	(1C4)	ADDRESS	4	BPHXBB1	ADDR(XBB OF SEQUENCE SET BUFFER)
456	(1C8)	ADDRESS	4	BPHXBFR1	ADDR(SEQUENCE SET BUFFER)
460	(1CC)	ADDRESS	4	BPHXSOF1	ADDR(XBB FOR SEQUENCE SET SEOF)
464	(1D0)	ADDRESS	4	BPHXBB2	ADDR(XBB OF 2ND-LEVEL INDEX BUFFER)
468	(1D4)	ADDRESS	4	BPHXBFR2	ADDR(2ND-LEVEL INDEX BUFFER)
472	(1D8)	ADDRESS	4	BPHXBBN	ADDR(XBB OF HIGH-LEVEL INDEX BUFFER)
476	(1DC)	ADDRESS	4	BPHXBFRN	ADDR(HIGH-LEVEL INDEX BUFFER)
480	(1E0)	ADDRESS	4	BPHXSOFN	ADDR(XBB FOR HIGH-LEVEL INDEX SEOF)

BPH EQUATES

		1..1 1...		BPHLEN	"*-BPH" LENGTH OF BUFFER POOL HEADER

VSE/VSAM BACKUP/RESTORE - IDCDFB12 - 5686-03704(C69)
5746-AM2(C69) COPYRIGHT IBM CORP 1991
LICENSED MATERIAL - PROGRAM PROPERTY OF IBM
BACKUP FILE HEADER (BFH)
THE BACKUP FILE HEADER (BFH) IS PART OF THE
BACKUP/RESTORE BLOCK (BRB) AND CONTROLS THE
PROCESSING OF THE BACKUP FILE

Dec	Hex	Type	Len	Name (Dim)	Description
484	(1E4)	SIGNED	4	BFH (0)	BACKUP FILE HEADER
BACKUP FILE OPTIONS					
484	(1E4)	BITSTRING	1	BFHOPTN	BACKUP FILE OPTIONS
		1...		BFHSLBL	"B'10000000'" LABELED BACKUP FILE
BACKUP FILE DEVICE TYPE CODE					
485	(1E5)	CHAR-ACTER	2	BFHDEVT (0)	BACKUP FILE DEVICE CODE AND MODE
485	(1E5)	BITSTRING	1	BFHDVC	BACKUP FILE DEVICE CODE
486	(1E6)	BITSTRING	1	BFHDVM	BACKUP FILE DEVICE MODE
BACKUP FILE PHYSICAL UNIT NUMBER (CUU)					
487	(1E7)	CHAR-ACTER	4	BFHCUU (0)	PHYSICAL UNIT NUMBER
487	(1E7)	CHAR-ACTER	3	BFHPCUU	PHYSICAL UNIT NUMBER IN PRINT FORMAT
490	(1EA)	CHAR-ACTER	1	BFHXCUU	USED FOR CONVERSION PURPOSES
BACKUP FILE STATUS FLAGS					
491	(1EB)	BITSTRING	1	BFHST	BACKUP FILE STATUS FLAGS
		....		BFHRST	"B'00000000'" STATUS FLAG RESET MASK
		1...		BFHOPN	"B'10000000'" BACKUP FILE OPEN FLAG
		.1..		BFHEOV	"B'01000000'" BACKUP FILE END-OF-VOLUME FLAG
		..1.		BFHTER	"B'00100000'" BACKUP FILE TAPE-ERROR FLAG
		...1		BFHTMM	"B'00010000'" TIME-STAMP-MISMATCH FLAG
		.... 1...		BFHEOF	"B'00001000'" END-OF-BACKUP-FILE FLAG
BACKUP FILE TIME STAMPS					
PRINTABLE BACKUP FILE CREATION TIME MM/DD/YYYY HH:MM:SS					
492	(1EC)	CHAR-ACTER	18	BFHPFCRT (0)	PRINT.BACKUP FILE CREAT.TIME
492	(1EC)	CHAR-ACTER	10	BFHPDATE (0)	PRINT.BACKUP FILE CREAT.DATE
492	(1EC)	CHAR-ACTER	2	BFHPMM	BACKUP FILE CREATION MONTH
494	(1EE)	CHAR-ACTER	1		DELIMITER
495	(1EF)	CHAR-ACTER	2	BFHPDD	BACKUP FILE CREATION DAY
497	(1F1)	CHAR-ACTER	1		DELIMITER
498	(1F2)	CHAR-ACTER	4	BFHPYY	BACKUP FILE CREATION YEAR
502	(1F6)	CHAR-ACTER	8	BFHPTOD (0)	PRINTABLE BACKUP FILE CREATION TOD
502	(1F6)	CHAR-ACTER	2	BFHPHRS	BACKUP FILE CREATION HOUR
504	(1F8)	CHAR-ACTER	1		DELIMITER
505	(1F9)	CHAR-ACTER	2	BFHPMIN	BACKUP FILE CREATION MINUTE
507	(1FB)	CHAR-ACTER	1		DELIMITER
508	(1FC)	CHAR-ACTER	2	BFHPSEC	BACKUP FILE CREATION SECOND
BACKUP FILE CREATION TIME IN TIMER UNITS					
510	(1FE)	CHAR-ACTER	10	BFHFCRT (0)	BACKUP FILE CREATION TIME
510	(1FE)	CHAR-ACTER	6	BFHFDATE (0)	BACKUP FILE CREATION DATE
510	(1FE)	BITSTRING	2	BFHFMM	BACKUP FILE CREATION MONTH
512	(200)	BITSTRING	2	BFHFDD	BACKUP FILE CREATIN DAY

Dec	Hex	Type	Len	Name (Dim)	Description
514	(202)	BITSTRING	2	BFHFYY	BACKUP FILE CREATION YEAR
516	(204)	BITSTRING	4	BFHFTOD	BACKUP FILE CREATION TOD (IN TUS)

BACKUP VOLUME CREATION TIME

Dec	Hex	Type	Len	Name (Dim)	Description
520	(208)	CHAR-ACTER	10	BFHVCRT (0)	BACKUP VOLUME CREATION TIME
520	(208)	BITSTRING	6	BFHVDATE	BACKUP VOLUME CREATION DATE
526	(20E)	BITSTRING	4	BFHVTOD	BACKUP VOLUME CREATION TOD (IN TUS)

VOLUME SEQUENCE NUMBER AND VOLUME
SERIAL NUMBER OF CURRENT BACKUP VOLUME

Dec	Hex	Type	Len	Name (Dim)	Description
532	(214)	SIGNED	4	BFHHVSQ	HIGHEST MOUNTED VOLUME SEQ NUMBER
536	(218)	SIGNED	4	BFHVSQ	CURRENT VOLUME SEQUENCE NUMBER
540	(21C)	BITSTRING	6	BFHVSR	CURRENT VOLUME SERIAL NUMBER

NUMBER OF DUMMY BLOCKS USED FOR BACKUP VOLUME

Dec	Hex	Type	Len	Name (Dim)	Description
546	(222)	SIGNED	2	BFHNDB	NUMBER OF DUMMY BLOCKS

BACKUP FILE WORK AREA INFORMATION

Dec	Hex	Type	Len	Name (Dim)	Description
548	(224)	CHAR-ACTER	24	BFHWAI (0)	BACKUP FILE WORK AREA INFORMATION

ADDRESS AND LENGTH OF BACKUP FILE WORK AREA

Dec	Hex	Type	Len	Name (Dim)	Description
548	(224)	ADDRESS	4	BFHWAP	ADDRESS OF BACKUP FILE WORK AREA
552	(228)	SIGNED	4	BFHWAL	LENGTH OF BACKUP FILE WORK AREA

INFORMATION ABOUT SUBCOMPONENTS
OF BACKUP FILE WORK AREA

Dec	Hex	Type	Len	Name (Dim)	Description
556	(22C)	CHAR-ACTER	16	BFHWASC (0)	WORK AREA SUBCOMPONENT DESCRIPTION

VOLUME LIST

Dec	Hex	Type	Len	Name (Dim)	Description
556	(22C)	CHAR-ACTER	12	BFHVLST (0)	VOLUME LIST DESCRIPTION
556	(22C)	ADDRESS	4	BFHFVLB	ADDRESS OF 1ST VOLUME LIST BLOCK
560	(230)	ADDRESS	4	BFHLVLB	ADDRESS OF LAST VOLUME LIST BLOCK
564	(234)	ADDRESS	4	BFHLVLE	ADDRESS OF LAST VOLUME LIST ENTRY

ADDRESS OF VOL1 LABEL FOR A LABELED BACKUP FILE

Dec	Hex	Type	Len	Name (Dim)	Description
568	(238)	ADDRESS	4	BFHVOL1	ADDRESS OF VOL1 LABEL

EXTENT LIST FOR BACKKUP FILE ON DISK VOLUMES

Dec	Hex	Type	Len	Name (Dim)	Description
572	(23C)	CHAR-ACTER	12	BFHELST (0)	EXTENT LIST DESCRIPTION
572	(23C)	ADDRESS	4	BFHFELB	ADDR OF 1ST EXTNT LST BLOCK
576	(240)	ADDRESS	4	BFHLELB	ADDR OF LAST EXTNT LST BLCK
580	(244)	ADDRESS	4	BFHLELE	ADDR OF LAST EXTNT LST ENTRY

BFH EQUATES

Dec	Hex	Type	Len	Name (Dim)	Description
		.11. .1..		BFHLEN	"*-BFH" LENGTH OF BFH

VSE/VSAM BACKUP/RESTORE -IDCDFB13 - 5686-066-05(35C)
5686-066 COPYRIGHT IBM CORP 1980, 1997
LICENSED MATERIAL - PROGRAM PROPERTY OF IBM
TAPE COMMAND PARAMETER LIST (TCP)
THE TAPE COMMAND PARAMETER LIST (TCP) IS PART OF THE
BACKUP/RESTORE BLOCK (BRB) AND CONTAINS THE GLOBAL
TAPE CCB, THE GLOBAL TAPE CHANNEL PROGRAMS WHICH ARE
NOT BUFFER-RELATED, THEIR DATA AREAS LIKE THE EOT
RECORD, AND POINTERS TO THE DYNAMICALLY BUILT NON-
BUFFER-RELATED TAPE CHANNEL PROGRAMS

Dec	Hex	Type	Len	Name (Dim)	Description
584	(248)	DBL WORD	8	TCP (0)	TAPE COMMAND PARAMETER LIST

GLOBAL TAPE CCB

Dec	Hex	Type	Len	Name (Dim)	Description
584	(248)	CHAR-ACTER	16	TCPCCB (0)	GLOBAL TAPE CCB

Dec	Hex	Type	Len	Name (Dim)	Description
584	(248)	BITSTRING	2	TCPRS	RESIDUAL COUNT
586	(24A)	CHAR-ACTER	4	TCPER (0)	ERROR BYTES
586	(24A)	ADDRESS	1	TCPCM	1ST COMMUNICATION BYTE
		1...		TCPWT	"B'10000000'" TRAFFIC BIT
		..1.		TCPIE	"B'00100000'" IRRECOVERABLE I/O ERROR
		...1		TCPAE	"B'00010000'" ACCEPT IRRECOVERABLE I/O ERROR
587	(24B)	ADDRESS	1	TCPCM2	2ND COMMUNICATION BYTE
		1		TCPRNC	"B'00000001'" RETRY FROM NEXT CCW
588	(24C)	BITSTRING	1	TCPCS	1ST CSW STATUS BYTE
		1		TCPUE	"B'00000001'" UNIT EXCEPTION
589	(24D)	BITSTRING	1		2ND CSW STATUS BYTE
590	(24E)	BITSTRING	2	TCPLUB	LOGICAL UNIT NUMBER
592	(250)	BITSTRING	1		RESERVED
593	(251)	ADDRESS	3	TCPCCW	ADDRESS OF 1ST CCW
596	(254)	BITSTRING	1		RESERVED
597	(255)	ADDRESS	3	TCPCA	CCW ADDRESS IN CSW

GLOBAL CHANNEL PROGRAMS
WRITE-CONTINUATION-HEADER TAPE CHANNEL PROGRAM

Dec	Hex	Type	Len	Name (Dim)	Description
600	(258)	CHAR-ACTER	8	TCPWCHD (0)	WRITE-CONTINUATION-HEADER TAPE CP
600	(258)	ADDRESS	1		WRITE COMMAND CODE
601	(259)	ADDRESS	3		ADDRESS OF CONTINUATION HEADER
604	(25C)	ADDRESS	1		SUPPRESS INCORRECT LENGTH
605	(25D)	BITSTRING	1		RESERVED
606	(25E)	ADDRESS	2		BYTE COUNT

READ-CONTINUATION-HEADER TAPE CHANNEL PROGRAM

Dec	Hex	Type	Len	Name (Dim)	Description
608	(260)	CHAR-ACTER	16	TCPRCHD (0)	SKIP-CONTINUATION-HEADER TAPE CP
608	(260)	ADDRESS	1		FORWARD-SPACE-FILE COMMAND CODE
609	(261)	ADDRESS	3		NO ARGUMENT
612	(264)	ADDRESS	1		COMMAND CHAINING AND SLI FLAGS
613	(265)	BITSTRING	1		RESERVED
614	(266)	ADDRESS	2		BYTE COUNT
616	(268)	ADDRESS	1		READ-FORWARD COMMAND CODE
617	(269)	ADDRESS	3		ADDRESS OF CONTINUATION HEADER AREA
620	(26C)	ADDRESS	1		SUPPRESS-INCORRECT-LENGTH
621	(26D)	BITSTRING	1		RESERVED
622	(26E)	ADDRESS	2		BYTE COUNT

READ-OBJECT-HEADER TAPE CHANNEL PROGRAM

Dec	Hex	Type	Len	Name (Dim)	Description
624	(270)	CHAR-ACTER	16	TCPROHD (0)	READ-OBJECT-HEADER TAPE CHANNEL PGM
624	(270)	ADDRESS	1		FORWARD-SPACE-FILE COMMAND CODE
625	(271)	ADDRESS	3		NO ARGUMENT
628	(274)	ADDRESS	1		COMMAND CHAINING AND SLI FLAGS
629	(275)	BITSTRING	1		RESERVED
630	(276)	ADDRESS	2		BYTE COUNT
632	(278)	ADDRESS	1		READ-FORWARD COMMAND CODE
633	(279)	ADDRESS	3	TCPOHWA1	ADDRESS OF OBJECT HEADER WORK AREA
636	(27C)	ADDRESS	1		SUPPRESS-INCORRECT-LENGTH
637	(27D)	BITSTRING	1		RESERVED
638	(27E)	ADDRESS	2		LENGTH OF OBJECT HEADER BLOCK

FORWARD-SPACE-FILE TAPE CHANNEL PROGRAM (2 FSF) D63GDWM

Dec	Hex	Type	Len	Name (Dim)	Description
640	(280)	CHAR-ACTER	16	TCPFSFD (0)	BACKSPACE-OBJECT-HEADER TAPE CP
640	(280)	ADDRESS	1		FORWARD SPACE FILE COMMAND CODE
641	(281)	ADDRESS	3		NO ARGUMENT
644	(284)	ADDRESS	1		COMMAND CHAINING AND SLI FLAGS
645	(285)	BITSTRING	1		RESERVED
646	(286)	ADDRESS	2		FORWARD SPACE BYTE COUNT D63GDWM
648	(288)	ADDRESS	1		FORWARD SPACE FILE COMMAND D63GDWM

Dec	Hex	Type	Len	Name (Dim)	Description
649	(289)	ADDRESS	3		NO ARGUMENT
652	(28C)	ADDRESS	1		SUPPRESS-INCORRECT-LENGTH
653	(28D)	BITSTRING	1		RESERVED
654	(28E)	ADDRESS	2		FORWARD SPACE BYTE COUNT D63GDWM

BACKSPACE-OBJECT-HEADER TAPE CHANNEL PROGRAM

Dec	Hex	Type	Len	Name (Dim)	Description
656	(290)	CHAR-ACTER	8	TCPBOHD (0)	BACKSPACE-OBJECT-HEADER TAPE CP
656	(290)	ADDRESS	1		BACKSPACE FILE COMMAND CODE
657	(291)	ADDRESS	3		NO ARGUMENT
660	(294)	ADDRESS	1		SUPPRESS INCORRECT LENGTH
661	(295)	BITSTRING	1		RESERVED
662	(296)	ADDRESS	2		BACKSPACE BYTE COUNT

WRITE-EOT-RECORD TAPE CHANNEL PROGRAM

Dec	Hex	Type	Len	Name (Dim)	Description
664	(298)	CHAR-ACTER	8	TCPWEOT (0)	WRITE-EOT-RECORD TAPE CHANNEL PGM
664	(298)	ADDRESS	1		WRITE COMMAND CODE
665	(299)	ADDRESS	3		ADDRESS OF EOT RECORD
668	(29C)	ADDRESS	1		SUPPRESS INCORRECT LENGTH
669	(29D)	BITSTRING	1		RESERVED
670	(29E)	ADDRESS	2		BYTE COUNT

READ-EOT-RECORD TAPE CHANNEL PROGRAM

Dec	Hex	Type	Len	Name (Dim)	Description
672	(2A0)	CHAR-ACTER	16	TCPREOT (0)	READ-EOT-RECORD TAPE CHANNEL PGM
672	(2A0)	ADDRESS	1		FORWARD-SPACE-FILE COMMAND CODE
673	(2A1)	ADDRESS	3		NO ARGUMENT
676	(2A4)	ADDRESS	1		COMMAND CHAINING AND SLI FLAGS
677	(2A5)	BITSTRING	1		RESERVED
678	(2A6)	ADDRESS	2		BYTE COUNT
680	(2A8)	ADDRESS	1		READ-FORWARD COMMAND CODE
681	(2A9)	ADDRESS	3		ADDRESS OF EOT RECORD
684	(2AC)	ADDRESS	1		SUPPRESS-INCORRECT-LENGTH
685	(2AD)	BITSTRING	1		RESERVED
686	(2AE)	ADDRESS	2		BYTE COUNT

REWIND-AND-UNLOAD TAPE CHANNEL PROGRAM

Dec	Hex	Type	Len	Name (Dim)	Description
688	(2B0)	CHAR-ACTER	8	TCPUNLD (0)	REWIND-AND-UNLOAD TAPE CHANNEL PGM
688	(2B0)	ADDRESS	1		REWIND-AND-UNLOAD COMMAND CODE
689	(2B1)	ADDRESS	3		NO ARGUMENT
692	(2B4)	ADDRESS	1		SUPPRESS INCORRECT LENGTH
693	(2B5)	BITSTRING	1		RESERVED
694	(2B6)	ADDRESS	2		REWIND-AND-UNLOAD BYTE COUNT

READ-FIRST-DIRECTORY-BLOCK TAPE CHANNEL PROGRAM

Dec	Hex	Type	Len	Name (Dim)	Description
696	(2B8)	CHAR-ACTER	8	TCPRFDB (0)	READ-1ST-DIRECTORY-BLOCK TAPE CP
696	(2B8)	ADDRESS	1		READ-FORWARD COMMAND CODE
697	(2B9)	ADDRESS	3	TCPAREA	ADDRESS OF I/O AREA
700	(2BC)	ADDRESS	1		SUPPRESS-INCORRECT-LENGTH FLAG
701	(2BD)	BITSTRING	1		RESERVED
702	(2BE)	ADDRESS	2		BYTE COUNT

CHANNEL PROGRAM ADDRESSES

Dec	Hex	Type	Len	Name (Dim)	Description
704	(2C0)	BITSTRING	1		NOT USED
705	(2C1)	ADDRESS	3	TCPWCHDP	ADDRESS OF WRITE-CONT-HEADER TAPE CP
708	(2C4)	BITSTRING	1		NOT USED
709	(2C5)	ADDRESS	3	TCPRCHDP	ADDRESS OF READ-CONT-HEADER TAPE CP
712	(2C8)	BITSTRING	1		NOT USED
713	(2C9)	ADDRESS	3	TCPROHDP	ADDRESS OF READ-OBJECT-HEADER CP
716	(2CC)	BITSTRING	1		NOT USED
717	(2CD)	ADDRESS	3	TCPFSFCP	ADDR FORWARD SPACE FILE CP D63GDWM
720	(2D0)	BITSTRING	1		NOT USED

Dec	Hex	Type	Len	Name (Dim)	Description
721	(2D1)	ADDRESS	3	TCPBOHDP	ADDRESS OF BACKSPACE-OBJ HEADER CP
724	(2D4)	BITSTRING	1		NOT USED
725	(2D5)	ADDRESS	3	TCPWEOTP	ADDRESS OF WRITE-EOT-RECORD TAPE CP
728	(2D8)	BITSTRING	1		NOT USED
729	(2D9)	ADDRESS	3	TCPREOTP	ADDRESS OF READ-EOT-RECORD TAPE CP
732	(2DC)	BITSTRING	1		NOT USED
733	(2DD)	ADDRESS	3	TCPWDIRP	ADDRESS OF WRITE-DIRECTORY TAPE CP
736	(2E0)	BITSTRING	1		NOT USED
737	(2E1)	ADDRESS	3	TCPWDRP	ADDRESS OF WRITE-DUMMY-RECORD CP
740	(2E4)	BITSTRING	1		NOT USED
741	(2E5)	ADDRESS	3	TCPUNLDP	ADDRESS OF REWIND-AND-UNLOAD CP
744	(2E8)	BITSTRING	1		NOT USED
745	(2E9)	ADDRESS	3	TCPRDIRP	ADDRESS OF READ-DIRECTORY TAPE CP

CONTINUATION HEADER

Dec	Hex	Type	Len	Name (Dim)	Description
748	(2EC)	CHARACTER	24	TCPCHD (0)	CONTINUATION-HEADER RECORD
748	(2EC)	CHARACTER	4	TCPCHDID	CONTINUATION-HEADER IDENTIFIER
752	(2F0)	BITSTRING	1	(20)	NOT USED

EOT RECORD

Dec	Hex	Type	Len	Name (Dim)	Description
772	(304)	CHARACTER	24	TCPEOT (0)	EOT RECORD
772	(304)	CHARACTER	4	TCPEOTID	EOT-RECORD IDENTIFIER
776	(308)	BITSTRING	1	TCPTYPE	EOT-RECORD TYPE
	11.. .11.			TCPEOF	"C'F'" END-OF-BACKUP-FILE INDICATION
	111. .1.1			TCPEOV	"C'V'" END-OF-BACKUP-VOLUME INDICATION
777	(309)	BITSTRING	1		NOT USED
778	(30A)	CHARACTER	10	TCPVTT (0)	BACKUP VOLUME TERMINATION TIME
778	(30A)	BITSTRING	6	TCPDATE	BACKUP VOLUME TERMINATION DATE
784	(310)	BITSTRING	4	TCPTOD	BACKUP VOLUME TERMINATION TOD
788	(314)	BITSTRING	8		NOT USED

OPEN/CLOSE INTERFACES
OPEN/CLOSE INTERFACE FOR BACKUP

Dec	Hex	Type	Len	Name (Dim)	Description
796	(31C)	ADDRESS	4	TCPDTFB	ADDRESS OF DTFMT FOR BACKUP

OPEN/CLOSE INTERFACE FOR RESTORE

Dec	Hex	Type	Len	Name (Dim)	Description
804	(324)	ADDRESS	4	TCPDTFR	ADDRESS OF DTF FOR RESTORE

COMMAND EQUATES

Dec	Hex	Type	Len	Name (Dim)	Description
	1			TCPWR	"X'01'" WRITE COMMAND CODE
	.... ..1.			TCPRDF	"X'02'" READ-FORWARD COMMAND CODE
	 1111			TCPRUN	"X'0F'" REWIND-AND-UNLOAD COMMAND CODE
	..11 1111			TCPFSF	"X'3F'" FORWARD-SPACE-FILE COMMAND CODE
	..11 .111			TCPFSB	"X'37'" FORWARD-SPACE-BLOCK COMMAND CODE
	..1. 1111			TCPBSF	"X'2F'" BACKSPACE-FILE COMMAND CODE
	.1..			TCPCCH	"B'01000000'" COMMAND-CHAINING FLAG
	..1.			TCPSLI	"B'00100000'" SUPPRESS-INCORRECT-LENGTH FLAG
	1			TCPRUCNT	"1" REWIND-AND-UNLOAD BYTE COUNT
	1			TCPFSCNT	"1" FORWARD-SPACE BYTE COUNT
	1			TCPBSCNT	"1" BACKSPACE BYTE COUNT

OBJECT HEADER EQUATES

Dec	Hex	Type	Len	Name (Dim)	Description
810	(32A)	SIGNED		TCPOHDBL	"1280" OBJECT HEADER BLOCK LENGTH

TCP EQUATES

Dec	Hex	Type	Len	Name (Dim)	Description
	111. .1..			TCPLEN	"*-TCP" LENGTH OF TCP

Offsets					
Dec	Hex	Type	Len	Name (Dim)	Description

VSE/VSAM BACKUP/RESTORE - IDCDFB25 - 5686-03704(C69)
5746-AM2(C69) COPYRIGHT IBM CORP 1991
LICENSED MATERIAL - PROGRAM PROPERTY OF IBM
BACKUP FILE PARAMETER AREA (BPA)
THE BACKUP FILE PARAMETER AREA (BPA) IS PART OF THE
BACKUP/RESTORE BLOCK (BRB) AND CONTAINS PARAMETERS WHICH
ARE USED BY DIFFERENT ROUTINES DURING THE WHOLE BACKUP
OR RESTORE PROCESS, ESPECIALLY IN THE CASE THAT THE
BACKUP FILE IS LOCATED ON DISK VOLUMES

Dec	Hex	Type	Len	Name (Dim)	Description
816	(330)	DBL WORD	8	BPA (0)	

DEVICE CHARACTERISTICS FOR THE BACKUP DEVICE

Dec	Hex	Type	Len	Name (Dim)	Description
816	(330)	CHAR-ACTER	56	BPABDVC (0)	

. IBM DISK OPERATING SYSTEM
    SUPERVISOR - AVRLIST - 5686-066-06

Dec	Hex	Type	Len	Name (Dim)	Description
816	(330)	DBL WORD	8	AVRADR (0)	
816	(330)			AVRVOLC	"*" VOLUME CHARACTERISTICS
816	(330)	ADDRESS	4	AVRPUB	ADDRESS OF PHYSICAL UNIT BLOCK
820	(334)	CHAR-ACTER	6	AVRVOLID	VOLUME IDENTIFIER
826	(33A)	BITSTRING	1	AVRFLAG	FLAG BYTE
		1...		AVREXTFL	"X'80'" EXTENTION AVAILABLE
		.1..		AVRSHR	"X'40'" DEVICE IS SHARED
		..1.		AVRRSV	"X'20'" DEVICE IS RESERVED
		...1		AVRCOPY	"X'10'" DEVICE A COPY
		.... 1...		AVRREMV	"X'08'" DEVICE HAS REMOVABLE MEDIA
		.... .1..		AVRCMSV	"X'04'" DEVICE IS A CMS DISK
		.... ..1.		AVRNLNO	"X'02'" AVRLNO IS NOT VALID
		1		AVRNVOL	"X'01'" VOLID INFORMATION IS NOT VALID E.G NO VOL1 LABEL
827	(33B)	BITSTRING	1	AVRTYPE	FORMAT OF DEVICE CHARACTERISTICS
		1		AVRFBA	"X'01'" FBA DEVICE
		.... ..1.		AVRCKD	"X'02'" CKD DEVICE
		11		AVRRPS	"X'03'" CKD DEVICE WITH RPS
		.... .1..		AVRECKD	"X'04'" ECKD DEVICE
		..1.		AVRTAPE	"X'20'" TAPE DEVICE
828	(33C)	BITSTRING	5	AVRVTOC (0)	DASD ADDRESS OF VTOC
828	(33C)	BITSTRING	2	AVRVCC	CKD CYLINDER NO.
830	(33E)	BITSTRING	2	AVRVHH	CKD TRACK NO.
832	(340)	BITSTRING	1	AVRVR	CKD RECORD NO.
833	(341)	BITSTRING	1	AVRCDCST	CKD DEVICE STATUS
		1...		AVRNOWRT	"X'80'" VM DEVICE WITH READ ONLY
828	(33C)	BITSTRING	1	AVRVCI	BLOCKS PER CONTROL INTERVAL
829	(33D)	BITSTRING	4	AVRVNUM	FBA BLOCK NO. OF VTOC
833	(341)	BITSTRING	1	AVRFDCST	FBA DUAL COPY STATUS
828	(33C)	BITSTRING	3	AVRTLSEQ	LIBRARY SEQUENCE NUMBER
831	(33F)	BITSTRING	1	AVRTLSID	LIBRARY SUBSYTEM-ID
832	(340)	BITSTRING	2	AVRTINFO	RESERVED FOR FUTURE EXTENTION
834	(342)	BITSTRING	2	AVRLNO	LOGICAL UNIT NO. (AS IN CCB)
836	(344)	BITSTRING	1	AVRDEVC (0)	DEVICE TYPE CHARACTERISTICS

SUPERVISOR - 5686-007-06-C44

Dec	Hex	Type	Len	Name (Dim)	Description
836	(344)	BITSTRING	1	DCTADR (0)	DEVICE CHARACTERISTICS
836	(344)	BITSTRING	1	DCTPUBC	DOS/VS PUB DEVICE TYPE CODE
837	(345)	BITSTRING	1	DCTDTFC	DTF DEVICE CODE (AS IN SECTVAL MACRO), NOT USED FOR TAPE
838	(346)	BITSTRING	4	DCTUCBC (0)	UNIT CODE (AS IN VSAM CATALOG RECORD) FOR FBA, GOTTEN FROM DEVICE
838	(346)	BITSTRING	1	DCTUFLG	UNIT I/O FLAGS
839	(347)	BITSTRING	1	DCTUOPT	UNIT OPTIONAL FEATURES
		.1..		DCTREMV	"X'40'" DEVICE HAS REMOVABLE VOLUME
840	(348)	BITSTRING	1	DCTUDCL	UNIT DEVICE CLASS

Dec	Hex	Type	Len	Name (Dim)	Description
841	(349)	BITSTRING	1	DCTUTYP	UNIT TYPE

REMAINDER, EXCEPT DCTEXTCD NOT USED FOR TAPES
  DEVICE CAPACITY

Dec	Hex	Type	Len	Name (Dim)	Description
842	(34A)	BITSTRING	2	DCTPCYL	PRIMARY CYLINDERS PER VOLUME FBA=(FIXED+MOVABLE ACCESS BLOCKS)/BLOCKS PER ACCESS POSTION
844	(34C)	BITSTRING	2	DCTACYL	CYLINDERS(OR FBA BLOCKS) IN ALTERN. AREA
846	(34E)	BITSTRING	2	DCTTCYL	TRACKS PER CYLINDER FBA=BLOCKS PER ACCESS POSITION/BLOCKS PER CYCLICAL GROUP
848	(350)	BITSTRING	4	DCTBTRK	BYTES PER TRACK, FBA BLKS/CYCLICAL GROUP
852	(354)	BITSTRING	4	DCTTFIX	CYLINDERS OR (FBA BLOCKS) UNDER FIXED-ACCESS MECHANISM
856	(358)	BITSTRING	2	DCTMAXR	MAXIMUM PHYSICAL RECORD SIZE FBA= BLOCK SIZE

DEVICE CAPACITY AND BALANCE CONSTANTS

Dec	Hex	Type	Len	Name (Dim)	Description
858	(35A)	BITSTRING	2	DCTROH (0)	DATA+KEY OVERHD ALL RECORDS
858	(35A)	BITSTRING	1	DCTROH1	DATA+KEY OVERHD NON-LAST RECORDS
859	(35B)	BITSTRING	1	DCTROH2	DATA+KEY OVERHD LAST RECORD
860	(35C)	BITSTRING	1	DCTKYOH	KEY OVERHEAD
861	(35D)	BITSTRING	1	DCTTFLG	CAPACITY/BALANCE CALCULATION ID
		1		DCTTUSE	"X'01'" DEVICE IS A 2311 2314
		.... 1...		DCTHALF	"X'08'" DEVICE IS CKD BUT NOT 2311 OR 2314
		...1 1...		DCTTCKD	"X'18'" DEVICE IS CKD AND MODULO
		...1		DCTTMOD	"X'10'" DEVICE IS A MODULO DEVICE
		..11 1...		DCTTECKD	"X'38'" DEVICE IS AN ECKD DEVICE
862	(35E)	BITSTRING	2	DCTTFAC	TOLERANCE FACTOR
862	(35E)	BITSTRING	1	DCTBYSEG	BYTES / SEGMENT (DCTTMOD=YES)
863	(35F)	BITSTRING	1	DCTDCBYT	DATA CORRECTION BYTES (DCTTMOD=YES)

RPS DEVICE TYPE CODE

Dec	Hex	Type	Len	Name (Dim)	Description
864	(360)	BITSTRING	1	DCTRPSC	RPS DEVICE TYPE CODE
865	(361)	BITSTRING	1		RESERVED
866	(362)	CHAR-ACTER	6	DCTEXTCD	EXTERNAL DEVICE TYPE CODE
		..1. .1..		DCTLEN	"*-DCTADR" TABLE LENGTH
		..11 1...		AVRLEN	"*-AVRADR" LENGTH OF OUTPUT LIST
		.... 11..		AVRILNG	"12" LENGTH OF INPUT PARAMETER LIST

RETURN CODES

Dec	Hex	Type	Len	Name (Dim)	Description
		....		AVRGOOD	"0" ALL DATA RETURNED
		.... .1..		AVRNOLNO	"4" WAS UNABLE TO READ VOL1 LABEL CHECK FIELD AVRFLAG
		.... 1...		AVRNOVOL	"8" VOLUME NOT MOUNTED
		.... 1...		AVRNOASG	"8" LOGICAL UNIT NOT ASSIGNED
		.... 1...		AVRNDASD	"8" DEVICE NOT DASD
		.... 11..		AVRIGN	"12" LOGICAL UNIT IS ASSIGNED 'IGNORE'
		...1		AVRNOTUP	"16" DEVICE IS NOT OPERATIONAL
		...1 .1..		AVRBPL	"20" BAD INPUT PARAMETER LIST
		...1 1...		AVRNOTDF	"24" ASSIGNED UNIT IS DIFFERENT CLASS
		...1 11..		AVRNRDY	"28" DEVICE IS NOT READY

IORB AND I/O PARM LISTS FOR A BACKUP DEVICE FROM DISK TYPE
USED BY SIMPLE READ ONE BLOCK OR WRITE ONE BLOCK OPERATIONS

Dec	Hex	Type	Len	Name (Dim)	Description
872	(368)	CHAR-ACTER	24	BPAIORB (0)	

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Dec	Hex	Type	Len	Name (Dim)	Description
872	(368)	SIGNED	4	(0)	
872	(368)	CHAR-ACTER	64	BPARCSD1 (0)	REQUEST CONTROL SECTION

IORB FOR I/O REQUESTS OF ASSOCIATED CHANNEL PROGRAM

Dec	Hex	Type	Len	Name (Dim)	Description
872	(368)	CHARACTER	24	BPAIOD1 (0)	I/O REQUEST BLOCK
872	(368)	BITSTRING	2	BPARSD1	RESIDUAL COUNT
874	(36A)	CHARACTER	4	BPAERD1 (0)	ERROR BYTES
874	(36A)	BITSTRING	1	BPACMD1	1ST COMMUNICATION BYTE
		1...		BPAWTD1	"B'10000000'" TRAFFIC BIT
		..1.		BPAIED1	"B'00100000'" IRRECOVERABLE I/O ERROR
		...1		BPAAED1	"B'00010000'" ACCEPT IRRECOVERABLE I/O ERROR
875	(36B)	BITSTRING	1	BPACM2D1	2ND COMMUNICATION BYTE
		..1.		BPAEOCD1	"X'20'" END OF CYLINDER
876	(36C)	BITSTRING	1	BPACSD1	1ST CSW STATUS BYTE
		.... ..1.		BPAUCD1	"X'02'" UNIT CHECK
		1		BPAUED1	"B'00000001'" UNIT EXCEPTION
877	(36D)	BITSTRING	1	BPACS2D1	2ND CSW STATUS BYTE
		.1..		BPALNED1	"X'40'" LENGTH ERROR
878	(36E)	CHARACTER	2	BPALUD1 (0)	SYMBOLIC LOGICAL UNIT
878	(36E)	BITSTRING	1	BPACLD1	LOGICAL UNIT CLASS
		.... .1..		BPAIOBD1	"B'00000100'" IORB INDICATOR
879	(36F)	BITSTRING	1	BPALND1	LOGICAL UNIT NUMBER
880	(370)	BITSTRING	1		RESERVED
881	(371)	ADDRESS	3	BPACWD1	ADDRESS OF 1ST CCW
884	(374)	BITSTRING	1		3RD COMMUNICATION BYTE
885	(375)	ADDRESS	3	BPACAD1	VIRTUAL CCW ADDRESS FROM CSW
888	(378)	BITSTRING	1	BPAFXOD1	FIX LIST OPTIONS
		1...		BPACMPD1	"B'10000000'" COMPRESSED OPTION
		.1..		BPAFIXD1	"B'01000000'" FIXED OPTION
889	(379)	ADDRESS	3	BPAFXLD1	ADDRESS OF FIX LIST
892	(37C)	BITSTRING	2		IORB IDENTIFIER
894	(37E)	BITSTRING	2		RESERVED

CHANNEL PROGRAM PARAMETER LISTS

Dec	Hex	Type	Len	Name (Dim)	Description
896	(380)	CHARACTER	40	BPAPLD1 (0)	CHANNEL PROGRAM PARAMETERS
898	(382)	BITSTRING	6	BPADSKD1	DISK ADDRESS FIELD FOR CKD AND FBM

PARAMETER LISTS FOR FBM CHANNEL PROGRAMS

Dec	Hex	Type	Len	Name (Dim)	Description
896	(380)	CHARACTER	24	BPAFBD1 (0)	FBM CHANNEL PROGRAMS

DEFINE EXTENT PARAMETER LIST FOR FBM CHANNEL PROGRAM

Dec	Hex	Type	Len	Name (Dim)	Description
896	(380)	CHARACTER	16	BPADXD1 (0)	DEFINE EXTENT PARAMETER LIST
896	(380)	BITSTRING	1	BPAMSD1	MASK BYTE
897	(381)	BITSTRING	1		UNUSED
898	(382)	BITSTRING	2	BPABLD1	FBM BLOCK SIZE (ZERO FOR 512)
900	(384)	ADDRESS	4	BPAPSD1	PHYSICAL START OF EXTENT
904	(388)	ADDRESS	4	BPALSD1	LOGICAL START OF EXTENT
908	(38C)	ADDRESS	4	BPALED1	LOGICAL END OF EXTENT

LOCATE PARAMETER LIST FOR FBM CHANNEL PROGRAM

Dec	Hex	Type	Len	Name (Dim)	Description
912	(390)	CHARACTER	8	BPALPD1 (0)	LOCATE-CCW PARAMETER LIST
912	(390)	BITSTRING	1	BPAOPD1	OPERATIONS BYTE
		1		BPAWRDD1	"B'00000001'" WRITE DATA OPERATION CODE
		.... ..1.		BPARRDD1	"B'00000010'" READ REPLICATED DATA OP-CODE
		.... .11.		BPARDDD1	"B'00000110'" READ DATA OPERATION CODE
913	(391)	BITSTRING	1	BPARCD1	REPLICATION COUNT
914	(392)	BITSTRING	2	BPABCD1	BLOCK COUNT
916	(394)	ADDRESS	4	BPALBD1	LOGICAL BLOCK NUMBER

UNUSED SPACE FOR FBM PARAMETER LIST
PARAMETER LISTS FOR CKD DEVICES

Dec	Hex	Type	Len	Name (Dim)	Description
896	(380)	CHAR-ACTER	24	BPACKD1 (0)	CKD PARAMETER LISTS

SEEK-COUNT FIELD

Dec	Hex	Type	Len	Name (Dim)	Description
896	(380)	CHAR-ACTER	10	BPASKD1 (0)	SEEK-COUNT FIELD
896	(380)	BITSTRING	2	BPABBD1	BIN NUMBER
898	(382)	CHAR-ACTER	8	BPACNTD1 (0)	COUNT AREA
898	(382)	BITSTRING	2	BPACCD1	CYLINDER NUMBER
900	(384)	CHAR-ACTER	3	BPAHHRD1 (0)	HEAD AND RECORD NUMBER
900	(384)	BITSTRING	2	BPAHHD1	HEAD NUMBER
902	(386)	BITSTRING	1	BPARD1	RECORD NUMBER
903	(387)	BITSTRING	1	BPAKLD1	KEY LENGTH
904	(388)	BITSTRING	2	BPADLD1	DATA LENGTH

SECTOR NUMBER FOR RPS DEVICES

Dec	Hex	Type	Len	Name (Dim)	Description
906	(38A)	BITSTRING	1	BPASND1	SECTOR NUMBER FOR RPS DEVICES
907	(38B)	BITSTRING	1	BPASNRD1	SECTOR NUMBER READ
908	(38C)	BITSTRING	4		UNUSED

PARAMETER LISTS FOR ECKD DEVICES
THE PARAMETER LISTS FOR ECKD DEVICES DO NOT OVERLAY
THE PARAMETER LISTS FOR FBM/CKD DEVICES BECAUSE SOME
OF THE CKD PARAMETER WILL BE USED FOR ECKD TOO.

Dec	Hex	Type	Len	Name (Dim)	Description
912	(390)	CHAR-ACTER	40	BPAECD1 (0)	ECKD PARAMETER LISTS

DEFINE EXTENT PARAMETER LIST FOR ECKD CHANNEL PROGRAM

Dec	Hex	Type	Len	Name (Dim)	Description
912	(390)	CHAR-ACTER	16	BPADED1 (0)	DEFINE EXTENT PARAMETER LIST
912	(390)	BITSTRING	1	BPAE0D1	MASK BYTE
		.1.1 1...		BPAEDRD1	"B'01011000'" MASK BYTE FOR ECKD READ

```
|| ++------------ INHIBIT ALL SEEK COMMANDS
|| WE WILL ALWAYS OPERATE IN-
|| SIDE LOCATE RECORD DOMAINS
++-------------- INHIBIT ALL WRITES
```

Dec	Hex	Type	Len	Name (Dim)	Description
		...1 1...		BPAEFWD1	"B'00011000'" MASK BYTE FOR ECKD FOR-WRITE

```
|| ++------------ INHIBIT ALL SEEK COMMANDS
|| WE WILL ALWAYS OPERATE IN-
|| SIDE LOCATE RECORD DOMAINS
++-------------- PERMIT MOST WRITES
```

Dec	Hex	Type	Len	Name (Dim)	Description
		1..1 1...		BPAEUWD1	"B'10011000'" MASK BYTE FOR ECKD UPD-WRITE

```
|| ++------------ INHIBIT ALL SEEK COMMANDS
|| WE WILL ALWAYS OPERATE IN-
|| SIDE LOCATE RECORD DOMAINS
++-------------- PERMIT UPDATE WRITES ONLY
```

Dec	Hex	Type	Len	Name (Dim)	Description
913	(391)	BITSTRING	1	BPAE1D1	GLOBAL ATTRIBUTES
		11.. 1...		BPAEDAD1	"B'11001000'" GLOBAL ATTRIBUTES ECKD READ

```
|||+++---------- INHIBIT CACHE LOADING
||+------------- NOT CKD CONVERSION MODE
++-------------- ECKD MODE
```

Dec	Hex	Type	Len	Name (Dim)	Description
		11.. 11..		BPAEDSD1	"B'11001100'" GLOBAL ATTRIBUTES ECKD READ

```
|||+++---------- SEQUENTIAL ACCESS
||+------------- NOT CKD CONVERSION MODE
++-------------- ECKD MODE
```

Dec	Hex	Type	Len	Name (Dim)	Description
		11.. .1..		BPAEDWD1	"B'11000100'" GLOBAL ATTRIBUTES ECKD WRITE

Offsets					
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
		|||++----------- BYPASS CACHE		
		||+------------- NOT CKD CONVERSION MODE		
		++--------------- ECKD MODE		
		11..		BPAEDND1	"B'11000000'" GLOBAL ATTRIBUTES ECKD WRITE
		|||++----------- normal cache replacement		
		||+------------- NOT CKD CONVERSION MODE		
		++--------------- ECKD MODE		
914	(392)	BITSTRING	2	BPAE2D1	BLOCK SIZE
916	(394)	BITSTRING	2	BPAE4D1	UNUSED (CACHE FAST WRITE ID)
918	(396)	BITSTRING	1	BPAE6D1	RESERVED - MUST BE ZERO
919	(397)	BITSTRING	1	BPAE7D1	Global attribs extended
		.... .1..		BPARR0D1	"B'00000100'" Regular record zero
920	(398)	BITSTRING	4	BPAE8D1 (0)	BEGINN OF EXTENT
920	(398)	BITSTRING	2	BPAESCD1	ECKD START CC OF EXTENT
922	(39A)	BITSTRING	2	BPAESHD1	ECKD START HH OF EXTENT
924	(39C)	BITSTRING	4	BPAE12D1 (0)	END OF EXTENT
924	(39C)	BITSTRING	2	BPAEECD1	ECKD END CC OF EXTENT
926	(39E)	BITSTRING	2	BPAEEHD1	ECKD END HH OF EXTENT
LOCATE RECORD PARAMETER LIST FOR ECKD CHANNEL PROGRAM					
928	(3A0)	CHAR-ACTER	16	BPALRD1 (0)	LOCATE RECORD CCW PARAMETER
928	(3A0)	BITSTRING	1	BPAR0D1	OPERATION BYTE
		...1 .11.		BPAEROD1	"B'00010110'" OPERATION BYTE ECKD READ
		||++++++-------- READ OPERATION		
		++--------------- COUNT AREA ORIENTATION		
		1... .11.		BPAERRD1	"B'10000110'" OP BYTE ECKD READ REPLICATED
		||++++++-------- READ DATA OPERATION TO		
		|| CONTINUE ON SAME TRACK		
		++--------------- DATA AREA ORIENTATION		
		11		BPAEWFD1	"B'00000011'" OPERATION BYTE FORM. WRITE
		||++++++-------- FORMAT WRITE OPERATION		
		++--------------- COUNT AREA ORIENTATION		
		1		BPAEWUD1	"B'00000001'" OPERATION BYTE UPDATE WRITE
		||++++++-------- WRITE DATA OPERATION		
		++--------------- COUNT AREA ORIENTATION		
929	(3A1)	BITSTRING	1	BPAR1D1	AUXILIARY BYTE
		1...		BPATYD1	"B'10000000'" AUXILIARY BYTE
		+--------------- BYTE 14-15 CONTAIN A TLF		
930	(3A2)	BITSTRING	1	BPAR2D1	RESERVED - MUST BE ZERO
931	(3A3)	BITSTRING	1	BPAR3D1	COUNT OF CCWS IN THIS DOMAIN
932	(3A4)	BITSTRING	4	BPAR4D1 (0)	SEEK ADDRESS
932	(3A4)	BITSTRING	2	BPARSCD1	SEEK CC
934	(3A6)	BITSTRING	2	BPARSHD1	SEEK HH
936	(3A8)	BITSTRING	5	BPAR8D1 (0)	SEARCH ARGUMENT
936	(3A8)	BITSTRING	2	BPARACD1	SEARCH CC
938	(3AA)	BITSTRING	2	BPARAHD1	SEARCH HH
940	(3AC)	BITSTRING	1	BPARARD1	SEARCH R
941	(3AD)	BITSTRING	1	BPAESND1	ECKD SECTOR NUMBER
		1111 1111		BPANSPD1	"X'FF'" SEARCH SN- DEFAULT IS FF MEANS NO SECTOR POSITIONING
942	(3AE)	BITSTRING	2	BPATLFD1	TRANSFER LENGTH FIELD
END OF ECKD LOCATE RECORD PARAMETER LIST					
944	(3B0)	CHAR-ACTER	8	BPAECFD1	ECKD READ COUNT FIELD OR COUNT FIELD FOR ONE BLOCK WRITE OPERATIONS IN THE CASE OF BACKUP
952	(3B8)	CHAR-ACTER	1	BPANRCD1	FULL NUMBER OF READ CCWS

Offsets					
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
		POINTERS TO ASSOCIATED CCWS			
953	(3B9)	CHARACTER	16	BPACCWD1 (0)	POINTERS TO ASSOCIATED CCWS
956	(3BC)	ADDRESS	4	BPATICD1	ADDR(2ND TIC CCW IN CP)
956	(3BC)	ADDRESS	4	BPALRCD1	ADDR(LOCATE-RECORD CCW)
960	(3C0)	ADDRESS	4	BPALSTD1	ADDR(LAST CCW IN CP)
964	(3C4)	ADDRESS	4	BPASCPD1	ADDR(LAST CCW IN SHORT CP)
968	(3C8)	ADDRESS	4	BPAEBPD1	ADDR(END OF BOUNDARY CCW)
		AREA FOR CP CONSTRUCTION THIS AREA CONTAINS AFTER BACKUP FILE OPEN FOR DISK A SIMPLE CHANNEL PROGRAM FOR READING OR WRITING ONE BLOCK FROM OR TO DISK. THE FORM OF CP DEPENDS ON DISK DEVICE TYPE			
976	(3D0)	DBL WORD	8	BPACPA (0)	
976	(3D0)	CHARACTER	56		
1032	(408)	SIGNED	4	BPABOE (0)	
		VSE/VSAM BACKUP/RESTORE - IDCDFB29 - 5686-03704(C69) 5746-AM2(C69) COPYRIGHT IBM CORP 1991 LICENSED MATERIAL - PROGRAM PROPERTY OF IBM BEGIN OF EXTENT RECORD (BOE)			
1032	(408)	CHARACTER	30	BOE (0)	
1032	(408)	CHARACTER	4	BOEID	BOE-RECORD ID
1036	(40C)	BITSTRING	6	BOEFDATE	BACKUP FILE CREATION DATE
1042	(412)	BITSTRING	4	BOEFTOD	BACKUP FILE CREATION TIME OF DAY
1046	(416)	BITSTRING	2	BOEEXTSQ	EXTENT SEQ. NBR OF CURRENT EXTENT
1048	(418)	BITSTRING	4	BOEBEXT	BEGIN ADDRESS OF CURRENT EXTENT
1052	(41C)	BITSTRING	4	BOEEEXT	END ADDRESS OF CURRENT EXTENT
1056	(420)	BITSTRING	2	BOEDRNBR	NUMBER OF DIRECTORY BLOCKS
1058	(422)	BITSTRING	4		RESERVED
		...1 111.		BOELEN	"*-BOE" LENGTH OF BOE RECORD
1064	(428)	SIGNED	4	BPAEOE (0)	
		VSE/VSAM BACKUP/RESTORE - IDCDFB28 - 5686-03704(C69) 5746-AM2(C69) COPYRIGHT IBM CORP 1991 LICENSED MATERIAL - PROGRAM PROPERTY OF IBM END OF EXTENT RECORD (EOE)			
1064	(428)	CHARACTER	30	EOE (0)	
1064	(428)	CHARACTER	4	EOEID	EOE-RECORD ID
1068	(42C)	BITSTRING	6	EOEFDATE	BACKUP FILE CREATION DATE
1074	(432)	BITSTRING	4	EOEFTOD	BACKUP FILE CREATION TIME OF DAY
1078	(436)	BITSTRING	2	EOEEXTSQ	EXTENT SEQ. NBR OF NEXT EXTENT
1080	(438)	BITSTRING	6	EOEVOLSR	VOLSER OF NEXT EXTENT
1086	(43E)	BITSTRING	4	EOEBEXT	BEGIN ADDRESS OF NEXT EXTENT
1090	(442)	BITSTRING	4	EOEEEXT	END ADDRESS OF NEXT EXTENT
		...1 111.		EOELEN	"*-EOE" LENGTH OF EOE RECORD
		INDICATORS FOR BACKUP PROCESS			
1094	(446)	BITSTRING	1	BPAFLAG	FLAG BYTE
		1...		EXCFBA	"128" EXCEPTION INDICATOR (FBA DEVICE)
		.1..		EOEEXP	"64" END OF EXTENT EXPECTED
		..1.		EOOEXP	"32" END OF OBJECT EXPECTED
		...1		OBJPRC	"16" BIT = 1 - OBJECT IS IN PROCESS BIT = 0 - NO OBJECT IN PROCESS, PHYSICAL END OF OBJECT IS REACHED
		.... 1...		OBJLEND	"8" LOGICAL END OF OBJECT
		.... .1..		VOLCHG	"4" NEW EXTENT ON NEW VOLUME
		.... ..1.		OBJNWEX	"2" NEW OBJECT ON NEW EXTENT
1095	(447)	BITSTRING	1		RESERVED

Offsets					
Dec	Hex	Type	Len	Name (Dim)	Description

PARAMETERS FOR HANDLING A BACKUP FILE RESIDING ON A DISK
DEVICE OF CKD OR ECKD TYPE

Dec	Hex	Type	Len	Name (Dim)	Description
1096	(448)	SIGNED	2	BPADRNBR	NUMBER OF DIRECTORY BLOCKS
1100	(44C)	SIGNED	4	BPADIRBN	NEED OF BYTES FOR A DIREC- TORY OR OBJECT HEADER BLOCK
1104	(450)	SIGNED	4	BPADATBN	NEED OF BYTES FOR A DATA BLOCK BUILD FOR THE ACTUAL VSAM OBJECT
1108	(454)	SIGNED	4	BPADASBN	NEED OF BYTES FOR A SPECIAL DATA BLOCK WRITTEN OUT FROM A SPECIFIED AREA
1112	(458)	SIGNED	4	BPABOEBN	NEED OF BYTES FOR A BEGIN OF EXTENT (BOE) RECORD
1116	(45C)	SIGNED	4	BPAEOFBN	NEED OF BYTES FOR A EOF RECORD
1120	(460)	SIGNED	2	BPADIRTN	NUMBER OF TRACKS NEEDED BY DIRECTORY
1122	(462)	SIGNED	2	BPADIRLT	NUMBER OF DIRECTORY BLOCKS ON LAST DIRECTORY TRACK
1124	(464)	SIGNED	4	BPARESTC	RESIDUAL TRACK CAPACITY ON CURRENT TRACK
1128	(468)	SIGNED	4	BPARESTD	RESIDUAL TRACK CAPACITY ON CURRENT TRACK AFTER WRITING DIRECTORY
1132	(46C)	SIGNED	4	BPANBLTW	NUMBER OF DATA BLOCKS FITTING ON A WHOLE TRACK
1136	(470)	SIGNED	4	BPANBLTC	NUMBER OF DATA BLOCKS FITTING ON THE FREE PART OF CURRENT TRACK

EXTENT SPECIFIC INFORMATION

Dec	Hex	Type	Len	Name (Dim)	Description
1140	(474)	SIGNED	4	BPAESQNR	EXTENT SEQUENCE NUMBER OF EXTENT CURRENTLY OPENED (BACKUP)
1144	(478)	CHAR- ACTER	6	BPAVOLSR	VOLSER OF VOLUME WHERE CURRENT EXTENT IS LOCATED
1150	(47E)	CHAR- ACTER	4	BPAEXLLM	LOW LIMIT OF CURRENT EXTENT (CCHH FOR CKD/ECKD OR PHYS. BLOCK NUMBER FOR FBA)
1154	(482)	CHAR- ACTER	4	BPAEXHLM	HIGH LIMIT OF CURRENT EXTENT (CCHH FOR CKD/ECKD OR PHYS: BLOCK NUMBER FOR FBA)
1158	(486)	SIGNED	2	BPAEXCTR	COUNTER FOR EXTENTS OF CURRENT- LY PROCESSED VSAM OBJECT
1160	(488)	SIGNED	4	BPAAVSLT	CURRENTLY AVAILABLE SLOTS IN THE ACTUAL EXTENT OF AN FBA DISK

PARAMETERS FOR NEXT I/O OPERATION

Dec	Hex	Type	Len	Name (Dim)	Description
1166	(48E)	CHAR- ACTER	10	BPASEEK (0)	ACTUAL SEEK/SEARCH ADDR
1166	(48E)	BITSTRING	2	BPABB	BB PART OF SEEK ADDR
1168	(490)	CHAR- ACTER	5	BPASRCH (0)	SEARCH ADDR FOR NEXT WRITE
1168	(490)	BITSTRING	2	BPASCC	CYLINDER NUMBER
1170	(492)	BITSTRING	2	BPASHH	HEAD NUMBER
1172	(494)	BITSTRING	1	BPASR	RECORD NUMBER
1173	(495)	BITSTRING	3		RESERVED
1168	(490)	BITSTRING	4	BPALBNR	LOGICAL BLOCK NUMBER FOR NEXT BLOCK TO BE WRITTEN TO BE READ FROM FBA DEVICE
1172	(494)	BITSTRING	4	BPABFSLT	SLOTS ON AN FBA DEVICE REQUIRED FOR ONE DATA BUFFER
1176	(498)	CHAR- ACTER	8	BPACOUNT (0)	COUNT FIELD FOR NEXT RECORD TO BE READ (RESTORE) OR COUNT FIELD LAST WRITTEN (BACKUP)
1176	(498)	BITSTRING	2	BPACCC	CYLINDER NUMBER
1178	(49A)	BITSTRING	2	BPACHH	HEAD NUMBER
1180	(49C)	BITSTRING	1	BPACR	RECORD NUMBER
1181	(49D)	BITSTRING	1	BPACKLN	KEY LENGTH
1182	(49E)	BITSTRING	2	BPACDLN	DATA LENGTH
1182	(49E)			BPAPLBNR	"BPACOUNT" PREVIOUS LOGICAL BLOCK NUMBER (FBA)

PARAMETERS FOR COMPACTION/DECOMPACTION
THE FIRST TWO PARAMETERS ARE ALSO USED
FOR RESTORE FROM DISK

Dec	Hex	Type	Len	Name (Dim)	Description
1184	(4A0)	ADDRESS	4	BPACBDB	COMP. : BDB-ADDR OF CURRENT SOURCE BUFFER TO BE HANDLED DECOMP. OR RESTORE FROM DISK : BDB-ADDR FOR FIRST OR CURRENT DESTINATION BUFFER TO BE FILLED
1188	(4A4)	ADDRESS	4	BPALBDB	COMP. : BDB-ADDR FOR LAST SOURCE BUFFER TO BE HANDLED DECOMP. OR RESTORE FROM DISK : BDB-ADDR FOR LAST DESTINA- TION BUFFER TO BE FILLED
1192	(4A8)	ADDRESS	4	BPAAIOB	COMPR.: BDB-ADDR OF ACTUAL I/O OR DESTINATION BUFFER DECOMP.: BDB-ADDR OF ACTUAL I/O BUFFER
1196	(4AC)	ADDRESS	4	BPAAIO2	COMPR.: BDB-ADDR OF NEXT I/O OR DESTINATION BUFFER DECOMP.:BDB-ADDR OF CURRENT SOURCE BUFFER
1200	(4B0)	ADDRESS	4	BPACADR	COMPR.: ACTUAL DESTINATION ADDR DECOMP.: ACTUAL SOURCE ADDR
1204	(4B4)	ADDRESS	4	BPAEADR	COMPR.: END ADDR OF CURRENT DESTI- NATION BUFFER DECOMP.: END ADDR OF CURRENT SOURCE BUFFER
1208	(4B8)	BITSTRING	1	BPACFLG	COMPACTION/DECOMPACTION FLAG
		1...		BPADBOV	"128" DESTINATION BUFFER OVERFLOW (BACKUP)
		.1..		BPADBFUL	"64" DESTINATION BUFFER FULL (BACKUP)
		..1.		BPASBEMP	"32" ALL SOURCE BUFFERS EMPTY (BACKUP)
		...1		BPASRCEX	"16" SOURCE BUFFER EXHAUSTED (RESTORE)
		.... 1...		BPANODST	"8" NO MORE DESTINATION BUFFERS AVAI- LABLE (RESTORE)
		.... .1..		BPANORES	"4" NO RESIDUAL SECTION IN PRECEDING SOURCE BUFFER (RESTORE)
1209	(4B9)	BITSTRING	3		RESERVED
		...1 11..		BPACWLEN	"*-BPACBDB" LENGTH OF COMP/DECOMP WORK AREA
1212	(4BC)	ADDRESS	4	BPACDMOD	ADDR OF COMPACT/DECOMPACT MODULE
1216	(4C0)	ADDRESS	4	BPACDTAB	ADDR OF COMPACT/DECOMPACT TABLE

ADDRESS LIST PASSED TO COMPACTION/DECOMPACTION ROUTINE

Dec	Hex	Type	Len	Name (Dim)	Description
1220	(4C4)	CHAR- ACTER	24	BPAALST (0)	

ADDRESS LIST FOR COMPACTION ROUTINE

Dec	Hex	Type	Len	Name (Dim)	Description
1220	(4C4)	ADDRESS	4	BPACAENC	ADDR OF ADDR OF ENCODING TABLES
1224	(4C8)	ADDRESS	4	BPACALIN	ADDR OF FIELD WITH LENGTH OF INPUT STRING
1228	(4CC)	ADDRESS	4	BPACAIN	ADDR OF INPUT STRING
1232	(4D0)	ADDRESS	4	BPACALOU	ADDR OF FIELD FOR LENGTH OF OUTPUT STRING (RETURNED BY IDCBPDNC)
1236	(4D4)	ADDRESS	4	BPACAOUT	ADDR OF OUTPUT BUFFER
1240	(4D8)	ADDRESS	4	BPACARCD	ADDR OF RETURN CODE FIELD

ADDRESS LIST FOR DECOMPACTION ROUTINE

Dec	Hex	Type	Len	Name (Dim)	Description
1220	(4C4)	ADDRESS	4	BPADADEC	ADDR OF ADDR OF DECODING TABLES
1224	(4C8)	ADDRESS	4	BPADAIN	ADDR OF INPUT STRING
1228	(4CC)	ADDRESS	4	BPADALOU	ADDR OF FIELD FOR LENGTH OF OUTPUT STRING (RETURNED BY IDCRTDDC)
1232	(4D0)	ADDRESS	4	BPADAOUT	ADDR OF OUTPUT BUFFER
1236	(4D4)	ADDRESS	4	BPADALOB	ADDR OF FIELD WITH LENGTH OF OUTPUT BUFFER
1240	(4D8)	ADDRESS	4	BPADARCD	ADDR OF RETURN CODE FIELD

OPEN/CLOSE INTERFACES
OPEN/CLOSE INTERFACE FOR BACKUP

Dec	Hex	Type	Len	Name (Dim)	Description
1244	(4DC)	ADDRESS	4	BPADTFB	ADDRESS OF DTFPH FOR BACKUP

OPEN/CLOSE INTERFACE FOR RESTORE

Dec	Hex	Type	Len	Name (Dim)	Description
1252	(4E4)	ADDRESS	4	BPADTFR	ADDRESS OF DTFPH FOR RESTORE

WORK FIELDS FOR DIFFERENT PURPOSES

Dec	Hex	Type	Len	Name (Dim)	Description
1260	(4EC)	BITSTRING	4	BPAWORK1	WORK FIELD 1
1264	(4F0)	BITSTRING	4	BPAWORK2	WORK FIELD 2

Offsets					
Dec	Hex	Type	Len	Name (Dim)	Description

BPA EQUATES

| 1264 | (4F0) | | | BPALEN | "*-BPA" LENGTH OF BPA |

BRB WORK AREAS
THE BRB WORK AREAS ARE INTENDED FOR THE USE BY THE IN-
DIVIDUAL BACKUP AND RESTORE SUB-FUNCTIONS. THE CONTENTS
OF THE WORK AREAS IS VOLATILE AND CANNOT BE ASSUMED TO
BE THE SAME AFTER THE INVOCATION OF ANOTHER SUB-FUNCTION

1272	(4F8)	DBL WORD	8	BRBDWA (0)	DOUBLE WORD WORK AREA
1272	(4F8)	BITSTRING	6		FIRST SIX BYTES
1278	(4FE)	BITSTRING	2	BRBDWA1	LAST TWO BYTES
1280	(500)	BITSTRING	1	BRBWORKA (128)	BRB WORK AREA

SAVE AREA POOL FOR INVOKED
BACKUP/RESTORE/VSAMCOPY FUNCTIONS

| 1408 | (580) | SIGNED | 4 | BRBSAP (128) | SAVE AREA POOL |

VSE/VSAM BACKUP/RESTORE - IDCDFB06 - 5686-03704(C69)
5746-AM2(C69) COPYRIGHT IBM CORP 1991
LICENSED MATERIAL - PROGRAM PROPERTY OF IBM
DATA SET CONTROL HEADER (DSH/DSI)
THE DATA SET CONTROL HEADER IS PART OF THE BACKUP/
RESTORE BLOCK (BRB) AND CONTAINS THE DATA SET SPECIFIC
INFORMATION NECESSARY FOR THE BACKUP OR THE RESTOR-
ATION OF A DATA SET

| 1920 | (780) | SIGNED | 4 | DSH (0) | DATA SET CONTROL HEADER |

ARDB PLACE HOLDER SECTION
THIS SECTION OF THE DATA SET CONTROL HEADER CONTAINS
POINTERS TO DATA AND INDEX ARDBS WHICH DESCRIBE THE
CURRENT ADDRESS RANGE POSITION WITHIN A VSAM OBJECT
DURING RESTORATION OF THE OBJECT

1920	(780)	ADDRESS	4	DSHCARDB	CURR. DATA ARDB (REST. ONLY)
1924	(784)	ADDRESS	4	DSHNARDB	NEXT DATA ARDB (REST. ONLY)
1928	(788)	ADDRESS	4	DSHSARDB	SS ARDB FOR PREV. CA

INDEX WORK AREA FIELD INFORMATION

1932	(78C)	CHAR-ACTER	32	DSHXWFLD (0)	INDEX WORK AREA FIELD INFORM
1932	(78C)	ADDRESS	4	DSHXWKA	ADDRESS OF INDEX WORK AREA
1936	(790)	SIGNED	4	DSHXWAL	LENGTH OF INDEX WORK AREA
1940	(794)	ADDRESS	4	DSHKFP1	ADDRESS OF 1ST KEY FIELD
1944	(798)	SIGNED	4	DSHKFL1	USED LENGTH OF 1ST KEY FIELD
1948	(79C)	ADDRESS	4	DSHKFP2	ADDRESS OF 2ND KEY FIELD
1952	(7A0)	SIGNED	4	DSHKFL2	USED LENGTH OF 2ND KEY FIELD
1956	(7A4)	ADDRESS	4	DSHXIB1	ADDRESS OF 1ST XIB
1960	(7A8)	ADDRESS	4	DSHXIB2	ADDRESS OD 2ND LEVEL XIB

RPS TABLE SPACE CONTROL

1964	(7AC)	CHAR-ACTER	8	DSHRTSC (0)	RPS TABLE SPACE CONTROL
1964	(7AC)	ADDRESS	4	DSHRTP	POINTER TO RPS TABLE SPACE
1968	(7B0)	SIGNED	4	DSHRTL	LENGTH OF RPS TABLE SPACE

CURRENT DATA SET INFORMATION
THIS SECTION CONTAINS DESCRIPTIVE INFORMATION FOR
THE DATA SET TO BE BACKED UP OR RESTORED

| 1972 | (7B4) | CHAR-ACTER | 288 | DSHDSI (0) | DATA SET INFORMATIONM |

DATA SET STATUS FLAGS

1972	(7B4)	BITSTRING	1	DSHDSST	DATA SET STATUS FLAGS#
		1...		DSHOPEN	"B'10000000'" DATA-SET-OPEN INDICATOR
		.1..		DSHEOD	"B'01000000'" END-OF-DATA-SET INDICATOR

Offsets					
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
		..1.		DSHREMAP	"B'00100000'" REMAP-CHARACTERISTICS FLAG
		...1		DSHOWARN	"B'00010000'" WARNING DURING OPEN

GENERAL DATA SET ATTRIBUTES

1973	(7B5)	CHAR-ACTER	5	DSHDSATR (0)	GENERAL DATA SET ATTRIBUTES
1973	(7B5)	BITSTRING	1	DSHDSTYP	DATA SET TYPE
		1...		DSHKSDS	"B'10000000'" KEY-SEQUENCED DATA SET
		1... ...1		DSHKRDS	"B'10000001'" KEY-RANGE DATA SET
		.1..		DSHESDS	"B'01000000'" ENTRY-SEQUENCED DATA SET
		..1.		DSHRRDS	"B'00100000'" RELATIVE RECORD DATA SET
		...1		DSHSESDS	"B'00010000'" SAM ESDS
1974	(7B6)	BITSTRING	1	DSHDSXAT	GENERAL INDEX ATTRIBUTES
		1...		DSHSDT	"B'10000000'" SEQ. SET WITH DATA (IMBED)
1975	(7B7)	BITSTRING	1	DSHFLGS	FLAGS FOR GET VSAM DATA ROU- TINE
		1...		DSHGFRST	"B'10000000'" FIRST ENTRY TO GET VSAM DATA ROUTINE
		.1..		DSHBWAIT	"B'01000000'" WAIT FOR DATA BUFFER
1976	(7B8)	SIGNED	2	DSHKEYLN	KEY LENGTH

NUMBER OF INDEX LEVELS

1978	(7BA)	SIGNED	2	DSHNIL	NUMBER OF INDEX LEVELS

NUMBER OF INDEX RECORDS

1980	(7BC)	SIGNED	4	DSHNXR	NUMBER OF INDEX RECORDS

RBA FOR NEXT SEQUENCE SET CONTROL INTERVAL

1984	(7C0)	ADDRESS	4	DSHSSRBA	RBA FOR NEXT SEQ. SET CNV

DATA SET HIGH-USED RBA

1988	(7C4)	ADDRESS	4	DSHHURBA	DATA SET HIGH-USED RBA

DATA COMPONENT DEFINITION BLOCK
THE DATA COMPONENT DEFINITION BLOCK CONTAINS
DESCRIPTIVE AND REFERENCE INFORMATION THAT PERTAINS
TO THE DATA COMPONENT. THE INFORMATION INCLUDES
THE CHARACTERISTICS OF THE DATA COMPONENT, POINTERS
TO THE VSAM CONTROL BLOCKS RELEVANT FOR THE DATA
COMPONENT, AND PLACE INFORMATION DESCRIBING THE
CURRENT POSITION IN THE DATA COMPONENT
VSE/VSAM BACKUP/RESTORE - IDCDFB07 - 568606605 (35C)
568606605 (35C) COPYRIGHT IBM CORP 1980 1997
LICENSED MATERIAL - PROGRAM PROPERTY OF IBM

1992	(7C8)	SIGNED	4	DSHCDBDT (0)	COMPONENT DEFINITION BLOCK

TYPE OF COMPONENT DEFINITION BLOCK

1992	(7C8)	BITSTRING	1	DSHTYPDT	DATA COMPONENT DEFINITION BLOCK
		1...		DSHDCDB	"B'10000000'" NON-SAM-ESDS DATA CDB
		..1.		DSHXXL	"B'00100000'" XXL-KSDS DATA CDB
		1... ...1		DSHSDCDB	"B'10000001'" SAM-ESDS DATA CDB
1993	(7C9)	BITSTRING	3		NOT USED

COMPONENT CHARACTERISTICS
THIS SECTION OF THE COMPONENT DEFINITION BLOCK CONTAINS
LOGICAL AND PHYSICAL CHARACTERISTICS FOR THE COMPONENT
DESCRIBED BY THE COMPONENT DEFINITION BLOCK

1996	(7CC)	CHAR-ACTER	32	DSHCCSDT (0)	COMPONENT CHARACTERISTICS

DATA COMPONENT BUFFER CHARACTERISTICS
THIS SECTION CONTAINS THE CHARACTERISTICS OF THE DATA
COMPONENT WHICH INFLUENCE THE CHANNEL PROGRAM CONSTRUCT-
ION FOR THE DATA COMPONENT OF THE REPRESENTED OBJECT

1996	(7CC)	CHAR-ACTER	12	DSHDCCDT (0)	DATA COMPONENT CHARACTERISTICS

Offsets		Type	Len	Name (Dim)	Description
Dec	Hex				
1996	(7CC)	CHAR-ACTER	8	DSHBCCDT (0)	BASIC COMPONENT CHARACTERISTICS
1996	(7CC)	BITSTRING	1	DSHDVTDT	DEVICE TYPE IMFORMATION
		1...		DSHFBMDT	"B'10000000'" FBM DEVICE
		.1..		DSHCKDDT	"B'01000000'" CKD DEVICE
		..1.		DSHRPSDT	"B'00100000'" RPS DEVICE
		.... 1...		DSHECKDT	"B'00001000'" EXTENDED CKD DEVICE
1997	(7CD)	BITSTRING	1		NOT USED
1998	(7CE)	BITSTRING	2		NOT USED
2000	(7D0)	ADDRESS	4	DSHPBSDT	PHYSICAL BLOCK SIZE
2004	(7D4)	ADDRESS	4	DSHBPIDT	BLOCK OFFSET DUE TO IMBEDDED SS
2008	(7D8)	SIGNED	4	DSHRPFDT	REPLICATION FACTOR
2012	(7DC)	ADDRESS	4	DSHBCVDT	NUMBER OF BLOCKS PER CNV
2016	(7E0)	SIGNED	4	DSHCNVDT	CONTROL INTERVAL SIZE
2020	(7E4)	SIGNED	4	DSHCNADT	CONTROL AREA SIZE
2024	(7E8)	ADDRESS	4	DSHBCADT	NUMBER OF BLOCKS PER CNA

DEVICE GEOMETRY

Offsets		Type	Len	Name (Dim)	Description
2028	(7EC)	CHAR-ACTER	4	DSHDVGDT (0)	DEVICE GEOMETRY
2028	(7EC)	SIGNED	2	DSHBPTDT	NUMBER OF BLOCKS PER TRACK
2030	(7EE)	SIGNED	2	DSHTPCDT	NUMBER OF TRACKS PER CYLINDER

VSAM CONTROL BLOCK POINTERS
THIS SECTION CONTAINS THE POINTERS TO THE VSAM INTERNAL
CONTROL BLOCKS AND THE RPS TABLE RELEVANT FOR THE COM-
PONENT DESCRIBED BY THIS COMPONENT DEFINITION BLOCK

Offsets		Type	Len	Name (Dim)	Description
2032	(7F0)	CHAR-ACTER	24	DSHVCBDT (0)	VSAM CONTROL BLOCK POINTERS
2032	(7F0)	ADDRESS	4	DSHAMBDT	ADDRESS OF AMBL
2036	(7F4)	ADDRESS	4	DSHAMDDT	ADDRESS OF COMPONENT AMDSB
2040	(7F8)	ADDRESS	4	DSHARDDT	ADDRESS OF 1ST COMPONENT ARDB
2044	(7FC)	ADDRESS	4	DSHLPMDT	ADDRESS OF COMPONENT LPMB
2048	(800)	ADDRESS	4	DSHRPTDT	ADDRESS OF COMPONENT RPS TABLE
2052	(804)	ADDRESS	4	DSHEDBDT	ADDRESS OF 1ST COMPONENT EDB

COMPONENT PLACE HOLDER
THIS SECTION CONTAINS INFORMATION RELEVANT FOR THE
CURRENT POSITION IN THE COMPONENT REPRESENTED BY
THE COMPONENT DEFINITION BLOCK

Offsets		Type	Len	Name (Dim)	Description
2056	(808)	CHAR-ACTER	36	DSHCPHDT (0)	COMPONENT PLACE HOLDER
2056	(808)	ADDRESS	4	DSHCEBDT	CURRENT EDB
2060	(80C)	ADDRESS	4	DSHELRDT	CURRENT EXTENT LOW RBA
2064	(810)	ADDRESS	4	DSHEHRDT	CURRENT EXTENT HIGH RBA
2068	(814)	ADDRESS	4	DSHELBDT	CURRENT EXTENT LOW BBBB
2072	(818)	ADDRESS	4	DSHRBADT	CURRENT RBA
2076	(81C)	ADDRESS	4	DSHHRBDT	CURRENT HI-RBA
2080	(820)	ADDRESS	4	DSHHURDT	CURRENT ARDB HI-USED RBA
2084	(824)	CHAR-ACTER	2	DSHLUBDT (0)	CURRENT SYMBOLIC UNIT ADDRESS
2084	(824)	BITSTRING	1	DSHSUCDT	SYMBOLIC UNIT CLASS
		.... .1..		DSHIOBDT	"B'00000100'" IORB INDICATOR
2085	(825)	BITSTRING	1	DSHSUNDT	SYMBOLIC UNIT NUMBER

CURRENT DISK ADDRESS FIELD

Offsets		Type	Len	Name (Dim)	Description
2086	(826)	CHAR-ACTER	6	DSHDSKDT (0)	CURRENT DISK ADDRESS

FORMAT OF DISK ADDRESS FIELD FOR CKD DEVICES

Offsets		Type	Len	Name (Dim)	Description
2086	(826)	SIGNED	2	DSHCCDT	CYLINDER NUMBER FOR CKD DEVICES
2088	(828)	SIGNED	2	DSHHHDT	HEAD NUMBER FOR CKD DEVICES
2090	(82A)	CHAR-ACTER	2	DSHRXDT (0)	RECORD NUMBER PLUS KEY LENGTH
2090	(82A)	BITSTRING	1	DSHRDT	RECORD NUMBER

Dec	Hex	Type	Len	Name (Dim)	Description
2091	(82B)	BITSTRING	1	DSHKLDT	KEY LENGTH (MUST BE ZERO)

FORMAT OF DISK ADDRESS FIELD FOR FBM DEVICES

Dec	Hex	Type	Len	Name (Dim)	Description
2086	(826)	SIGNED	2	DSHBLDT	FBM BLOCK SIZE OR ZERO
2088	(828)	ADDRESS	4	DSHPBNDT	PHYSICAL BLOCK NUMBER

END OF COMPONENT DEFINITION BLOCK

Dec	Hex	Type	Len	Name (Dim)	Description
2092	(82C)	SIGNED	4	DSHENDDT (0)	END OF COMPONENT DEFINITION BLOCK

SEQUENCE SET COMPONENT DEFINITION BLOCK
THE SEQUENCE SET COMPONENT DEFINITION BLOCK CONTAINS
DESCRIPTIVE AND REFERENCE INFORMATION THAT PERTAINS
TO THE SEQUENCE SET OF THE DATA SET CURRENTLY BEING
PROCESSED. THE INFORMATION INCLUDES THE CHARACTERISTICS
OF THE SEQUENCE SET, POINTERS TO THE VSAM INTERNAL
CONTROL BLOCKS RELEVANT FOR THE SEQUENCE SET, AND
PLACE INFORMATION DESCRIBING THE CURRENT POSITION
IN THE SEQUENCE SET
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Dec	Hex	Type	Len	Name (Dim)	Description
2092	(82C)	SIGNED	4	DSHCDBSS (0)	COMPONENT DEFINITION BLOCK

TYPE OF COMPONENT DEFINITION BLOCK

Dec	Hex	Type	Len	Name (Dim)	Description
2092	(82C)	BITSTRING	1	DSHTYPSS	SEQUENCE SET CDB
2093	(82D)	BITSTRING	3		NOT USED

COMPONENT CHARACTERISTICS
THIS SECTION OF THE COMPONENT DEFINITION BLOCK CONTAINS
LOGICAL AND PHYSICAL CHARACTERISTICS FOR THE COMPONENT
DESCRIBED BY THE COMPONENT DEFINITION BLOCK

Dec	Hex	Type	Len	Name (Dim)	Description
2096	(830)	CHAR-ACTER	32	DSHCCSSS (0)	COMPONENT CHARACTERISTICS

INDEX COMPONENT BUFFER CHARACTERISTICS
THIS SECTION CONTAINS THE INDEX COMPONENT CHARACTERISTICS
WHICH INFLUENCE THE CHANNEL PROGRAM CONSTRUCTION FOR THE
INDEX COMPONENT REPRESENTED BY THE COMPONENT DEFINIT-
ION BLOCK

Dec	Hex	Type	Len	Name (Dim)	Description
2096	(830)	CHAR-ACTER	20	DSHXCCSS (0)	INDEX COMPONENT CHARACTERISTICS
2096	(830)	CHAR-ACTER	8	DSHBCCSS (0)	BASIC COMPONENT CHARACTERISTICS
2096	(830)	BITSTRING	1	DSHDVTSS	DEVICE TYPE IMFORMATION
		1...		DSHFBMSS	"B'10000000'" FBM DEVICE
		.1..		DSHCKDSS	"B'01000000'" CKD DEVICE
		..1.		DSHRPSSS	"B'00100000'" RPS DEVICE
		.... 1...		DSHECKSS	"B'00001000'" EXTENDED CKD DEVICE
2097	(831)	BITSTRING	1	DSHXOPSS	INDEX OPTIONS
		1...		DSHREPSS	"B'10000000'" INDEX RECORDS REPLICATED
2098	(832)	BITSTRING	2		NOT USED
2100	(834)	ADDRESS	4	DSHPBSSS	PHYSICAL BLOCK SIZE
2104	(838)	SIGNED	4		MUST BE ZERO
2108	(83C)	SIGNED	4	DSHRPFSS	REPLICATION FACTOR
2112	(840)	ADDRESS	4	DSHBCVSS	NUMBER OF BLOCKS PER CNV
2116	(844)	SIGNED	4	DSHCNVSS	CONTROL INTERVAL SIZE
2120	(848)	SIGNED	4	DSHCNASS	CONTROL AREA SIZE
2124	(84C)	ADDRESS	4	DSHBCASS	NUMBER OF BLOCKS PER CNA

DEVICE GEOMETRY

Dec	Hex	Type	Len	Name (Dim)	Description
2128	(850)	CHAR-ACTER	4	DSHDVGSS (0)	DEVICE GEOMETRY
2128	(850)	SIGNED	2	DSHBPTSS	NUMBER OF BLOCKS PER TRACK

Dec	Hex	Type	Len	Name (Dim)	Description
2130	(852)	SIGNED	2	DSHTPCSS	NUMBER OF TRACKS PER CYLINDER

VSAM CONTROL BLOCK POINTERS
THIS SECTION CONTAINS THE POINTERS TO THE VSAM INTERNAL
CONTROL BLOCKS AND THE RPS TABLE RELEVANT FOR THE COM-
PONENT DESCRIBED BY THIS COMPONENT DEFINITION BLOCK

Dec	Hex	Type	Len	Name (Dim)	Description
2132	(854)	CHAR-ACTER	24	DSHVCBSS (0)	VSAM CONTROL BLOCK POINTERS
2132	(854)	ADDRESS	4	DSHAMBSS	ADDRESS OF AMBL
2136	(858)	ADDRESS	4	DSHAMDSS	ADDRESS OF COMPONENT AMDSB
2140	(85C)	ADDRESS	4	DSHARDSS	ADDRESS OF 1ST COMPONENT ARDB
2144	(860)	ADDRESS	4	DSHLPMSS	ADDRESS OF COMPONENT LPMB
2148	(864)	ADDRESS	4	DSHRPTSS	ADDRESS OF COMPONENT RPS TABLE
2152	(868)	ADDRESS	4	DSHEDBSS	ADDRESS OF 1ST COMPONENT EDB

COMPONENT PLACE HOLDER
THIS SECTION CONTAINS INFORMATION RELEVANT FOR THE
CURRENT POSITION IN THE COMPONENT REPRESENTED BY
THE COMPONENT DEFINITION BLOCK

Dec	Hex	Type	Len	Name (Dim)	Description
2156	(86C)	CHAR-ACTER	36	DSHCPHSS (0)	COMPONENT PLACE HOLDER
2156	(86C)	ADDRESS	4	DSHCEBSS	CURRENT EDB
2160	(870)	ADDRESS	4	DSHELRSS	CURRENT EXTENT LOW RBA
2164	(874)	ADDRESS	4	DSHEHRSS	CURRENT EXTENT HIGH RBA
2168	(878)	ADDRESS	4	DSHELBSS	CURRENT EXTENT LOW BBBB
2172	(87C)	ADDRESS	4	DSHRBASS	CURRENT RBA
2176	(880)	ADDRESS	4	DSHHRBSS	CURRENT HI-RBA
2180	(884)	ADDRESS	4	DSHHURSS	CURRENT ARDB HI-USED RBA
2184	(888)	CHAR-ACTER	2	DSHLUBSS (0)	CURRENT SYMBOLIC UNIT ADDRESS
2184	(888)	BITSTRING	1	DSHSUCSS	SYMBOLIC UNIT CLASS
		.... .1..		DSHIOBSS	"B'00000100'" IORB INDICATOR
2185	(889)	BITSTRING	1	DSHSUNSS	SYMBOLIC UNIT NUMBER

CURRENT DISK ADDRESS FIELD

Dec	Hex	Type	Len	Name (Dim)	Description
2186	(88A)	CHAR-ACTER	6	DSHDSKSS (0)	CURRENT DISK ADDRESS

FORMAT OF DISK ADDRESS FIELD FOR CKD DEVICES

Dec	Hex	Type	Len	Name (Dim)	Description
2186	(88A)	SIGNED	2	DSHCCSS	CYLINDER NUMBER FOR CKD DEVICES
2188	(88C)	SIGNED	2	DSHHHSS	HEAD NUMBER FOR CKD DEVICES
2190	(88E)	CHAR-ACTER	2	DSHRXSS (0)	RECORD NUMBER PLUS KEY LENGTH
2190	(88E)	BITSTRING	1	DSHRSS	RECORD NUMBER
2191	(88F)	BITSTRING	1	DSHKLSS	KEY LENGTH (MUST BE ZERO)

FORMAT OF DISK ADDRESS FIELD FOR FBM DEVICES

Dec	Hex	Type	Len	Name (Dim)	Description
2186	(88A)	SIGNED	2	DSHBLSS	FBM BLOCK SIZE OR ZERO
2188	(88C)	ADDRESS	4	DSHPBNSS	PHYSICAL BLOCK NUMBER

END OF COMPONENT DEFINITION BLOCK

Dec	Hex	Type	Len	Name (Dim)	Description
2192	(890)	SIGNED	4	DSHENDSS (0)	END OF COMPONENT DEFINITION BLOCK

HIGH-LEVEL INDEX COMPONENT DEFINITION BLOCK
THE HIGH-LEVEL INDEX COMPONENT DEFINITION BLOCK CONTAINS
DESCRIPTIVE AND REFERENCE INFORMATION THAT PERTAINS TO
THE HIGH-LEVEL INDEX OF THE DATA SET CURRENTLY BEING
PROCESSED. THE INFORMATION INCLUDES THE CHARACTERISTICS
OF THE HIGH-LEVEL INDEX, POINTERS TO THE VSAM INTERNAL
CONTROL BLOCKS RELEVANT FOR THE HIGH-LEVEL INDEX, AND
PLACE INFORMATION DESCRIBING THE CURRENT POSITION IN
THE HIGH-LEVEL INDEX
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Dec	Hex	Type	Len	Name (Dim)	Description
2192	(890)	SIGNED	4	DSHCDBHX (0)	COMPONENT DEFINITION BLOCK

TYPE OF COMPONENT DEFINITION BLOCK

Dec	Hex	Type	Len	Name (Dim)	Description
2192	(890)	BITSTRING	1	DSHTYPHX	HIGH-LEVEL INDEX CDB
2193	(891)	BITSTRING	3		NOT USED

COMPONENT CHARACTERISTICS
THIS SECTION OF THE COMPONENT DEFINITION BLOCK CONTAINS
LOGICAL AND PHYSICAL CHARACTERISTICS FOR THE COMPONENT
DESCRIBED BY THE COMPONENT DEFINITION BLOCK

Dec	Hex	Type	Len	Name (Dim)	Description
2196	(894)	CHAR-ACTER	32	DSHCCSHX (0)	COMPONENT CHARACTERISTICS

INDEX COMPONENT BUFFER CHARACTERISTICS
THIS SECTION CONTAINS THE INDEX COMPONENT CHARACTERISTICS
WHICH INFLUENCE THE CHANNEL PROGRAM CONSTRUCTION FOR THE
INDEX COMPONENT REPRESENTED BY THE COMPONENT DEFINIT-
ION BLOCK

Dec	Hex	Type	Len	Name (Dim)	Description
2196	(894)	CHAR-ACTER	20	DSHXCCHX (0)	INDEX COMPONENT CHARACTERISTICS
2196	(894)	CHAR-ACTER	8	DSHBCCHX (0)	BASIC COMPONENT CHARACTERISTICS
2196	(894)	BITSTRING	1	DSHDVTHX	DEVICE TYPE IMFORMATION
		1...		DSHFBMHX	"B'10000000'" FBM DEVICE
		.1..		DSHCKDHX	"B'01000000'" CKD DEVICE
		..1.		DSHRPSHX	"B'00100000'" RPS DEVICE
		.... 1...		DSHECKHX	"B'00001000'" EXTENDED CKD DEVICE
2197	(895)	BITSTRING	1	DSHXOPHX	INDEX OPTIONS
		1...		DSHREPHX	"B'10000000'" INDEX RECORDS REPLICATED
2198	(896)	BITSTRING	2		NOT USED
2200	(898)	ADDRESS	4	DSHPBSHX	PHYSICAL BLOCK SIZE
2204	(89C)	SIGNED	4		MUST BE ZERO
2208	(8A0)	SIGNED	4	DSHRPFHX	REPLICATION FACTOR
2212	(8A4)	ADDRESS	4	DSHBCVHX	NUMBER OF BLOCKS PER CNV
2216	(8A8)	SIGNED	4	DSHCNVHX	CONTROL INTERVAL SIZE
2220	(8AC)	SIGNED	4	DSHCNAHX	CONTROL AREA SIZE
2224	(8B0)	ADDRESS	4	DSHBCAHX	NUMBER OF BLOCKS PER CNA

DEVICE GEOMETRY

Dec	Hex	Type	Len	Name (Dim)	Description
2228	(8B4)	CHAR-ACTER	4	DSHDVGHX (0)	DEVICE GEOMETRY
2228	(8B4)	SIGNED	2	DSHBPTHX	NUMBER OF BLOCKS PER TRACK
2230	(8B6)	SIGNED	2	DSHTPCHX	NUMBER OF TRACKS PER CYLINDER

VSAM CONTROL BLOCK POINTERS
THIS SECTION CONTAINS THE POINTERS TO THE VSAM INTERNAL
CONTROL BLOCKS AND THE RPS TABLE RELEVANT FOR THE COM-
PONENT DESCRIBED BY THIS COMPONENT DEFINITION BLOCK

Dec	Hex	Type	Len	Name (Dim)	Description
2232	(8B8)	CHAR-ACTER	24	DSHVCBHX (0)	VSAM CONTROL BLOCK POINTERS
2232	(8B8)	ADDRESS	4	DSHAMBHX	ADDRESS OF AMBL

Dec	Hex	Type	Len	Name (Dim)	Description
2236	(8BC)	ADDRESS	4	DSHAMDHX	ADDRESS OF COMPONENT AMDSB
2240	(8C0)	ADDRESS	4	DSHARDHX	ADDRESS OF 1ST COMPONENT ARDB
2244	(8C4)	ADDRESS	4	DSHLPMHX	ADDRESS OF COMPONENT LPMB
2248	(8C8)	ADDRESS	4	DSHRPTHX	ADDRESS OF COMPONENT RPS TABLE
2252	(8CC)	ADDRESS	4	DSHEDBHX	ADDRESS OF 1ST COMPONENT EDB

COMPONENT PLACE HOLDER
THIS SECTION CONTAINS INFORMATION RELEVANT FOR THE
CURRENT POSITION IN THE COMPONENT REPRESENTED BY
THE COMPONENT DEFINITION BLOCK

Dec	Hex	Type	Len	Name (Dim)	Description
2256	(8D0)	CHAR-ACTER	36	DSHCPHHX (0)	COMPONENT PLACE HOLDER
2256	(8D0)	ADDRESS	4	DSHCEBHX	CURRENT EDB
2260	(8D4)	ADDRESS	4	DSHELRHX	CURRENT EXTENT LOW RBA
2264	(8D8)	ADDRESS	4	DSHEHRHX	CURRENT EXTENT HIGH RBA
2268	(8DC)	ADDRESS	4	DSHELBHX	CURRENT EXTENT LOW BBBB
2272	(8E0)	ADDRESS	4	DSHRBAHX	CURRENT RBA
2276	(8E4)	ADDRESS	4	DSHHRBHX	CURRENT HI-RBA
2280	(8E8)	ADDRESS	4	DSHHURHX	CURRENT ARDB HI-USED RBA
2284	(8EC)	CHAR-ACTER	2	DSHLUBHX (0)	CURRENT SYMBOLIC UNIT ADDRESS
2284	(8EC)	BITSTRING	1	DSHSUCHX	SYMBOLIC UNIT CLASS
		.... .1..		DSHIOBHX	"B'00000100'" IORB INDICATOR
2285	(8ED)	BITSTRING	1	DSHSUNHX	SYMBOLIC UNIT NUMBER

CURRENT DISK ADDRESS FIELD

Dec	Hex	Type	Len	Name (Dim)	Description
2286	(8EE)	CHAR-ACTER	6	DSHDSKHX (0)	CURRENT DISK ADDRESS

FORMAT OF DISK ADDRESS FIELD FOR CKD DEVICES

Dec	Hex	Type	Len	Name (Dim)	Description
2286	(8EE)	SIGNED	2	DSHCCHX	CYLINDER NUMBER FOR CKD DEVICES
2288	(8F0)	SIGNED	2	DSHHHHX	HEAD NUMBER FOR CKD DEVICES
2290	(8F2)	CHAR-ACTER	2	DSHRXHX (0)	RECORD NUMBER PLUS KEY LENGTH
2290	(8F2)	BITSTRING	1	DSHRHX	RECORD NUMBER
2291	(8F3)	BITSTRING	1	DSHKLHX	KEY LENGTH (MUST BE ZERO)

FORMAT OF DISK ADDRESS FIELD FOR FBM DEVICES

Dec	Hex	Type	Len	Name (Dim)	Description
2286	(8EE)	SIGNED	2	DSHBLHX	FBM BLOCK SIZE OR ZERO
2288	(8F0)	ADDRESS	4	DSHPBNHX	PHYSICAL BLOCK NUMBER

END OF COMPONENT DEFINITION BLOCK

Dec	Hex	Type	Len	Name (Dim)	Description
2292	(8F4)	SIGNED	4	DSHENDHX (0)	END OF COMPONENT DEFINITION BLOCK

EQUATES

Dec	Hex	Type	Len	Name (Dim)	Description
2292	(8F4)			DSHLEN	"*-DSH" LENGTH OF DSH

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VSAM DATA SET WORK AREA (VDW/VDI)
THE VSAM DATA SET WORK AREA (VDW) IS USED AS REPOSIT-
ORY FOR THE VSAM CONTROL BLOCKS AND THE RELATED FIELDS
THAT ARE NECESSARY TO OPEN OR CLOSE A VSAM DATA SET.
IT ALSO CONTAINS THE OPEN/CLOSE INVOCATION INTERFACE

Dec	Hex	Type	Len	Name (Dim)	Description
2292	(8F4)	SIGNED	4	VDW (0)	VSAM DATA SET WORK AREA(VDW)

VSAM OPEN/CLOSE INVOCATION INTERFACE

Dec	Hex	Type	Len	Name (Dim)	Description
2292	(8F4)	ADDRESS	4	VDWPACB	ADDRESS OF VSAM DATA SET ACB

VSAM DATA SET ACB
VSAM - ACB - 5686-03702(CF7) - VERSION 2 RELEASE 1.0
VSAM - IKQACB1 - 5686-037(C66) VERSION 2 RELEASE 1.0
VSAM - IKQACBG - 5686-037(C66) - VERSION 2 RELEASE 1.0

Dec	Hex	Type	Len	Name (Dim)	Description
2300	(8FC)	SIGNED	4	VDWACB (0)	

Dec	Hex	Type	Len	Name (Dim)	Description
2300	(8FC)	BITSTRING	1		. ACBID
2301	(8FD)	BITSTRING	1		. ACB SUBTYPE FIELD
2302	(8FE)	ADDRESS	2		. ACB LENGTH
2304	(900)	ADDRESS	4		. ACBAMBL POINTER
2308	(904)	ADDRESS	4		. VSAM REC.MGT. MODULE ADDRESS
2312	(908)	BITSTRING	1		. TEST & SET BYTE
2313	(909)	BITSTRING	1		. CRA FLAG-BYTE
2314	(90A)	ADDRESS	2		. NUMBER OF DATA BUFFERS
2316	(90C)	ADDRESS	2		. NUMBER OF INDEX BUFFERS
2318	(90E)	BITSTRING	1		. MACRF(1) BYTE
2319	(90F)	BITSTRING	1		. MACRF(2) BYTE
2320	(910)	ADDRESS	1		. AM/0 DOS DTF ID
2321	(911)	BITSTRING	1		. OPEN / CLOSE FLAGS
2322	(912)	ADDRESS	1		. NUMBER OF STRINGS
2323	(913)	ADDRESS	1		. ERROR FLAGS
2324	(914)	ADDRESS	4		. BUFFER SPACE
2328	(918)	CHAR-ACTER	8		. DDNAME
2336	(920)	ADDRESS	4		. POINTER TO PASSWORD
2340	(924)	ADDRESS	4		. PTR TO USER WORK AREA
2344	(928)	ADDRESS	4		. BUFFER ADDRESS
2348	(92C)	ADDRESS	4		. EXIT LIST POINTER
2352	(930)	ADDRESS	4		. PTR TO BAM PARM LIST
2356	(934)	ADDRESS	1		. DSN STRING NUMBER
2357	(935)	BITSTRING	1		. MORE O/C FLAGS
2358	(936)	ADDRESS	2		. MESSAGE AREA LENGTH
2360	(938)	ADDRESS	4		.
2364	(93C)	ADDRESS	4		. PTR TO 44 CHAR NAME
2368	(940)	BITSTRING	1		. MACRF(3) BYTE
2369	(941)	BITSTRING	1		. MACRF(4) BYTE(NOT USED)
2370	(942)	ADDRESS	1		SHRPOOL DEFAULT VALUE
2371	(943)	BITSTRING	1		. RESERVED 1 BYTE
2372	(944)	SIGNED	4		. RESERVED WORD

PASSWORD/DATA SET NAME/CATALOG NAME COMBINATION

Dec	Hex	Type	Len	Name (Dim)	Description
2376	(948)	CHAR-ACTER	97	VDWPDS (0)	PASSWORD/DSNAME COMBINATION
2376	(948)	CHAR-ACTER	9	VDWPWD (0)	PASSWORD STRUCTURE
2376	(948)	BITSTRING	1	VDWPWLN	LENGTH OF PASSWORD
2377	(949)	CHAR-ACTER	8	VDWPWVAL	PASSWORD
2385	(951)	CHAR-ACTER	44	VDWDSN	DATA SET NAME
2429	(97D)	CHAR-ACTER	44	VDWCDSN	CATALOG DATA SET NAME
2473	(9A9)	CHAR-ACTER	1		END INDICATOR (MUST BE BLANK)
2474	(9AA)	BITSTRING	2		NOT USED
2480	(9B0)	DBL WORD	8	(0)	
2480	(9B0)	BITSTRING	256	VDWCCBL	CCBL FOR COMPRESSION CONTROL

EQUATES

Dec	Hex	Type	Len	Name (Dim)	Description
2480	(9B0)			VDWLEN	"*-VDW" LENGTH OF VSAM DATA SET WA

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DATA SET CONTROL HEADER (DSH/DSI)
THE DATA SET CONTROL HEADER IS PART OF THE BACKUP/
RESTORE BLOCK (BRB) AND CONTAINS THE DATA SET SPECIFIC
INFORMATION NECESSARY FOR THE BACKUP OR THE RESTOR-
ATION OF A DATA SET

Dec	Hex	Type	Len	Name (Dim)	Description
2736	(AB0)	SIGNED	4	DSI (0)	DATA SET CONTROL HEADER

Dec	Hex	Type	Len	Name (Dim)	Description

ARDB PLACE HOLDER SECTION
THIS SECTION OF THE DATA SET CONTROL HEADER CONTAINS
POINTERS TO DATA AND INDEX ARDBS WHICH DESCRIBE THE
CURRENT ADDRESS RANGE POSITION WITHIN A VSAM OBJECT
DURING RESTORATION OF THE OBJECT

Dec	Hex	Type	Len	Name (Dim)	Description
2736	(AB0)	ADDRESS	4	DSICARDB	CURR. DATA ARDB (REST. ONLY)
2740	(AB4)	ADDRESS	4	DSINARDB	NEXT DATA ARDB (REST. ONLY)
2744	(AB8)	ADDRESS	4	DSISARDB	SS ARDB FOR PREV. CA

INDEX WORK AREA FIELD INFORMATION

Dec	Hex	Type	Len	Name (Dim)	Description
2748	(ABC)	CHAR-ACTER	32	DSIXWFLD (0)	INDEX WORK AREA FIELD INFORM
2748	(ABC)	ADDRESS	4	DSIXWKA	ADDRESS OF INDEX WORK AREA
2752	(AC0)	SIGNED	4	DSIXWAL	LENGTH OF INDEX WORK AREA
2756	(AC4)	ADDRESS	4	DSIKFP1	ADDRESS OF 1ST KEY FIELD
2760	(AC8)	SIGNED	4	DSIKFL1	USED LENGTH OF 1ST KEY FIELD
2764	(ACC)	ADDRESS	4	DSIKFP2	ADDRESS OF 2ND KEY FIELD
2768	(AD0)	SIGNED	4	DSIKFL2	USED LENGTH OF 2ND KEY FIELD
2772	(AD4)	ADDRESS	4	DSIXIB1	ADDRESS OF 1ST XIB
2776	(AD8)	ADDRESS	4	DSIXIB2	ADDRESS OD 2ND LEVEL XIB

RPS TABLE SPACE CONTROL

Dec	Hex	Type	Len	Name (Dim)	Description
2780	(ADC)	CHAR-ACTER	8	DSIRTSC (0)	RPS TABLE SPACE CONTROL
2780	(ADC)	ADDRESS	4	DSIRTP	POINTER TO RPS TABLE SPACE
2784	(AE0)	SIGNED	4	DSIRTL	LENGTH OF RPS TABLE SPACE

CURRENT DATA SET INFORMATION
THIS SECTION CONTAINS DESCRIPTIVE INFORMATION FOR
THE DATA SET TO BE BACKED UP OR RESTORED

Dec	Hex	Type	Len	Name (Dim)	Description
2788	(AE4)	CHAR-ACTER	288	DSIDSI (0)	DATA SET INFORMATIONM

DATA SET STATUS FLAGS

Dec	Hex	Type	Len	Name (Dim)	Description
2788	(AE4)	BITSTRING	1	DSIDSST	DATA SET STATUS FLAGS#
		1...		DSIOPEN	"B'10000000'" DATA-SET-OPEN INDICATOR
		.1..		DSIEOD	"B'01000000'" END-OF-DATA-SET INDICATOR
		..1.		DSIREMAP	"B'00100000'" REMAP-CHARACTERISTICS FLAG
		...1		DSIOWARN	"B'00010000'" WARNING DURING OPEN

GENERAL DATA SET ATTRIBUTES

Dec	Hex	Type	Len	Name (Dim)	Description
2789	(AE5)	CHAR-ACTER	5	DSIDSATR (0)	GENERAL DATA SET ATTRIBUTES
2789	(AE5)	BITSTRING	1	DSIDSTYP	DATA SET TYPE
		1...		DSIKSDS	"B'10000000'" KEY-SEQUENCED DATA SET
		1... ...1		DSIKRDS	"B'10000001'" KEY-RANGE DATA SET
		.1..		DSIESDS	"B'01000000'" ENTRY-SEQUENCED DATA SET
		..1.		DSIRRDS	"B'00100000'" RELATIVE RECORD DATA SET
		...1		DSISESDS	"B'00010000'" SAM ESDS
2790	(AE6)	BITSTRING	1	DSIDSXAT	GENERAL INDEX ATTRIBUTES
		1...		DSISDT	"B'10000000'" SEQ. SET WITH DATA (IMBED)
2791	(AE7)	BITSTRING	1	DSIFLGS	FLAGS FOR GET VSAM DATA ROU- TINE
		1...		DSIGFRST	"B'10000000'" FIRST ENTRY TO GET VSAM DATA ROUTINE
		.1..		DSIBWAIT	"B'01000000'" WAIT FOR DATA BUFFER
2792	(AE8)	SIGNED	2	DSIKEYLN	KEY LENGTH

NUMBER OF INDEX LEVELS

Dec	Hex	Type	Len	Name (Dim)	Description
2794	(AEA)	SIGNED	2	DSINIL	NUMBER OF INDEX LEVELS

NUMBER OF INDEX RECORDS

Dec	Hex	Type	Len	Name (Dim)	Description
2796	(AEC)	SIGNED	4	DSINXR	NUMBER OF INDEX RECORDS

RBA FOR NEXT SEQUENCE SET CONTROL INTERVAL

Dec	Hex	Type	Len	Name (Dim)	Description
2800	(AF0)	ADDRESS	4	DSISSRBA	RBA FOR NEXT SEQ. SET CNV

	Offsets				
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
		DATA SET HIGH-USED RBA			
2804	(AF4)	ADDRESS	4	DSIHURBA	DATA SET HIGH-USED RBA
		DATA COMPONENT DEFINITION BLOCK			
		THE DATA COMPONENT DEFINITION BLOCK CONTAINS			
		DESCRIPTIVE AND REFERENCE INFORMATION THAT PERTAINS			
		TO THE DATA COMPONENT. THE INFORMATION INCLUDES			
		THE CHARACTERISTICS OF THE DATA COMPONENT, POINTERS			
		TO THE VSAM CONTROL BLOCKS RELEVANT FOR THE DATA			
		COMPONENT, AND PLACE INFORMATION DESCRIBING THE			
		CURRENT POSITION IN THE DATA COMPONENT			
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		LICENSED MATERIAL - PROGRAM PROPERTY OF IBM			
2808	(AF8)	SIGNED	4	DSICDBDT (0)	COMPONENT DEFINITION BLOCK
		TYPE OF COMPONENT DEFINITION BLOCK			
2808	(AF8)	BITSTRING	1	DSITYPDT	DATA COMPONENT DEFINITION BLOCK
		1...		DSIDCDB	"B'10000000'" NON-SAM-ESDS DATA CDB
		..1.		DSIXXL	"B'00100000'" XXL-KSDS DATA CDB
		1... ...1		DSISDCDB	"B'10000001'" SAM-ESDS DATA CDB
2809	(AF9)	BITSTRING	3		NOT USED
		COMPONENT CHARACTERISTICS			
		THIS SECTION OF THE COMPONENT DEFINITION BLOCK CONTAINS			
		LOGICAL AND PHYSICAL CHARACTERISTICS FOR THE COMPONENT			
		DESCRIBED BY THE COMPONENT DEFINITION BLOCK			
2812	(AFC)	CHAR-ACTER	32	DSICCSDT (0)	COMPONENT CHARACTERISTICS
		DATA COMPONENT BUFFER CHARACTERISTICS			
		THIS SECTION CONTAINS THE CHARACTERISTICS OF THE DATA			
		COMPONENT WHICH INFLUENCE THE CHANNEL PROGRAM CONSTRUCT-			
		ION FOR THE DATA COMPONENT OF THE REPRESENTED OBJECT			
2812	(AFC)	CHAR-ACTER	12	DSIDCCDT (0)	DATA COMPONENT CHARACTERISTICS
2812	(AFC)	CHAR-ACTER	8	DSIBCCDT (0)	BASIC COMPONENT CHARACTERISTICS
2812	(AFC)	BITSTRING	1	DSIDVTDT	DEVICE TYPE IMFORMATION
		1...		DSIFBMDT	"B'10000000'" FBM DEVICE
		.1..		DSICKDDT	"B'01000000'" CKD DEVICE
		..1.		DSIRPSDT	"B'00100000'" RPS DEVICE
		.... 1...		DSIECKDT	"B'00001000'" EXTENDED CKD DEVICE
2813	(AFD)	BITSTRING	1		NOT USED
2814	(AFE)	BITSTRING	2		NOT USED
2816	(B00)	ADDRESS	4	DSIPBSDT	PHYSICAL BLOCK SIZE
2820	(B04)	ADDRESS	4	DSIBPIDT	BLOCK OFFSET DUE TO IMBEDDED SS
2824	(B08)	SIGNED	4	DSIRPFDT	REPLICATION FACTOR
2828	(B0C)	ADDRESS	4	DSIBCVDT	NUMBER OF BLOCKS PER CNV
2832	(B10)	SIGNED	4	DSICNVDT	CONTROL INTERVAL SIZE
2836	(B14)	SIGNED	4	DSICNADT	CONTROL AREA SIZE
2840	(B18)	ADDRESS	4	DSIBCADT	NUMBER OF BLOCKS PER CNA
		DEVICE GEOMETRY			
2844	(B1C)	CHAR-ACTER	4	DSIDVGDT (0)	DEVICE GEOMETRY
2844	(B1C)	SIGNED	2	DSIBPTDT	NUMBER OF BLOCKS PER TRACK
2846	(B1E)	SIGNED	2	DSITPCDT	NUMBER OF TRACKS PER CYLINDER
		VSAM CONTROL BLOCK POINTERS			
		THIS SECTION CONTAINS THE POINTERS TO THE VSAM INTERNAL			
		CONTROL BLOCKS AND THE RPS TABLE RELEVANT FOR THE COM-			
		PONENT DESCRIBED BY THIS COMPONENT DEFINITION BLOCK			

Dec	Hex	Type	Len	Name (Dim)	Description
2848	(B20)	CHAR-ACTER	24	DSIVCBDT (0)	VSAM CONTROL BLOCK POINTERS
2848	(B20)	ADDRESS	4	DSIAMBDT	ADDRESS OF AMBL
2852	(B24)	ADDRESS	4	DSIAMDDT	ADDRESS OF COMPONENT AMDSB
2856	(B28)	ADDRESS	4	DSIARDDT	ADDRESS OF 1ST COMPONENT ARDB
2860	(B2C)	ADDRESS	4	DSILPMDT	ADDRESS OF COMPONENT LPMB
2864	(B30)	ADDRESS	4	DSIRPTDT	ADDRESS OF COMPONENT RPS TABLE
2868	(B34)	ADDRESS	4	DSIEDBDT	ADDRESS OF 1ST COMPONENT EDB

COMPONENT PLACE HOLDER
THIS SECTION CONTAINS INFORMATION RELEVANT FOR THE
CURRENT POSITION IN THE COMPONENT REPRESENTED BY
THE COMPONENT DEFINITION BLOCK

Dec	Hex	Type	Len	Name (Dim)	Description
2872	(B38)	CHAR-ACTER	36	DSICPHDT (0)	COMPONENT PLACE HOLDER
2872	(B38)	ADDRESS	4	DSICEBDT	CURRENT EDB
2876	(B3C)	ADDRESS	4	DSIELRDT	CURRENT EXTENT LOW RBA
2880	(B40)	ADDRESS	4	DSIEHRDT	CURRENT EXTENT HIGH RBA
2884	(B44)	ADDRESS	4	DSIELBDT	CURRENT EXTENT LOW BBBB
2888	(B48)	ADDRESS	4	DSIRBADT	CURRENT RBA
2892	(B4C)	ADDRESS	4	DSIHRBDT	CURRENT HI-RBA
2896	(B50)	ADDRESS	4	DSIHURDT	CURRENT ARDB HI-USED RBA
2900	(B54)	CHAR-ACTER	2	DSILUBDT (0)	CURRENT SYMBOLIC UNIT ADDRESS
2900	(B54)	BITSTRING	1	DSISUCDT	SYMBOLIC UNIT CLASS
		.... .1..		DSIIOBDT	"B'00000100'" IORB INDICATOR
2901	(B55)	BITSTRING	1	DSISUNDT	SYMBOLIC UNIT NUMBER

CURRENT DISK ADDRESS FIELD

Dec	Hex	Type	Len	Name (Dim)	Description
2902	(B56)	CHAR-ACTER	6	DSIDSKDT (0)	CURRENT DISK ADDRESS

FORMAT OF DISK ADDRESS FIELD FOR CKD DEVICES

Dec	Hex	Type	Len	Name (Dim)	Description
2902	(B56)	SIGNED	2	DSICCDT	CYLINDER NUMBER FOR CKD DEVICES
2904	(B58)	SIGNED	2	DSIHHDT	HEAD NUMBER FOR CKD DEVICES
2906	(B5A)	CHAR-ACTER	2	DSIRXDT (0)	RECORD NUMBER PLUS KEY LENGTH
2906	(B5A)	BITSTRING	1	DSIRDT	RECORD NUMBER
2907	(B5B)	BITSTRING	1	DSIKLDT	KEY LENGTH (MUST BE ZERO)

FORMAT OF DISK ADDRESS FIELD FOR FBM DEVICES

Dec	Hex	Type	Len	Name (Dim)	Description
2902	(B56)	SIGNED	2	DSIBLDT	FBM BLOCK SIZE OR ZERO
2904	(B58)	ADDRESS	4	DSIPBNDT	PHYSICAL BLOCK NUMBER

END OF COMPONENT DEFINITION BLOCK

Dec	Hex	Type	Len	Name (Dim)	Description
2908	(B5C)	SIGNED	4	DSIENDDT (0)	END OF COMPONENT DEFINITION BLOCK

SEQUENCE SET COMPONENT DEFINITION BLOCK
THE SEQUENCE SET COMPONENT DEFINITION BLOCK CONTAINS
DESCRIPTIVE AND REFERENCE INFORMATION THAT PERTAINS
TO THE SEQUENCE SET OF THE DATA SET CURRENTLY BEING
PROCESSED. THE INFORMATION INCLUDES THE CHARACTERISTICS
OF THE SEQUENCE SET, POINTERS TO THE VSAM INTERNAL
CONTROL BLOCKS RELEVANT FOR THE SEQUENCE SET, AND
PLACE INFORMATION DESCRIBING THE CURRENT POSITION
IN THE SEQUENCE SET
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Dec	Hex	Type	Len	Name (Dim)	Description
2908	(B5C)	SIGNED	4	DSICDBSS (0)	COMPONENT DEFINITION BLOCK

TYPE OF COMPONENT DEFINITION BLOCK

Dec	Hex	Type	Len	Name (Dim)	Description
2908	(B5C)	BITSTRING	1	DSITYPSS	SEQUENCE SET CDB
2909	(B5D)	BITSTRING	3		NOT USED

Dec	Hex	Type	Len	Name (Dim)	Description
					COMPONENT CHARACTERISTICS
					THIS SECTION OF THE COMPONENT DEFINITION BLOCK CONTAINS
					LOGICAL AND PHYSICAL CHARACTERISTICS FOR THE COMPONENT
					DESCRIBED BY THE COMPONENT DEFINITION BLOCK
2912	(B60)	CHAR-ACTER	32	DSICCSSS (0)	COMPONENT CHARACTERISTICS
					INDEX COMPONENT BUFFER CHARACTERISTICS
					THIS SECTION CONTAINS THE INDEX COMPONENT CHARACTERISTICS
					WHICH INFLUENCE THE CHANNEL PROGRAM CONSTRUCTION FOR THE
					INDEX COMPONENT REPRESENTED BY THE COMPONENT DEFINIT-
					ION BLOCK
2912	(B60)	CHAR-ACTER	20	DSIXCCSS (0)	INDEX COMPONENT CHARACTERISTICS
2912	(B60)	CHAR-ACTER	8	DSIBCCSS (0)	BASIC COMPONENT CHARACTERISTICS
2912	(B60)	BITSTRING	1	DSIDVTSS	DEVICE TYPE IMFORMATION
		1...		DSIFBMSS	"B'10000000'" FBM DEVICE
		.1..		DSICKDSS	"B'01000000'" CKD DEVICE
		..1.		DSIRPSSS	"B'00100000'" RPS DEVICE
		.... 1...		DSIECKSS	"B'00001000'" EXTENDED CKD DEVICE
2913	(B61)	BITSTRING	1	DSIXOPSS	INDEX OPTIONS
		1...		DSIREPSS	"B'10000000'" INDEX RECORDS REPLICATED
2914	(B62)	BITSTRING	2		NOT USED
2916	(B64)	ADDRESS	4	DSIPBSSS	PHYSICAL BLOCK SIZE
2920	(B68)	SIGNED	4		MUST BE ZERO
2924	(B6C)	SIGNED	4	DSIRPFSS	REPLICATION FACTOR
2928	(B70)	ADDRESS	4	DSIBCVSS	NUMBER OF BLOCKS PER CNV
2932	(B74)	SIGNED	4	DSICNVSS	CONTROL INTERVAL SIZE
2936	(B78)	SIGNED	4	DSICNASS	CONTROL AREA SIZE
2940	(B7C)	ADDRESS	4	DSIBCASS	NUMBER OF BLOCKS PER CNA
					DEVICE GEOMETRY
2944	(B80)	CHAR-ACTER	4	DSIDVGSS (0)	DEVICE GEOMETRY
2944	(B80)	SIGNED	2	DSIBPTSS	NUMBER OF BLOCKS PER TRACK
2946	(B82)	SIGNED	2	DSITPCSS	NUMBER OF TRACKS PER CYLINDER
					VSAM CONTROL BLOCK POINTERS
					THIS SECTION CONTAINS THE POINTERS TO THE VSAM INTERNAL
					CONTROL BLOCKS AND THE RPS TABLE RELEVANT FOR THE COM-
					PONENT DESCRIBED BY THIS COMPONENT DEFINITION BLOCK
2948	(B84)	CHAR-ACTER	24	DSIVCBSS (0)	VSAM CONTROL BLOCK POINTERS
2948	(B84)	ADDRESS	4	DSIAMBSS	ADDRESS OF AMBL
2952	(B88)	ADDRESS	4	DSIAMDSS	ADDRESS OF COMPONENT AMDSB
2956	(B8C)	ADDRESS	4	DSIARDSS	ADDRESS OF 1ST COMPONENT ARDB
2960	(B90)	ADDRESS	4	DSILPMSS	ADDRESS OF COMPONENT LPMB
2964	(B94)	ADDRESS	4	DSIRPTSS	ADDRESS OF COMPONENT RPS TABLE
2968	(B98)	ADDRESS	4	DSIEDBSS	ADDRESS OF 1ST COMPONENT EDB
					COMPONENT PLACE HOLDER
					THIS SECTION CONTAINS INFORMATION RELEVANT FOR THE
					CURRENT POSITION IN THE COMPONENT REPRESENTED BY
					THE COMPONENT DEFINITION BLOCK
2972	(B9C)	CHAR-ACTER	36	DSICPHSS (0)	COMPONENT PLACE HOLDER
2972	(B9C)	ADDRESS	4	DSICEBSS	CURRENT EDB
2976	(BA0)	ADDRESS	4	DSIELRSS	CURRENT EXTENT LOW RBA
2980	(BA4)	ADDRESS	4	DSIEHRSS	CURRENT EXTENT HIGH RBA
2984	(BA8)	ADDRESS	4	DSIELBSS	CURRENT EXTENT LOW BBBB
2988	(BAC)	ADDRESS	4	DSIRBASS	CURRENT RBA
2992	(BB0)	ADDRESS	4	DSIHRBSS	CURRENT HI-RBA
2996	(BB4)	ADDRESS	4	DSIHURSS	CURRENT ARDB HI-USED RBA

Dec	Hex	Type	Len	Name (Dim)	Description
3000	(BB8)	CHAR-ACTER	2	DSILUBSS (0)	CURRENT SYMBOLIC UNIT ADDRESS
3000	(BB8)	BITSTRING	1	DSISUCSS	SYMBOLIC UNIT CLASS
		.... .1..		DSIIOBSS	"B'00000100'" IORB INDICATOR
3001	(BB9)	BITSTRING	1	DSISUNSS	SYMBOLIC UNIT NUMBER

CURRENT DISK ADDRESS FIELD

Dec	Hex	Type	Len	Name (Dim)	Description
3002	(BBA)	CHAR-ACTER	6	DSIDSKSS (0)	CURRENT DISK ADDRESS

FORMAT OF DISK ADDRESS FIELD FOR CKD DEVICES

Dec	Hex	Type	Len	Name (Dim)	Description
3002	(BBA)	SIGNED	2	DSICCSS	CYLINDER NUMBER FOR CKD DEVICES
3004	(BBC)	SIGNED	2	DSIHHSS	HEAD NUMBER FOR CKD DEVICES
3006	(BBE)	CHAR-ACTER	2	DSIRXSS (0)	RECORD NUMBER PLUS KEY LENGTH
3006	(BBE)	BITSTRING	1	DSIRSS	RECORD NUMBER
3007	(BBF)	BITSTRING	1	DSIKLSS	KEY LENGTH (MUST BE ZERO)

FORMAT OF DISK ADDRESS FIELD FOR FBM DEVICES

Dec	Hex	Type	Len	Name (Dim)	Description
3002	(BBA)	SIGNED	2	DSIBLSS	FBM BLOCK SIZE OR ZERO
3004	(BBC)	ADDRESS	4	DSIPBNSS	PHYSICAL BLOCK NUMBER

END OF COMPONENT DEFINITION BLOCK

Dec	Hex	Type	Len	Name (Dim)	Description
3008	(BC0)	SIGNED	4	DSIENDSS (0)	END OF COMPONENT DEFINITION BLOCK

HIGH-LEVEL INDEX COMPONENT DEFINITION BLOCK
THE HIGH-LEVEL INDEX COMPONENT DEFINITION BLOCK CONTAINS
DESCRIPTIVE AND REFERENCE INFORMATION THAT PERTAINS TO
THE HIGH-LEVEL INDEX OF THE DATA SET CURRENTLY BEING
PROCESSED. THE INFORMATION INCLUDES THE CHARACTERISTICS
OF THE HIGH-LEVEL INDEX, POINTERS TO THE VSAM INTERNAL
CONTROL BLOCKS RELEVANT FOR THE HIGH-LEVEL INDEX, AND
PLACE INFORMATION DESCRIBING THE CURRENT POSITION IN
THE HIGH-LEVEL INDEX
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Dec	Hex	Type	Len	Name (Dim)	Description
3008	(BC0)	SIGNED	4	DSICDBHX (0)	COMPONENT DEFINITION BLOCK

TYPE OF COMPONENT DEFINITION BLOCK

Dec	Hex	Type	Len	Name (Dim)	Description
3008	(BC0)	BITSTRING	1	DSITYPHX	HIGH-LEVEL INDEX CDB
3009	(BC1)	BITSTRING	3		NOT USED

COMPONENT CHARACTERISTICS
THIS SECTION OF THE COMPONENT DEFINITION BLOCK CONTAINS
LOGICAL AND PHYSICAL CHARACTERISTICS FOR THE COMPONENT
DESCRIBED BY THE COMPONENT DEFINITION BLOCK

Dec	Hex	Type	Len	Name (Dim)	Description
3012	(BC4)	CHAR-ACTER	32	DSICCSHX (0)	COMPONENT CHARACTERISTICS

INDEX COMPONENT BUFFER CHARACTERISTICS
THIS SECTION CONTAINS THE INDEX COMPONENT CHARACTERISTICS
WHICH INFLUENCE THE CHANNEL PROGRAM CONSTRUCTION FOR THE
INDEX COMPONENT REPRESENTED BY THE COMPONENT DEFINIT-
ION BLOCK

Dec	Hex	Type	Len	Name (Dim)	Description
3012	(BC4)	CHAR-ACTER	20	DSIXCCHX (0)	INDEX COMPONENT CHARACTERISTICS
3012	(BC4)	CHAR-ACTER	8	DSIBCCHX (0)	BASIC COMPONENT CHARACTERISTICS
3012	(BC4)	BITSTRING	1	DSIDVTHX	DEVICE TYPE IMFORMATION
		1...		DSIFBMHX	"B'10000000'" FBM DEVICE
		.1..		DSICKDHX	"B'01000000'" CKD DEVICE
		..1.		DSIRPSHX	"B'00100000'" RPS DEVICE
		.... 1...		DSIECKHX	"B'00001000'" EXTENDED CKD DEVICE
3013	(BC5)	BITSTRING	1	DSIXOPHX	INDEX OPTIONS
		1...		DSIREPHX	"B'10000000'" INDEX RECORDS REPLICATED

Dec	Hex	Type	Len	Name (Dim)	Description
3014	(BC6)	BITSTRING	2		NOT USED
3016	(BC8)	ADDRESS	4	DSIPBSHX	PHYSICAL BLOCK SIZE
3020	(BCC)	SIGNED	4		MUST BE ZERO
3024	(BD0)	SIGNED	4	DSIRPFHX	REPLICATION FACTOR
3028	(BD4)	ADDRESS	4	DSIBCVHX	NUMBER OF BLOCKS PER CNV
3032	(BD8)	SIGNED	4	DSICNVHX	CONTROL INTERVAL SIZE
3036	(BDC)	SIGNED	4	DSICNAHX	CONTROL AREA SIZE
3040	(BE0)	ADDRESS	4	DSIBCAHX	NUMBER OF BLOCKS PER CNA

DEVICE GEOMETRY

Dec	Hex	Type	Len	Name (Dim)	Description
3044	(BE4)	CHARACTER	4	DSIDVGHX (0)	DEVICE GEOMETRY
3044	(BE4)	SIGNED	2	DSIBPTHX	NUMBER OF BLOCKS PER TRACK
3046	(BE6)	SIGNED	2	DSITPCHX	NUMBER OF TRACKS PER CYLINDER

VSAM CONTROL BLOCK POINTERS
THIS SECTION CONTAINS THE POINTERS TO THE VSAM INTERNAL
CONTROL BLOCKS AND THE RPS TABLE RELEVANT FOR THE COM-
PONENT DESCRIBED BY THIS COMPONENT DEFINITION BLOCK

Dec	Hex	Type	Len	Name (Dim)	Description
3048	(BE8)	CHARACTER	24	DSIVCBHX (0)	VSAM CONTROL BLOCK POINTERS
3048	(BE8)	ADDRESS	4	DSIAMBHX	ADDRESS OF AMBL
3052	(BEC)	ADDRESS	4	DSIAMDHX	ADDRESS OF COMPONENT AMDSB
3056	(BF0)	ADDRESS	4	DSIARDHX	ADDRESS OF 1ST COMPONENT ARDB
3060	(BF4)	ADDRESS	4	DSILPMHX	ADDRESS OF COMPONENT LPMB
3064	(BF8)	ADDRESS	4	DSIRPTHX	ADDRESS OF COMPONENT RPS TABLE
3068	(BFC)	ADDRESS	4	DSIEDBHX	ADDRESS OF 1ST COMPONENT EDB

COMPONENT PLACE HOLDER
THIS SECTION CONTAINS INFORMATION RELEVANT FOR THE
CURRENT POSITION IN THE COMPONENT REPRESENTED BY
THE COMPONENT DEFINITION BLOCK

Dec	Hex	Type	Len	Name (Dim)	Description
3072	(C00)	CHARACTER	36	DSICPHHX (0)	COMPONENT PLACE HOLDER
3072	(C00)	ADDRESS	4	DSICEBHX	CURRENT EDB
3076	(C04)	ADDRESS	4	DSIELRHX	CURRENT EXTENT LOW RBA
3080	(C08)	ADDRESS	4	DSIEHRHX	CURRENT EXTENT HIGH RBA
3084	(C0C)	ADDRESS	4	DSIELBHX	CURRENT EXTENT LOW BBBB
3088	(C10)	ADDRESS	4	DSIRBAHX	CURRENT RBA
3092	(C14)	ADDRESS	4	DSIHRBHX	CURRENT HI-RBA
3096	(C18)	ADDRESS	4	DSIHURHX	CURRENT ARDB HI-USED RBA
3100	(C1C)	CHARACTER	2	DSILUBHX (0)	CURRENT SYMBOLIC UNIT ADDRESS
3100	(C1C)	BITSTRING	1	DSISUCHX	SYMBOLIC UNIT CLASS
		.... .1..		DSIIOBHX	"B'00000100'" IORB INDICATOR
3101	(C1D)	BITSTRING	1	DSISUNHX	SYMBOLIC UNIT NUMBER

CURRENT DISK ADDRESS FIELD

Dec	Hex	Type	Len	Name (Dim)	Description
3102	(C1E)	CHARACTER	6	DSIDSKHX (0)	CURRENT DISK ADDRESS

FORMAT OF DISK ADDRESS FIELD FOR CKD DEVICES

Dec	Hex	Type	Len	Name (Dim)	Description
3102	(C1E)	SIGNED	2	DSICCHX	CYLINDER NUMBER FOR CKD DEVICES
3104	(C20)	SIGNED	2	DSIHHHX	HEAD NUMBER FOR CKD DEVICES
3106	(C22)	CHARACTER	2	DSIRXHX (0)	RECORD NUMBER PLUS KEY LENGTH
3106	(C22)	BITSTRING	1	DSIRHX	RECORD NUMBER
3107	(C23)	BITSTRING	1	DSIKLHX	KEY LENGTH (MUST BE ZERO)

FORMAT OF DISK ADDRESS FIELD FOR FBM DEVICES

Dec	Hex	Type	Len	Name (Dim)	Description
3102	(C1E)	SIGNED	2	DSIBLHX	FBM BLOCK SIZE OR ZERO
3104	(C20)	ADDRESS	4	DSIPBNHX	PHYSICAL BLOCK NUMBER

END OF COMPONENT DEFINITION BLOCK

Dec	Hex	Type	Len	Name (Dim)	Description
3108	(C24)	SIGNED	4	DSIENDHX (0)	END OF COMPONENT DEFINITION BLOCK

Dec	Hex	Type	Len	Name (Dim)	Description
		EQUATES			
3108	(C24)			DSILEN	"*-DSI" LENGTH OF DSH

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VSAM DATA SET WORK AREA (VDW/VDI)
THE VSAM DATA SET WORK AREA (VDW) IS USED AS REPOSIT-
ORY FOR THE VSAM CONTROL BLOCKS AND THE RELATED FIELDS
THAT ARE NECESSARY TO OPEN OR CLOSE A VSAM DATA SET.
IT ALSO CONTAINS THE OPEN/CLOSE INVOCATION INTERFACE

Dec	Hex	Type	Len	Name (Dim)	Description
3108	(C24)	SIGNED	4	VDI (0)	VSAM DATA SET WORK AREA(VDW)
		VSAM OPEN/CLOSE INVOCATION INTERFACE			
3108	(C24)	ADDRESS	4	VDIPACB	ADDRESS OF VSAM DATA SET ACB

VSAM DATA SET ACB
VSAM - ACB - 5686-03702(CF7) - VERSION 2 RELEASE 1.0
VSAM - IKQACB1 - 5686-037(C66) VERSION 2 RELEASE 1.0
VSAM - IKQACBG - 5686-037(C66) - VERSION 2 RELEASE 1.0

Dec	Hex	Type	Len	Name (Dim)	Description
3116	(C2C)	SIGNED	4	VDIACB (0)	
3116	(C2C)	BITSTRING	1		. ACBID
3117	(C2D)	BITSTRING	1		. ACB SUBTYPE FIELD
3118	(C2E)	ADDRESS	2		. ACB LENGTH
3120	(C30)	ADDRESS	4		. ACBAMBL POINTER
3124	(C34)	ADDRESS	4		. VSAM REC.MGT. MODULE ADDRESS
3128	(C38)	BITSTRING	1		. TEST & SET BYTE
3129	(C39)	BITSTRING	1		. CRA FLAG-BYTE
3130	(C3A)	ADDRESS	2		. NUMBER OF DATA BUFFERS
3132	(C3C)	ADDRESS	2		. NUMBER OF INDEX BUFFERS
3134	(C3E)	BITSTRING	1		. MACRF(1) BYTE
3135	(C3F)	BITSTRING	1		. MACRF(2) BYTE
3136	(C40)	ADDRESS	1		. AM/0 DOS DTF ID
3137	(C41)	BITSTRING	1		. OPEN / CLOSE FLAGS
3138	(C42)	ADDRESS	1		. NUMBER OF STRINGS
3139	(C43)	ADDRESS	1		. ERROR FLAGS
3140	(C44)	ADDRESS	4		. BUFFER SPACE
3144	(C48)	CHAR-ACTER	8		. DDNAME
3152	(C50)	ADDRESS	4		. POINTER TO PASSWORD
3156	(C54)	ADDRESS	4		. PTR TO USER WORK AREA
3160	(C58)	ADDRESS	4		. BUFFER ADDRESS
3164	(C5C)	ADDRESS	4		. EXIT LIST POINTER
3168	(C60)	ADDRESS	4		. PTR TO BAM PARM LIST
3172	(C64)	ADDRESS	1		. DSN STRING NUMBER
3173	(C65)	BITSTRING	1		. MORE O/C FLAGS
3174	(C66)	ADDRESS	2		. MESSAGE AREA LENGTH
3176	(C68)	ADDRESS	4		.
3180	(C6C)	ADDRESS	4		. PTR TO 44 CHAR NAME
3184	(C70)	BITSTRING	1		. MACRF(3) BYTE
3185	(C71)	BITSTRING	1		. MACRF(4) BYTE(NOT USED)
3186	(C72)	ADDRESS	1		SHRPOOL DEFAULT VALUE
3187	(C73)	BITSTRING	1		. RESERVED 1 BYTE
3188	(C74)	SIGNED	4		. RESERVED WORD
		PASSWORD/DATA SET NAME/CATALOG NAME COMBINATION			
3192	(C78)	CHAR-ACTER	97	VDIPDS (0)	PASSWORD/DSNAME COMBINATION
3192	(C78)	CHAR-ACTER	9	VDIPWD (0)	PASSWORD STRUCTURE
3192	(C78)	BITSTRING	1	VDIPWLN	LENGTH OF PASSWORD
3193	(C79)	CHAR-ACTER	8	VDIPWVAL	PASSWORD

Dec	Hex	Type	Len	Name (Dim)	Description
3201	(C81)	CHAR-ACTER	44	VDIDSN	DATA SET NAME
3245	(CAD)	CHAR-ACTER	44	VDICDSN	CATALOG DATA SET NAME
3289	(CD9)	CHAR-ACTER	1		END INDICATOR (MUST BE BLANK)
3290	(CDA)	BITSTRING	2		NOT USED
3296	(CE0)	DBL WORD	8	(0)	
3296	(CE0)	BITSTRING	256	VDICCBL	CCBL FOR COMPRESSION CONTROL

EQUATES

3296	(CE0)			VDILEN	"*-VDI" LENGTH OF VSAM DATA SET WA

BRB EQUATES

3296	(CE0)			BRBLEN	"*-BRB" LENGTH OF BRB

Cross Reference

Name	Hex Offset	Hex Value	Level
AVRADR	330		2
AVRBPL	362	14	2
AVRCDCST	341		2
AVRCKD	33B	2	2
AVRCMSV	33A	4	2
AVRCOPY	33A	10	2
AVRDEVC	344		2
AVRECKD	33B	4	2
AVREXTFL	33A	80	2
AVRFBA	33B	1	2
AVRFDCST	341		2
AVRFLAG	33A		2
AVRGOOD	362	0	2
AVRIGN	362	C	2
AVRILNG	362	C	2
AVRLEN	362	38	2
AVRLNO	342		2
AVRNDASD	362	8	2
AVRNLNO	33A	2	2
AVRNOASG	362	8	2
AVRNOLNO	362	4	2
AVRNOTDF	362	18	2
AVRNOTUP	362	10	2
AVRNOVOL	362	8	2
AVRNOWRT	341	80	2
AVRNRDY	362	1C	2
AVRNVOL	33A	1	2
AVRPUB	330		2
AVRREMV	33A	8	2
AVRRPS	33B	3	2
AVRRSV	33A	20	2
AVRSHR	33A	40	2
AVRTAPE	33B	20	2
AVRTINFO	340		2
AVRTLSEQ	33C		2
AVRTLSID	33F		2
AVRTYPE	33B		2
AVRVCC	33C		2
AVRVCI	33C		2
AVRVHH	33E		2
AVRVNUM	33D		2
AVRVOLC	330	330	2
AVRVOLID	334		2
AVRVR	340		2

Name	Hex Offset	Hex Value	Level
AVRVTOC	33C		2
BFH	1E4		2
BFHCUU	1E7		2
BFHDEVT	1E5		2
BFHDVC	1E5	0	2
BFHDVM	1E6	0	2
BFHELST	23C		2
BFHEOF	1EB	8	2
BFHEOV	1EB	40	2
BFHFCRT	1FE		2
BFHFDATE	1FE		2
BFHFDD	200	0	2
BFHFELB	23C		2
BFHFMM	1FE	0	2
BFHFTOD	204	0	2
BFHFVLB	22C		2
BFHFYY	202	0	2
BFHHVSQ	214	0	2
BFHLELB	240		2
BFHLELE	244		2
BFHLEN	244	64	2
BFHLVLB	230		2
BFHLVLE	234		2
BFHNDB	222	0	2
BFHOPN	1EB	80	2
BFHOPTN	1E4	0	2
BFHPCUU	1E7	404040	2
BFHPDATE	1EC		2
BFHPDD	1EF	4040	2
BFHPFCRT	1EC		2
BFHPHRS	1F6	4040	2
BFHPMIN	1F9	4040	2
BFHPMM	1EC	4040	2
BFHPSEC	1FC	4040	2
BFHPTOD	1F6		2
BFHPYY	1F2	40404040	2
BFHRST	1EB	0	2
BFHSLBL	1E4	80	2
BFHST	1EB	0	2
BFHTER	1EB	20	2
BFHTMM	1EB	10	2
BFHVCRT	208		2
BFHVDATE	208	0	2
BFHVLST	22C		2
BFHVOL1	238		2
BFHVSQ	218	0	2
BFHVSR	21C	0	2
BFHVTOD	20E	0	2
BFHWAI	224		2
BFHWAL	228	0	2
BFHWAP	224		2
BFHWASC	22C		2
BFHXCUU	1EA	40	2
BOE	408		2
BOEBEXT	418	0	2
BOEDRNBR	420	0	2
BOEEEXT	41C	0	2
BOEEXTSQ	416	0	2
BOEFDATE	40C	0	2
BOEFTOD	412	0	2
BOEID	408	C2D6C540	2
BOELEN	422	1E	2
BPA	330		2
BPAAED1	36A	10	2
BPAAIOB	4A8		2

Name	Hex Offset	Hex Value	Level
BPAAIO2	4AC		2
BPAALST	4C4		2
BPAAVSLT	488	0	2
BPABB	48E	0	2
BPABBD1	380	0	2
BPABCD1	392	0	2
BPABDVC	330		2
BPABFSLT	494	0	2
BPABLD1	382	0	2
BPABOE	408		2
BPABOEBN	458	0	2
BPACADR	4B0		2
BPACAD1	375		2
BPACAENC	4C4		2
BPACAIN	4CC		2
BPACALIN	4C8		2
BPACALOU	4D0		2
BPACAOUT	4D4		2
BPACARCD	4D8		2
BPACBDB	4A0		2
BPACCC	498	0	2
BPACCD1	382	0	2
BPACCWD1	3B9		2
BPACDLN	49E	0	2
BPACDMOD	4BC		2
BPACDTAB	4C0		2
BPACFLG	4B8	0	2
BPACHH	49A	0	2
BPACKD1	380		2
BPACKLN	49D	0	2
BPACLD1	36E	0	2
BPACMD1	36A	0	2
BPACMPD1	378	80	2
BPACM2D1	36B	0	2
BPACNTD1	382		2
BPACOUNT	498		2
BPACPA	3D0		2
BPACR	49C	0	2
BPACSD1	36C	0	2
BPACS2D1	36D	0	2
BPACWD1	371		2
BPACWLEN	4B9	1C	2
BPADADEC	4C4		2
BPADAIN	4C8		2
BPADALOB	4D4		2
BPADALOU	4CC		2
BPADAOUT	4D0		2
BPADARCD	4D8		2
BPADASBN	454	0	2
BPADATBN	450	0	2
BPADBFUL	4B8	40	2
BPADBOV	4B8	80	2
BPADED1	390		2
BPADIRBN	44C	0	2
BPADIRLT	462	0	2
BPADIRTN	460	0	2
BPADLD1	388	0	2
BPADRNBR	448	0	2
BPADSKD1	382	0	2
BPADTFB	4DC		2
BPADTFR	4E4		2
BPADXD1	380		2
BPAEADR	4B4		2
BPAEBPD1	3C8		2
BPAECD1	390		2

Name	Hex Offset	Hex Value	Level
BPAECFD1	3B0		2
BPAEDAD1	391	C8	2
BPAEDND1	391	C0	2
BPAEDRD1	390	58	2
BPAEDSD1	391	CC	2
BPAEDWD1	391	C4	2
BPAEECD1	39C	0	2
BPAEEHD1	39E	0	2
BPAEFWD1	390	18	2
BPAEOCD1	36B	20	2
BPAEOE	428		2
BPAEOFBN	45C	0	2
BPAERD1	36A		2
BPAEROD1	3A0	16	2
BPAERRD1	3A0	86	2
BPAESCD1	398	0	2
BPAESHD1	39A	0	2
BPAESND1	3AD	0	2
BPAESQNR	474	0	2
BPAEUWD1	390	98	2
BPAEWFD1	3A0	3	2
BPAEWUD1	3A0	1	2
BPAEXCTR	486	0	2
BPAEXHLM	482	40404040	2
BPAEXLLM	47E	40404040	2
BPAE0D1	390	0	2
BPAE1D1	391	0	2
BPAE12D1	39C		2
BPAE2D1	392	0	2
BPAE4D1	394	0	2
BPAE6D1	396	0	2
BPAE7D1	397	0	2
BPAE8D1	398		2
BPAFBD1	380		2
BPAFIXD1	378	40	2
BPAFLAG	446	0	2
BPAFXLD1	379		2
BPAFXOD1	378	0	2
BPAHHD1	384	0	2
BPAHHRD1	384		2
BPAIED1	36A	20	2
BPAIOBD1	36E	4	2
BPAIOD1	368		2
BPAIORB	368		2
BPAKLD1	387	0	2
BPALBDB	4A4		2
BPALBD1	394		2
BPALBNR	490	0	2
BPALED1	38C		2
BPALEN	4F0	1C4	2
BPALND1	36F	0	2
BPALNED1	36D	40	2
BPALPD1	390		2
BPALRCD1	3BC		2
BPALRD1	3A0		2
BPALSD1	388		2
BPALSTD1	3C0		2
BPALUD1	36E		2
BPAMSD1	380	0	2
BPANBLTC	470	0	2
BPANBLTW	46C	0	2
BPANODST	4B8	8	2
BPANORES	4B8	4	2
BPANRCD1	3B8		2
BPANSPD1	3AD	FF	2

Name	Hex Offset	Hex Value	Level
BPAOPD1	390	0	2
BPAPLBNR	49E	498	2
BPAPLD1	380		2
BPAPSD1	384		2
BPARACD1	3A8	0	2
BPARAHD1	3AA	0	2
BPARARD1	3AC	0	2
BPARCD1	391	0	2
BPARCSD1	368		2
BPARDDD1	390	6	2
BPARD1	386	0	2
BPARESTC	464	0	2
BPARESTD	468	0	2
BPARRDD1	390	2	2
BPARR0D1	397	4	2
BPARSCD1	3A4	0	2
BPARSD1	368	0	2
BPARSHD1	3A6	0	2
BPAR0D1	3A0	0	2
BPAR1D1	3A1	0	2
BPAR2D1	3A2	0	2
BPAR3D1	3A3	0	2
BPAR4D1	3A4		2
BPAR8D1	3A8		2
BPASBEMP	4B8	20	2
BPASCC	490	0	2
BPASCPD1	3C4		2
BPASEEK	48E		2
BPASHH	492	0	2
BPASKD1	380		2
BPASND1	38A	0	2
BPASNRD1	38B	0	2
BPASR	494	0	2
BPASRCEX	4B8	10	2
BPASRCH	490		2
BPATICD1	3BC		2
BPATLFD1	3AE	0	2
BPATYD1	3A1	80	2
BPAUCD1	36C	2	2
BPAUED1	36C	1	2
BPAVOLSR	478	40404040	2
BPAWORK1	4EC	0	2
BPAWORK2	4F0	0	2
BPAWRDD1	390	1	2
BPAWTD1	36A	80	2
BPH	14C		2
BPHADRS	19C		2
BPHBCCDT	168		2
BPHBCCHX	188		2
BPHBCCSS	174		2
BPHBCVHX	198	0	2
BPHBCVSS	184	0	2
BPHBFRS	150	0	2
BPHBFSZ	15C	0	2
BPHBLSZ	14C	0	2
BPHBPC	15C		2
BPHBPCDT	164		2
BPHBPCHX	188		2
BPHBPCSS	174		2
BPHBPIDT	170		2
BPHBSTAB	154		2
BPHCKDDT	168	40	2
BPHCKDHX	188	40	2
BPHCKDSS	174	40	2
BPHDCCDT	168		2

Name	Hex Offset	Hex Value	Level
BPHDSOF	1B4		2
BPHDVTDT	168	0	2
BPHDVTHX	188	0	2
BPHDVTSS	174	0	2
BPHECKDT	168	8	2
BPHECKHX	188	8	2
BPHECKSS	174	8	2
BPHFBDB	1AC		2
BPHFBDB2	1B0		2
BPHFBMDT	168	80	2
BPHFBMHX	188	80	2
BPHFBMSS	174	80	2
BPHFIX	152	80	2
BPHFLN	1A0		2
BPHLEN	1E0	98	2
BPHNBFR	160	0	2
BPHNBFR2	162	0	2
BPHNBFSZ	158	0	2
BPHNPBDT	164	0	2
BPHOPTN	152	0	2
BPHPADR	19C		2
BPHPBSDT	16C		2
BPHPBSHX	18C		2
BPHPBSSS	178		2
BPHPFBDB	1B8		2
BPHPFXL	19C		2
BPHPLN	1A8	0	2
BPHPOOL	19C		2
BPHRABDB	1BC		2
BPHREMAP	152	1	2
BPHREPHX	189	80	2
BPHREPSS	175	80	2
BPHRPFHX	194	0	2
BPHRPFSS	180	0	2
BPHRPSDT	168	20	2
BPHRPSHX	188	20	2
BPHRPSSS	174	20	2
BPHSQBDB	1C0		2
BPHUSV	14C		2
BPHXBB	1C4		2
BPHXBBN	1D8		2
BPHXBB1	1C4		2
BPHXBB2	1D0		2
BPHXBFRN	1DC		2
BPHXBFR1	1C8		2
BPHXBFR2	1D4		2
BPHXOPHX	189	0	2
BPHXOPSS	175	0	2
BPHXSOFN	1E0		2
BPHXSOF1	1CC		2
BRBAMSPL	74		2
BRBBCA	DC		2
BRBBUP	70	4	2
BRBCC	58		2
BRBCHAR	71	0	2
BRBCMPR	71	40	2
BRBCOPY	70	2	2
BRBDDS	94	0	2
BRBDISK	71	80	2
BRBDSN1	60		2
BRBDSN2	64		2
BRBDWA	4F8		2
BRBDWA1	4FE	0	2
BRBERC	5A	0	2
BRBERCNT	54	0	2

Name	Hex Offset	Hex Value	Level
BRBERMAX	56	20	2
BRBERRCT	54		2
BRBERRID	58		2
BRBFBFLG	6C	0	2
BRBFDBK	6E	4040	2
BRBFDT	7C		2
BRBGDT	78		2
BRBGFDT	78		2
BRBID	48	C2D9C240	2
BRBIOM	100		2
BRBLCC	58	0	2
BRBLEN	CE0	DE0	2
BRBLRML	E8	0	2
BRBMCC	59	0	2
BRBMID	5B	40404040	2
BRBMXERR	56		2
BRBNSA	50		2
BRBOBJID	5F		2
BRBOBTYP	5F	40	2
BRBOHD	FC		2
BRBOHL	F0	800	2
BRBOHW	EC		2
BRBOHWA1	EC		2
BRBOHWA2	F4		2
BRBOHWL1	F0	0	2
BRBOHWL2	F8	0	2
BRBPDDS	90		2
BRBRCA	E0		2
BRBREQ	70	0	2
BRBREQ2	72	0	2
BRBRML	E4		2
BRBRST	70	8	2
BRBRTN	58		2
BRBSADDR	4		2
BRBSAP	580	0	2
BRBSAREA	0		2
BRBSAVE	C	0	2
BRBSFE	68	0	2
BRBSFEID	68		2
BRBSIZE	4C	0	2
BRBUEPL	C0		2
BRBUEPRT	CC		2
BRBUPL	80		2
BRBUPPRT	8C		2
BRBURPL	D0		2
BRBURPRT	D8		2
BRBVCL	E4		2
BRBVIN	72	80	2
BRBWORKA	500	0	2
DCH	104		2
DCHBCT	110	0	2
DCHBL	104		2
DCHCDB	11C		2
DCHCDE	120		2
DCHCEDE	120		2
DCHCEP	11C		2
DCHCIDE	124		2
DCHCNT	110		2
DCHEBL	106	0	2
DCHECT	114	0	2
DCHEDEL	108	0	2
DCHFDB	118		2
DCHIDEL	10C	0	2
DCHLDB	128		2
DCHLDE	12C		2

Name	Hex Offset	Hex Value	Level
DCHLEDE	12C		2
DCHLEN	130	30	2
DCHLEP	128		2
DCHLIDE	130		2
DCHPTRS	118		2
DCHTBL	104	0	2
DCTACYL	34C		2
DCTADR	344		2
DCTBTRK	350		2
DCTBYSEG	35E		2
DCTDCBYT	35F		2
DCTDTFC	345		2
DCTEXTCD	362		2
DCTHALF	35D	8	2
DCTKYOH	35C		2
DCTLEN	362	24	2
DCTMAXR	358		2
DCTPCYL	34A		2
DCTPUBC	344		2
DCTREMV	347	40	2
DCTROH	35A		2
DCTROH1	35A		2
DCTROH2	35B		2
DCTRPSC	360		2
DCTTCKD	35D	18	2
DCTTCYL	34E		2
DCTTECKD	35D	38	2
DCTTFAC	35E		2
DCTTFIX	354		2
DCTTFLG	35D		2
DCTTMOD	35D	10	2
DCTTUSE	35D	1	2
DCTUCBC	346		2
DCTUDCL	348		2
DCTUFLG	346		2
DCTUOPT	347		2
DCTUTYP	349		2
DSH	780		2
DSHAMBDT	7F0		2
DSHAMBHX	8B8		2
DSHAMBSS	854		2
DSHAMDDT	7F4		2
DSHAMDHX	8BC		2
DSHAMDSS	858		2
DSHARDDT	7F8		2
DSHARDHX	8C0		2
DSHARDSS	85C		2
DSHBCADT	7E8		2
DSHBCAHX	8B0		2
DSHBCASS	84C		2
DSHBCCDT	7CC		2
DSHBCCHX	894		2
DSHBCCSS	830		2
DSHBCVDT	7DC		2
DSHBCVHX	8A4		2
DSHBCVSS	840		2
DSHBLDT	826	0	2
DSHBLHX	8EE	0	2
DSHBLSS	88A	0	2
DSHBPIDT	7D4		2
DSHBPTDT	7EC	0	2
DSHBPTHX	8B4	0	2
DSHBPTSS	850	0	2
DSHBWAIT	7B7	40	2
DSHCARDB	780		2

Name	Hex Offset	Hex Value	Level
DSHCCDT	826	0	2
DSHCCHX	8EE	0	2
DSHCCSDT	7CC		2
DSHCCSHX	894		2
DSHCCSS	88A	0	2
DSHCCSSS	830		2
DSHCDBDT	7C8		2
DSHCDBHX	890		2
DSHCDBSS	82C		2
DSHCEBDT	808		2
DSHCEBHX	8D0		2
DSHCEBSS	86C		2
DSHCKDDT	7CC	40	2
DSHCKDHX	894	40	2
DSHCKDSS	830	40	2
DSHCNADT	7E4	0	2
DSHCNAHX	8AC	0	2
DSHCNASS	848	0	2
DSHCNVDT	7E0	0	2
DSHCNVHX	8A8	0	2
DSHCNVSS	844	0	2
DSHCPHDT	808		2
DSHCPHHX	8D0		2
DSHCPHSS	86C		2
DSHDCCDT	7CC		2
DSHDCDB	7C8	80	2
DSHDSATR	7B5		2
DSHDSI	7B4		2
DSHDSKDT	826		2
DSHDSKHX	8EE		2
DSHDSKSS	88A		2
DSHDSST	7B4	0	2
DSHDSTYP	7B5	0	2
DSHDSXAT	7B6	0	2
DSHDVGDT	7EC		2
DSHDVGHX	8B4		2
DSHDVGSS	850		2
DSHDVTDT	7CC	0	2
DSHDVTHX	894	0	2
DSHDVTSS	830	0	2
DSHECKDT	7CC	8	2
DSHECKHX	894	8	2
DSHECKSS	830	8	2
DSHEDBDT	804		2
DSHEDBHX	8CC		2
DSHEDBSS	868		2
DSHEHRDT	810		2
DSHEHRHX	8D8		2
DSHEHRSS	874		2
DSHELBDT	814		2
DSHELBHX	8DC		2
DSHELBSS	878		2
DSHELRDT	80C		2
DSHELRHX	8D4		2
DSHELRSS	870		2
DSHENDDT	82C		2
DSHENDHX	8F4		2
DSHENDSS	890		2
DSHEOD	7B4	40	2
DSHESDS	7B5	40	2
DSHFBMDT	7CC	80	2
DSHFBMHX	894	80	2
DSHFBMSS	830	80	2
DSHFLGS	7B7	0	2
DSHGFRST	7B7	80	2

Name	Hex Offset	Hex Value	Level
DSHHHDT	828	0	2
DSHHHHX	8F0	0	2
DSHHHSS	88C	0	2
DSHHRBDT	81C		2
DSHHRBHX	8E4		2
DSHHRBSS	880		2
DSHHURBA	7C4		2
DSHHURDT	820		2
DSHHURHX	8E8		2
DSHHURSS	884		2
DSHIOBDT	824	4	2
DSHIOBHX	8EC	4	2
DSHIOBSS	888	4	2
DSHKEYLN	7B8	0	2
DSHKFL1	798	0	2
DSHKFL2	7A0	0	2
DSHKFP1	794		2
DSHKFP2	79C		2
DSHKLDT	82B	0	2
DSHKLHX	8F3	0	2
DSHKLSS	88F	0	2
DSHKRDS	7B5	81	2
DSHKSDS	7B5	80	2
DSHLEN	8F4	174	2
DSHLPMDT	7FC		2
DSHLPMHX	8C4		2
DSHLPMSS	860		2
DSHLUBDT	824		2
DSHLUBHX	8EC		2
DSHLUBSS	888		2
DSHNARDB	784		2
DSHNIL	7BA	0	2
DSHNXR	7BC	0	2
DSHOPEN	7B4	80	2
DSHOWARN	7B4	10	2
DSHPBNDT	828		2
DSHPBNHX	8F0		2
DSHPBNSS	88C		2
DSHPBSDT	7D0		2
DSHPBSHX	898		2
DSHPBSSS	834		2
DSHRBADT	818		2
DSHRBAHX	8E0		2
DSHRBASS	87C		2
DSHRDT	82A	0	2
DSHREMAP	7B4	20	2
DSHREPHX	895	80	2
DSHREPSS	831	80	2
DSHRHX	8F2	0	2
DSHRPFDT	7D8	0	2
DSHRPFHX	8A0	0	2
DSHRPFSS	83C	0	2
DSHRPSDT	7CC	20	2
DSHRPSHX	894	20	2
DSHRPSSS	830	20	2
DSHRPTDT	800		2
DSHRPTHX	8C8		2
DSHRPTSS	864		2
DSHRRDS	7B5	20	2
DSHRSS	88E	0	2
DSHRTL	7B0	0	2
DSHRTP	7AC		2
DSHRTSC	7AC		2
DSHRXDT	82A		2
DSHRXHX	8F2		2

Name	Hex Offset	Hex Value	Level
DSHRXSS	88E		2
DSHSARDB	788		2
DSHSDCDB	7C8	81	2
DSHSDT	7B6	80	2
DSHSESDS	7B5	10	2
DSHSSRBA	7C0		2
DSHSUCDT	824	0	2
DSHSUCHX	8EC	0	2
DSHSUCSS	888	0	2
DSHSUNDT	825	0	2
DSHSUNHX	8ED	0	2
DSHSUNSS	889	0	2
DSHTPCDT	7EE	0	2
DSHTPCHX	8B6	0	2
DSHTPCSS	852	0	2
DSHTYPDT	7C8	80	2
DSHTYPHX	890	20	2
DSHTYPSS	82C	40	2
DSHVCBDT	7F0		2
DSHVCBHX	8B8		2
DSHVCBSS	854		2
DSHXCCHX	894		2
DSHXCCSS	830		2
DSHXIB1	7A4		2
DSHXIB2	7A8		2
DSHXOPHX	895	0	2
DSHXOPSS	831	0	2
DSHXWAL	790	0	2
DSHXWFLD	78C		2
DSHXWKA	78C		2
DSHXXL	7C8	20	2
DSI	AB0		2
DSIAMBDT	B20		2
DSIAMBHX	BE8		2
DSIAMBSS	B84		2
DSIAMDDT	B24		2
DSIAMDHX	BEC		2
DSIAMDSS	B88		2
DSIARDDT	B28		2
DSIARDHX	BF0		2
DSIARDSS	B8C		2
DSIBCADT	B18		2
DSIBCAHX	BE0		2
DSIBCASS	B7C		2
DSIBCCDT	AFC		2
DSIBCCHX	BC4		2
DSIBCCSS	B60		2
DSIBCVDT	B0C		2
DSIBCVHX	BD4		2
DSIBCVSS	B70		2
DSIBLDT	B56	0	2
DSIBLHX	C1E	0	2
DSIBLSS	BBA	0	2
DSIBPIDT	B04		2
DSIBPTDT	B1C	0	2
DSIBPTHX	BE4	0	2
DSIBPTSS	B80	0	2
DSIBWAIT	AE7	40	2
DSICARDB	AB0		2
DSICCDT	B56	0	2
DSICCHX	C1E	0	2
DSICCSDT	AFC		2
DSICCSHX	BC4		2
DSICCSS	BBA	0	2
DSICCSSS	B60		2

Name	Hex Offset	Hex Value	Level
DSICDBDT	AF8		2
DSICDBHX	BC0		2
DSICDBSS	B5C		2
DSICEBDT	B38		2
DSICEBHX	C00		2
DSICEBSS	B9C		2
DSICKDDT	AFC	40	2
DSICKDHX	BC4	40	2
DSICKDSS	B60	40	2
DSICNADT	B14	0	2
DSICNAHX	BDC	0	2
DSICNASS	B78	0	2
DSICNVDT	B10	0	2
DSICNVHX	BD8	0	2
DSICNVSS	B74	0	2
DSICPHDT	B38		2
DSICPHHX	C00		2
DSICPHSS	B9C		2
DSIDCCDT	AFC		2
DSIDCDB	AF8	80	2
DSIDSATR	AE5		2
DSIDSI	AE4		2
DSIDSKDT	B56		2
DSIDSKHX	C1E		2
DSIDSKSS	BBA		2
DSIDSST	AE4	0	2
DSIDSTYP	AE5	0	2
DSIDSXAT	AE6	0	2
DSIDVGDT	B1C		2
DSIDVGHX	BE4		2
DSIDVGSS	B80		2
DSIDVTDT	AFC	0	2
DSIDVTHX	BC4	0	2
DSIDVTSS	B60	0	2
DSIECKDT	AFC	8	2
DSIECKHX	BC4	8	2
DSIECKSS	B60	8	2
DSIEDBDT	B34		2
DSIEDBHX	BFC		2
DSIEDBSS	B98		2
DSIEHRDT	B40		2
DSIEHRHX	C08		2
DSIEHRSS	BA4		2
DSIELBDT	B44		2
DSIELBHX	C0C		2
DSIELBSS	BA8		2
DSIELRDT	B3C		2
DSIELRHX	C04		2
DSIELRSS	BA0		2
DSIENDDT	B5C		2
DSIENDHX	C24		2
DSIENDSS	BC0		2
DSIEOD	AE4	40	2
DSIESDS	AE5	40	2
DSIFBMDT	AFC	80	2
DSIFBMHX	BC4	80	2
DSIFBMSS	B60	80	2
DSIFLGS	AE7	0	2
DSIGFRST	AE7	80	2
DSIHHDT	B58	0	2
DSIHHHX	C20	0	2
DSIHHSS	BBC	0	2
DSIHRBDT	B4C		2
DSIHRBHX	C14		2
DSIHRBSS	BB0		2

Name	Hex Offset	Hex Value	Level
DSIHURBA	AF4		2
DSIHURDT	B50		2
DSIHURHX	C18		2
DSIHURSS	BB4		2
DSIIOBDT	B54	4	2
DSIIOBHX	C1C	4	2
DSIIOBSS	BB8	4	2
DSIKEYLN	AE8	0	2
DSIKFL1	AC8	0	2
DSIKFL2	AD0	0	2
DSIKFP1	AC4		2
DSIKFP2	ACC		2
DSIKLDT	B5B	0	2
DSIKLHX	C23	0	2
DSIKLSS	BBF	0	2
DSIKRDS	AE5	81	2
DSIKSDS	AE5	80	2
DSILEN	C24	174	2
DSILPMDT	B2C		2
DSILPMHX	BF4		2
DSILPMSS	B90		2
DSILUBDT	B54		2
DSILUBHX	C1C		2
DSILUBSS	BB8		2
DSINARDB	AB4		2
DSINIL	AEA	0	2
DSINXR	AEC	0	2
DSIOPEN	AE4	80	2
DSIOWARN	AE4	10	2
DSIPBNDT	B58		2
DSIPBNHX	C20		2
DSIPBNSS	BBC		2
DSIPBSDT	B00		2
DSIPBSHX	BC8		2
DSIPBSSS	B64		2
DSIRBADT	B48		2
DSIRBAHX	C10		2
DSIRBASS	BAC		2
DSIRDT	B5A	0	2
DSIREMAP	AE4	20	2
DSIREPHX	BC5	80	2
DSIREPSS	B61	80	2
DSIRHX	C22	0	2
DSIRPFDT	B08	0	2
DSIRPFHX	BD0	0	2
DSIRPFSS	B6C	0	2
DSIRPSDT	AFC	20	2
DSIRPSHX	BC4	20	2
DSIRPSSS	B60	20	2
DSIRPTDT	B30		2
DSIRPTHX	BF8		2
DSIRPTSS	B94		2
DSIRRDS	AE5	20	2
DSIRSS	BBE	0	2
DSIRTL	AE0	0	2
DSIRTP	ADC		2
DSIRTSC	ADC		2
DSIRXDT	B5A		2
DSIRXHX	C22		2
DSIRXSS	BBE		2
DSISARDB	AB8		2
DSISDCDB	AF8	81	2
DSISDT	AE6	80	2
DSISESDS	AE5	10	2
DSISSRBA	AF0		2

Name	Hex Offset	Hex Value	Level
DSISUCDT	B54	0	2
DSISUCHX	C1C	0	2
DSISUCSS	BB8	0	2
DSISUNDT	B55	0	2
DSISUNHX	C1D	0	2
DSISUNSS	BB9	0	2
DSITPCDT	B1E	0	2
DSITPCHX	BE6	0	2
DSITPCSS	B82	0	2
DSITYPDT	AF8	80	2
DSITYPHX	BC0	20	2
DSITYPSS	B5C	40	2
DSIVCBDT	B20		2
DSIVCBHX	BE8		2
DSIVCBSS	B84		2
DSIXCCHX	BC4		2
DSIXCCSS	B60		2
DSIXIB1	AD4		2
DSIXIB2	AD8		2
DSIXOPHX	BC5	0	2
DSIXOPSS	B61	0	2
DSIXWAL	AC0	0	2
DSIXWFLD	ABC		2
DSIXWKA	ABC		2
DSIXXL	AF8	20	2
EBLDISK	130	808	2
EBLTAPE	130	698	2
EOE	428		2
EOEBEXT	43E	0	2
EOEEEXT	442	0	2
EOEEXP	446	40	2
EOEEXTSQ	436	0	2
EOEFDATE	42C	0	2
EOEFTOD	432	0	2
EOEID	428	C5D6C540	2
EOELEN	442	1E	2
EOEVOLSR	438	0	2
EOOEXP	446	20	2
EXCFBA	446	80	2
LCH	134		2
LCHALS	138	0	2
LCHBL	134	1000	2
LCHFLB	140		2
LCHFULL	136	80	2
LCHLEN	148	18	2
LCHLLB	144		2
LCHMLS	13C	8000	2
LCHNLB	148		2
LCHPTRS	140		2
LCHRST	136	0	2
LCHSPS	138		2
LCHST	136	0	2
OBJLEND	446	8	2
OBJNWEX	446	2	2
OBJPRC	446	10	2
TBLDISK	130	940	2
TBLTAPE	130	800	2
TCP	248		2
TCPAE	24A	10	2
TCPAREA	2B9		2
TCPBOHD	290		2
TCPBOHDP	2D1		2
TCPBSCNT	32A	1	2
TCPBSF	32A	2F	2
TCPCA	255		2

Name	Hex Offset	Hex Value	Level
TCPCCB	248		2
TCPCCH	32A	40	2
TCPCCW	251		2
TCPCHD	2EC		2
TCPCHDID	2EC	C3C8C440	2
TCPCM	24A		2
TCPCM2	24B		2
TCPCS	24C	0	2
TCPDATE	30A	0	2
TCPDTFB	31C		2
TCPDTFR	324		2
TCPEOF	308	C6	2
TCPEOT	304		2
TCPEOTID	304	C5D6E340	2
TCPEOV	308	E5	2
TCPER	24A		2
TCPFSB	32A	37	2
TCPFSCNT	32A	1	2
TCPFSF	32A	3F	2
TCPFSFCP	2CD		2
TCPFSFD	280		2
TCPIE	24A	20	2
TCPLEN	32A	E4	2
TCPLUB	24E	0	2
TCPOHDBL	32A	500	2
TCPOHWA1	279		2
TCPRCHD	260		2
TCPRCHDP	2C5		2
TCPRDF	32A	2	2
TCPRDIRP	2E9		2
TCPREOT	2A0		2
TCPREOTP	2D9		2
TCPRFDB	2B8		2
TCPRNC	24B	1	2
TCPROHD	270		2
TCPROHDP	2C9		2
TCPRS	248	0	2
TCPRUCNT	32A	1	2
TCPRUN	32A	F	2
TCPSLI	32A	20	2
TCPTOD	310	0	2
TCPTYPE	308	0	2
TCPUE	24C	1	2
TCPUNLD	2B0		2
TCPUNLDP	2E5		2
TCPVTT	30A		2
TCPWCHD	258		2
TCPWCHDP	2C1		2
TCPWDIRP	2DD		2
TCPWDRP	2E1		2
TCPWEOT	298		2
TCPWEOTP	2D5		2
TCPWR	32A	1	2
TCPWT	24A	80	2
VDI	C24		2
VDIACB	C2C		2
VDICCBL	CE0	0	2
VDICDSN	CAD	40404040	2
VDIDSN	C81	40404040	2
VDILEN	CE0	1BC	2
VDIPACB	C24		2
VDIPDS	C78		2
VDIPWD	C78		2
VDIPWLN	C78	0	2
VDIPWVAL	C79	40404040	2

Name	Hex Offset	Hex Value	Level
VDW	8F4		2
VDWACB	8FC		2
VDWCCBL	9B0	0	2
VDWCDSN	97D	40404040	2
VDWDSN	951	40404040	2
VDWLEN	9B0	1BC	2
VDWPACB	8F4		2
VDWPDS	948		2
VDWPWD	948		2
VDWPWLN	948	0	2
VDWPWVAL	949	40404040	2
VOLCHG	446	4	2

Directory Block Header (DBH):

VSE/VSAM BACKUP/RESTORE - IDCDFB02: Each Directory Block begins with a Directory Block Header (DBH) which consists of two sub headers - the Pseudo Header and the Block Header.

The Pseudo Header is not part of the Directory Blocks of the backup file and is used to chain the individual Directory Blocks in virtual memory.

The Block Header is part of all Directory Blocks of the the backup file, even though some fields are initialized only for the first Directory Block of each backup volume.

The Block Header contains information pertaining to the volume on which the Directory Block resides and its creation. It contains global directory information and control information about the specific directory block.

Offsets Dec	Hex	Type	Len	Name (Dim)	Description
		PSEUDO HEADER			
0	(0)	SIGNED	4		ALIGNMENT
0	(0)	CHAR-ACTER	8	DBHPHD (0)	PSEUDO HEADER
0	(0)	ADDRESS	4	DBHNDBH	POINTER TO NEXT DBH
4	(4)	ADDRESS	4	DBHPDBH	POINTER TO PREVIOUS DBH
		BLOCK HEADER			
8	(8)	CHAR-ACTER	40	DBHBHD (0)	BLOCK HEADER
		DIRECTORY BLOCK IDENTIFICATION			
8	(8)	CHAR-ACTER	4	DBHID	DIRECTORY-BLOCK ID
		BACKUP VOLUME INFORMATION THE BACKUP VOLUME INFORMATION IS INITIALIZED ONLY FOR THE FIRST DIRECTORY BLOCK OF EACH BACKUP VOLUME. IT CONTAINS THE VOLUME SEQUENCE NUMBER OF THE BACKUP VOLUME THAT HOSTS THE DIRECTORY BLOCK, THE CREATION TIME OF THE BACKUP FILE, THE CREATION TIME OF THE BACKUP VOLUME, AND THE NUMBER OF BUFFERS (DUMMY BLOCKS) WITH WHICH THE BACKUP VOLUME WAS CREATED IN ORDER TO ALLOW MULTI-THREADING DURING RESTORATION			
12	(C)	CHAR-ACTER	28	DBHDVI (0)	BACKUP VOLUME INFORMATION
12	(C)	SIGNED	4	DBHVSQ	VOLUME SEQUENCE NUMBER
16	(10)	CHAR-ACTER	10	DBHFCRT (0)	BACKUP FILE CREATION TIME
16	(10)	BITSTRING	6	DBHFDATE	BACKUP FILE CREATION DATE
22	(16)	BITSTRING	4	DBHFTOD	BACKUP FILE CREATION TIME OF DAY
26	(1A)	CHAR-ACTER	10	DBHVCRT (0)	BACKUP VOLUME CREATION TIME
26	(1A)	BITSTRING	6	DBHVDATE	BACKUP VOLUME CREATION DATE

Dec	Hex	Type	Len	Name (Dim)	Description
32	(20)	BITSTRING	4	DBHVTOD	BACKUP VOLUME CREATION TIME OF DAY
36	(24)	SIGNED	2	DBHNDB	NUMBER OF DUMMY BLOCKS
38	(26)	BITSTRING	1	DBHFLAG	BACKUP FILE INDICATORS OF GENERAL MEANING
		1...		DBHCMPR	"128" COMPRESSION INDICATOR
39	(27)	BITSTRING	1		RESERVED

GLOBAL DIRECTORY INFORMATION
THE GLOBAL DIRECTORY INFORMATION IS INITIALIZED ONLY
FOR THE FIRST DIRECTORY BLOCK OF EACH BACKUP VOLUME.
IT CONTAINS THE TOTAL NUMBER OF DIRECTORY BLOCKS FOR
THE DIRECTORY AND THE TOTAL NUMBER OF ENTRIES IN THE
DIRECTORY

Dec	Hex	Type	Len	Name (Dim)	Description
40	(28)	CHAR-ACTER	8	DBHGDI (0)	GLOBAL DIRECTORY INFORMATION
40	(28)	SIGNED	4	DBHBCT	TOTAL DIRECTORY BLOCKS
44	(2C)	SIGNED	4	DBHECT	TOTAL DIRECTORY ENTRIES

LOCAL DIRECTORY INFORMATION
THE LOCAL DIRECTORY INFORMATION IS CONTAINED IN EACH
DIRECTORY BLOCK OF THE BACKUP FILE AND CONTAINS
CONTROL INFORMATION THAT PERTAINS TO THE SPECIFIC
DIRECTORY BLOCK

Dec	Hex	Type	Len	Name (Dim)	Description
48	(30)	CHAR-ACTER	8	DBHLDI (0)	LOCAL DIRECTORY INFORMATION
48	(30)	SIGNED	4	DBHNBR	DIRECTORY BLOCK NUMBER
52	(34)	CHAR-ACTER	4	DBHBDF (0)	BLOCK DEFINITION FIELD
52	(34)	SIGNED	2	DBHFSO	BLOCK FREE SPACE OFFSET
54	(36)	SIGNED	2	DBHFSL	BLOCK FREE SPACE LENGTH

DBH EQUATES

Dec	Hex	Type	Len	Name (Dim)	Description
	..11 1...			DBHLEN	"*-DBH" LENGTH OF DBH

Locate Area Block Header (LBH):

VSE/VSAM BACKUP/RESTORE - IDCDFB05: Each block of the Locate Area starts with a Locate Area Block Header (LBH) that contains information describing the space utilization of this Locate Area Block. In addition, the LBH contains forward and backward pointers to the next and previous LBH in the chain of Locate Area Blocks.

Offsets					
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
		FORWARD AND BACKWARD CHAIN POINTERS			
0	(0)	ADDRESS	4	LBHNLBH	ADDR(NEXT LBH)
4	(4)	ADDRESS	4	LBHPLBH	ADDR(PREVIOUS LBH)
		BLOCK DEFINITION FIELD THE BLOCK DEFINITION FIELD CONTAINS THE OFFSET TO THE FREE SPACE IN THE LOCATE AREA BLOCK AND THE LENGTH OF THE FREE SPACE REMAINING IN THE LOCATE AREA BLOCK			
8	(8)	CHAR- ACTER	4	LBHBDF (0)	BLOCK DEFINITION FIELD
8	(8)	SIGNED	2	LBHFSO	BLOCK FREE SPACE OFFSET
10	(A)	SIGNED	2	LBHFSL	BLOCK FREE SPACE LENGTH
		LBH EQUATES			
	.... 11..			LBHLEN	"*-LBH" LENGTH OF LBH

Buffer Definition Block (BDB):

VSE/VSAM BACKUP/RESTORE - IDCDFB09: Each buffer used by VSAM BACKUP/RESTORE has associated with it a Buffer Definition Block (BDB). The BDB contains a pointer to the next BDB, the address of the associated buffer, and request control sections which contain the I/O REQUEST BLOCKS (IORB), the I/O parameter list, and the CCW pointers necessary for the I/O requests that are performed for the buffer associated with the Buffer Definition Block.

Offsets Dec	Hex	Type	Len	Name (Dim)	Description
POINTER TO THE NEXT BDB					

Offsets Dec	Hex	Type	Len	Name (Dim)	Description
POINTER TO THE NEXT BDB					
ALL BDBS ARE CHAINED TOGETHER IN FORM OF A LOOP.					
THE LAST BDB POINTS AGAIN TO THE FIRST BDB					
0	(0)	ADDRESS	4	BDBBDB	POINTER TO NEXT BDB IN LOOP
BUFFER ASSOCIATED WITH BDB					
4	(4)	ADDRESS	4	BDBBFR	ADDR(ASSOCIATED BUFFER)
SIZE OF BUFFER ASSOCIATED WITH BDB					
8	(8)	SIGNED	4	BDBBFSZ	LENGTH OF ASSOCIATED BUFFER
CHANNEL PROGRAM CHARACTERISTICS					
12	(C)	SIGNED	2	BDBCCWL	LENGTH OF CCW'S USED FOR EACH PHYSICAL BLOCK ON CKD - 16 FOR FORMATTING C.P.'S - 24 FOR UPDATE C.P.'S
14	(E)	BITSTRING	1	BDBDVT	DEVICE RELATED INFORMATION
		1...		BDBFBM	"B'10000000'" C.P.'S ARE FOR FIXED BLOCK DEVICES
		.1..		BDBCKD	"B'01000000'" C.P.'S ARE FOR CKD DEVICES
		..1.		BDBRPS	"B'00100000'" C.P.'S ARE FOR RPS DEVICES
		...1		BDBRPSUP	"B'00010000'" C.P.'S ARE UPDATE WRITES FOR RPS DEVICES
		.... 1...		BDBECKD	"B'00001000'" EXTENDED CKD DEVICE
15	(F)	BITSTRING	1	BDBNPB	NUMBER OF PHYSICAL BLOCKS FOR THE BUFFER (BUFFER SIZE DIVIDED BY PHYSICAL BLOCK SIZE)
PARAMETER LIST FOR SEQUENTIAL READ OR WRITE					
16	(10)	CHAR-ACTER	8	BDBSPAR (0)	
16	(10)	BITSTRING	1	BDBSFLG	OPTIONS FOR SEQU READ OR WRITE
		1...		BDBHBUF	"128" BUFFER IS TO BE HANDLED
		.1..		BDBWBUF	"64" WAITING FOR BUFFER
		..1.		BDBEOBJ	"32" END OF OBJECT
		.... 1...		BDBAVBL	"8" BUFFER AVAILABLE FOR PROCES- SING (SET BY SEQU.READ ROUT)
17	(11)	BITSTRING	3		RESERVED
20	(14)	ADDRESS	4	BDBABDB	ADDR OF ASSOCIATED BDB

REQUEST CONTROL SECTIONS
EACH BUFFER DEFINITION BLOCK HAS THE FOLLOWING
REQUEST CONTROL SECTIONS ASSOCIATED WITH IT--
TWO DATA REQUEST CONTROL SECTION WHICH ALLOW
TWO INDEPENDENTLY SCHEDULED DISK I/O REQUESTS
FOR THE DATA COMPONENT OF THE OBJECT BEING
BACKED UP OR RESTORED IN ORDER TO FILL THE BUF-
FER OR TO WRITE IT ONTO DISK,
AN INDEX REQUEST CONTROL SECTION FOR THE READING
OF A SEQUENCE SET RECORD IN CASE OF BACKUP, AND
A TAPE REQUEST CONTROL SECTION FOR TAPE REQUESTS
FIRST DATA REQUEST CONTROL SECTION
FOR BACKUP, THE FIRST DATA REQUEST CONTROL SECTION
CONTROLS THE READING OF THE FIRST OR ONLY PORTION
OF THE DATA COMPONENT READ IN ORDER TO FILL THE
BUFFER REPRESENTED BY THE BUFFER DEFINITION BLOCK
WITH DATA. IN GENERAL, THE BUFFER IS FILLED WITH
ONE READ OPERATION. HOWEVER, IF THE DATA NEEDED TO
FILL THE BUFFER CROSS A CYLINDER BOUNDARY (FOR CKD
DEVICES ONLY), TWO READ OPERATIONS ARE NECESSARY.
WITH THE FIRST READ OPERATION, THE REMAINING PORTION
OF THE FIRST CYLINDER IS READ, WHEREAS THE DATA PORT-
ION RESIDING ON THE SECOND CYLINDER IS READ WITH A
SECOND I/O OPERATION.
FOR RESTORE, THE WRITE OPERATION FOR A BUFFER MAY
HAVE TO BE BROKEN INTO SEVERAL I/O OPERATIONS IF THE
DATA PORTION TO BE WRITTEN CROSSES SEVERAL TRACK
BOUNDARIES (CKD DEVICES ONLY). THE FIRST DATA REQUEST
CONTROL SECTION IS THEN USED TO WRITE THE ODD-NUMBERED
PORTIONS INTO WHICH THE BUFFER HAS TO BE SUBDIVIDED.
THE FIRST DATA REQUEST CONTROL SECTION CONTAINS THE
IORB AND THE CHANNEL PROGRAM PARAMETER LISTS FOR THE
APPROPRIATE I/O REQUESTS. IN ADDITION, IT CONTAINS
THE POINTERS NECESSARY TO CONTROL THE SPLITTING OF
THE DISK CHANNEL PROGRAM FOR THE FIRST I/O OPERATION

Dec	Hex	Type	Len	Name (Dim)	Description
24	(18)	ADDRESS	4	BDBPRCS	ADDRESS OF PREVIOUS RCS
28	(1C)	ADDRESS	4	BDBCRCS	ADDRESS OF CURRENT RCS

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Dec	Hex	Type	Len	Name (Dim)	Description
32	(20)	SIGNED	4		
32	(20)	CHAR-ACTER	64	BDBRCSD1 (0)	REQUEST CONTROL SECTION

IORB FOR I/O REQUESTS OF ASSOCIATED CHANNEL PROGRAM

Dec	Hex	Type	Len	Name (Dim)	Description
32	(20)	CHAR-ACTER	24	BDBIOD1 (0)	I/O REQUEST BLOCK
32	(20)	BITSTRING	2	BDBRSD1	RESIDUAL COUNT
34	(22)	CHAR-ACTER	4	BDBERD1 (0)	ERROR BYTES
34	(22)	BITSTRING	1	BDBCMD1	1ST COMMUNICATION BYTE
		1...		BDBWTD1	"B'10000000'" TRAFFIC BIT
		..1.		BDBIED1	"B'00100000'" IRRECOVERABLE I/O ERROR
		...1		BDBAED1	"B'00010000'" ACCEPT IRRECOVERABLE I/O ERROR
35	(23)	BITSTRING	1	BDBCM2D1	2ND COMMUNICATION BYTE
		..1.		BDBEOCD1	"X'20'" END OF CYLINDER
36	(24)	BITSTRING	1	BDBCSD1	1ST CSW STATUS BYTE
		.... ..1.		BDBUCD1	"X'02'" UNIT CHECK
		1		BDBUED1	"B'00000001'" UNIT EXCEPTION
37	(25)	BITSTRING	1	BDBCS2D1	2ND CSW STATUS BYTE
		.1..		BDBLNED1	"X'40'" LENGTH ERROR
38	(26)	CHAR-ACTER	2	BDBLUD1 (0)	SYMBOLIC LOGICAL UNIT
38	(26)	BITSTRING	1	BDBCLD1	LOGICAL UNIT CLASS
		.... .1..		BDBIOBD1	"B'00000100'" IORB INDICATOR

Dec	Hex	Type	Len	Name (Dim)	Description
39	(27)	BITSTRING	1	BDBLND1	LOGICAL UNIT NUMBER
40	(28)	BITSTRING	1		RESERVED
41	(29)	ADDRESS	3	BDBCWD1	ADDRESS OF 1ST CCW
44	(2C)	BITSTRING	1		3RD COMMUNICATION BYTE
45	(2D)	ADDRESS	3	BDBCAD1	VIRTUAL CCW ADDRESS FROM CSW
48	(30)	BITSTRING	1	BDBFXOD1	FIX LIST OPTIONS
		1...		BDBCMPD1	"B'10000000'" COMPRESSED OPTION
		.1..		BDBFIXD1	"B'01000000'" FIXED OPTION
49	(31)	ADDRESS	3	BDBFXLD1	ADDRESS OF FIX LIST
52	(34)	BITSTRING	2		IORB IDENTIFIER
54	(36)	BITSTRING	2		RESERVED

CHANNEL PROGRAM PARAMETER LISTS

56	(38)	CHAR-ACTER	40	BDBPLD1 (0)	CHANNEL PROGRAM PARAMETERS
58	(3A)	BITSTRING	6	BDBDSKD1	DISK ADDRESS FIELD FOR CKD AND FBM

PARAMETER LISTS FOR FBM CHANNEL PROGRAMS

56	(38)	CHAR-ACTER	24	BDBFBD1 (0)	FBM CHANNEL PROGRAMS

DEFINE EXTENT PARAMETER LIST FOR FBM CHANNEL PROGRAM

56	(38)	CHAR-ACTER	16	BDBDXD1 (0)	DEFINE EXTENT PARAMETER LIST
56	(38)	BITSTRING	1	BDBMSD1	MASK BYTE
57	(39)	BITSTRING	1		UNUSED
58	(3A)	BITSTRING	2	BDBBLD1	FBM BLOCK SIZE (ZERO FOR 512)
60	(3C)	ADDRESS	4	BDBPSD1	PHYSICAL START OF EXTENT
64	(40)	ADDRESS	4	BDBLSD1	LOGICAL START OF EXTENT
68	(44)	ADDRESS	4	BDBLED1	LOGICAL END OF EXTENT

LOCATE PARAMETER LIST FOR FBM CHANNEL PROGRAM

72	(48)	CHAR-ACTER	8	BDBLPD1 (0)	LOCATE-CCW PARAMETER LIST
72	(48)	BITSTRING	1	BDBOPD1	OPERATIONS BYTE
		1		BDBWRDD1	"B'00000001'" WRITE DATA OPERATION CODE
		.... ..1.		BDBRRDD1	"B'00000010'" READ REPLICATED DATA OP-CODE
		.... .11.		BDBRDDD1	"B'00000110'" READ DATA OPERATION CODE
73	(49)	BITSTRING	1	BDBRCD1	REPLICATION COUNT
74	(4A)	BITSTRING	2	BDBBCD1	BLOCK COUNT
76	(4C)	ADDRESS	4	BDBLBD1	LOGICAL BLOCK NUMBER

UNUSED SPACE FOR FBM PARAMETER LIST
PARAMETER LISTS FOR CKD DEVICES

56	(38)	CHAR-ACTER	24	BDBCKD1 (0)	CKD PARAMETER LISTS

SEEK-COUNT FIELD

56	(38)	CHAR-ACTER	10	BDBSKD1 (0)	SEEK-COUNT FIELD
56	(38)	BITSTRING	2	BDBBBD1	BIN NUMBER
58	(3A)	CHAR-ACTER	8	BDBCNTD1 (0)	COUNT AREA
58	(3A)	BITSTRING	2	BDBCCD1	CYLINDER NUMBER
60	(3C)	CHAR-ACTER	3	BDBHHRD1 (0)	HEAD AND RECORD NUMBER
60	(3C)	BITSTRING	2	BDBHHD1	HEAD NUMBER
62	(3E)	BITSTRING	1	BDBRD1	RECORD NUMBER
63	(3F)	BITSTRING	1	BDBKLD1	KEY LENGTH
64	(40)	BITSTRING	2	BDBDLD1	DATA LENGTH

SECTOR NUMBER FOR RPS DEVICES

66	(42)	BITSTRING	1	BDBSND1	SECTOR NUMBER FOR RPS DEVICES
67	(43)	BITSTRING	1	BDBSNRD1	SECTOR NUMBER READ
68	(44)	BITSTRING	4		UNUSED

Dec	Hex	Type	Len	Name (Dim)	Description
					PARAMETER LISTS FOR ECKD DEVICES
					THE PARAMETER LISTS FOR ECKD DEVICES DO NOT OVERLAY
					THE PARAMETER LISTS FOR FBM/CKD DEVICES BECAUSE SOME
					OF THE CKD PARAMETER WILL BE USED FOR ECKD TOO.
72	(48)	CHAR-ACTER	40	BDBECD1 (0)	ECKD PARAMETER LISTS
					DEFINE EXTENT PARAMETER LIST FOR ECKD CHANNEL PROGRAM
72	(48)	CHAR-ACTER	16	BDBDED1 (0)	DEFINE EXTENT PARAMETER LIST
72	(48)	BITSTRING	1	BDBE0D1	MASK BYTE
		.1.1 1...		BDBEDRD1	"B'01011000'" MASK BYTE FOR ECKD READ
					‖ ++----------- INHIBIT ALL SEEK COMMANDS
					‖ WE WILL ALWAYS OPERATE IN-
					‖ SIDE LOCATE RECORD DOMAINS
					++-------------- INHIBIT ALL WRITES
		...1 1...		BDBEFWD1	"B'00011000'" MASK BYTE FOR ECKD FOR-WRITE
					‖ ++----------- INHIBIT ALL SEEK COMMANDS
					‖ WE WILL ALWAYS OPERATE IN-
					‖ SIDE LOCATE RECORD DOMAINS
					++-------------- PERMIT MOST WRITES
		1..1 1...		BDBEUWD1	"B'10011000'" MASK BYTE FOR ECKD UPD-WRITE
					‖ ++----------- INHIBIT ALL SEEK COMMANDS
					‖ WE WILL ALWAYS OPERATE IN-
					‖ SIDE LOCATE RECORD DOMAINS
					++-------------- PERMIT UPDATE WRITES ONLY
73	(49)	BITSTRING	1	BDBE1D1	GLOBAL ATTRIBUTES
		11.. 1...		BDBEDAD1	"B'11001000'" GLOBAL ATTRIBUTES ECKD READ
					‖‖+++----------- INHIBIT CACHE LOADING
					‖+------------- NOT CKD CONVERSION MODE
					++-------------- ECKD MODE
		11.. 11..		BDBEDSD1	"B'11001100'" GLOBAL ATTRIBUTES ECKD READ
					‖‖+++----------- SEQUENTIAL ACCESS
					‖+------------- NOT CKD CONVERSION MODE
					++-------------- ECKD MODE
		11.. .1..		BDBEDWD1	"B'11000100'" GLOBAL ATTRIBUTES ECKD WRITE
					‖‖+++----------- BYPASS CACHE
					‖+------------- NOT CKD CONVERSION MODE
					++-------------- ECKD MODE
74	(4A)	BITSTRING	2	BDBE2D1	BLOCK SIZE
76	(4C)	BITSTRING	2	BDBE4D1	UNUSED (CACHE FAST WRITE ID)
78	(4E)	BITSTRING	1	BDBE6D1	RESERVED - MUST BE ZERO
79	(4F)	BITSTRING	1	BDBE7D1	RESERVED - IGNORED
80	(50)	BITSTRING	4	BDBE8D1 (0)	BEGINN OF EXTENT
80	(50)	BITSTRING	2	BDBESCD1	ECKD START CC OF EXTENT
82	(52)	BITSTRING	2	BDBESHD1	ECKD START HH OF EXTENT
84	(54)	BITSTRING	4	BDBE12D1 (0)	END OF EXTENT
84	(54)	BITSTRING	2	BDBEECD1	ECKD END CC OF EXTENT
86	(56)	BITSTRING	2	BDBEEHD1	ECKD END HH OF EXTENT
					LOCATE RECORD PARAMETER LIST FOR ECKD CHANNEL PROGRAM
88	(58)	CHAR-ACTER	16	BDBLRD1 (0)	LOCATE RECORD CCW PARAMETER
88	(58)	BITSTRING	1	BDBR0D1	OPERATION BYTE
		...1 .11.		BDBEROD1	"B'00010110'" OPERATION BYTE ECKD READ
					‖‖++++++-------- READ OPERATION
					++-------------- COUNT AREA ORIENTATION
		1... .11.		BDBERRD1	"B'10000110'" OP BYTE ECKD READ REPLICATED

	Offsets				
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
		ll++++++--------- READ DATA OPERATION TO			
		ll CONTINUE ON SAME TRACK			
		++-------------- DATA AREA ORIENTATION			
		11		BDBEWFD1	"B'00000011'" OPERATION BYTE FORM. WRITE
		ll++++++--------- FORMAT WRITE OPERATION			
		++-------------- COUNT AREA ORIENTATION			
		1		BDBEWUD1	"B'00000001'" OPERATION BYTE UPDATE WRITE
		ll++++++--------- WRITE DATA OPERATION			
		++-------------- COUNT AREA ORIENTATION			
89	(59)	BITSTRING	1	BDBR1D1	AUXILIARY BYTE
		1...		BDBTYD1	"B'10000000'" AUXILIARY BYTE
		+--------------- BYTE 14-15 CONTAIN A TLF			
90	(5A)	BITSTRING	1	BDBR2D1	RESERVED - MUST BE ZERO
91	(5B)	BITSTRING	1	BDBR3D1	COUNT OF CCWS IN THIS DOMAIN
92	(5C)	BITSTRING	4	BDBR4D1 (0)	SEEK ADDRESS
92	(5C)	BITSTRING	2	BDBRSCD1	SEEK CC
94	(5E)	BITSTRING	2	BDBRSHD1	SEEK HH
96	(60)	BITSTRING	5	BDBR8D1 (0)	SEARCH ARGUMENT
96	(60)	BITSTRING	2	BDBRACD1	SEARCH CC
98	(62)	BITSTRING	2	BDBRAHD1	SEARCH HH
100	(64)	BITSTRING	1	BDBRARD1	SEARCH R
101	(65)	BITSTRING	1	BDBESND1	ECKD SECTOR NUMBER
		1111 1111		BDBNSPD1	"X'FF'" SEARCH SN- DEFAULT IS FF MEANS NO SECTOR POSITIONING
102	(66)	BITSTRING	2	BDBTLFD1	TRANSFER LENGTH FIELD
		END OF ECKD LOCATE RECORD PARAMETER LIST			
104	(68)	CHAR-ACTER	8	BDBECFD1	ECKD READ COUNT FIELD OR COUNT FIELD FOR ONE BLOCK WRITE OPERATIONS IN THE CASE OF BACKUP
112	(70)	CHAR-ACTER	1	BDBNRCD1	FULL NUMBER OF READ CCWS
		POINTERS TO ASSOCIATED CCWS			
113	(71)	CHAR-ACTER	16	BDBCCWD1 (0)	POINTERS TO ASSOCIATED CCWS
116	(74)	ADDRESS	4	BDBTICD1	ADDR(2ND TIC CCW IN CP)
116	(74)	ADDRESS	4	BDBLRCD1	ADDR(LOCATE-RECORD CCW)
120	(78)	ADDRESS	4	BDBLSTD1	ADDR(LAST CCW IN CP)
124	(7C)	ADDRESS	4	BDBSCPD1	ADDR(LAST CCW IN SHORT CP)
128	(80)	ADDRESS	4	BDBEBPD1	ADDR(END OF BOUNDARY CCW)
		SECOND DATA REQUEST CONTROL SECTION			
		THE SECOND DATA REQUEST CONTROL SECTION IS NEEDED			
		ONLY FOR CKD DEVICES. IT IS USED ONLY IF THE DATA			
		TO BE READ OR WRITTEN CROSSES A CYLINDER BOUNDARY			
		(FOR BACKUP) OR A TRACK BOUNDARY (FOR RESTORE).			
		IT CONTAINS THE IORB AND CHANNEL PROGRAM PARAMETER			
		LISTS NECESSEARY FOR THE APPROPRIATE I/O OPERATIONS.			
		IT ALSO CONTAINS THE POINTERS NECESSARY TO CONTROL			
		THE CHANNEL PROGRAM SPLITTING FOR THE SECOND I/O			
		OPERATION			
		VSE/VSAM BACKUP/RESTORE - IDCDFB10			
132	(84)	SIGNED	4		
132	(84)	CHAR-ACTER	64	BDBRCSD2 (0)	REQUEST CONTROL SECTION
		IORB FOR I/O REQUESTS OF ASSOCIATED CHANNEL PROGRAM			
132	(84)	CHAR-ACTER	24	BDBIOD2 (0)	I/O REQUEST BLOCK
132	(84)	BITSTRING	2	BDBRSD2	RESIDUAL COUNT

Dec	Hex	Type	Len	Name (Dim)	Description
134	(86)	CHAR-ACTER	4	BDBERD2 (0)	ERROR BYTES
134	(86)	BITSTRING	1	BDBCMD2	1ST COMMUNICATION BYTE
		1...		BDBWTD2	"B'10000000'" TRAFFIC BIT
		..1.		BDBIED2	"B'00100000'" IRRECOVERABLE I/O ERROR
		...1		BDBAED2	"B'00010000'" ACCEPT IRRECOVERABLE I/O ERROR
135	(87)	BITSTRING	1	BDBCM2D2	2ND COMMUNICATION BYTE
		..1.		BDBEOCD2	"X'20'" END OF CYLINDER
136	(88)	BITSTRING	1	BDBCSD2	1ST CSW STATUS BYTE
		.... ..1.		BDBUCD2	"X'02'" UNIT CHECK
		1		BDBUED2	"B'00000001'" UNIT EXCEPTION
137	(89)	BITSTRING	1	BDBCS2D2	2ND CSW STATUS BYTE
		.1..		BDBLNED2	"X'40'" LENGTH ERROR
138	(8A)	CHAR-ACTER	2	BDBLUD2 (0)	SYMBOLIC LOGICAL UNIT
138	(8A)	BITSTRING	1	BDBCLD2	LOGICAL UNIT CLASS
		.... .1..		BDBIOBD2	"B'00000100'" IORB INDICATOR
139	(8B)	BITSTRING	1	BDBLND2	LOGICAL UNIT NUMBER
140	(8C)	BITSTRING	1		RESERVED
141	(8D)	ADDRESS	3	BDBCWD2	ADDRESS OF 1ST CCW
144	(90)	BITSTRING	1		3RD COMMUNICATION BYTE
145	(91)	ADDRESS	3	BDBCAD2	VIRTUAL CCW ADDRESS FROM CSW
148	(94)	BITSTRING	1	BDBFXOD2	FIX LIST OPTIONS
		1...		BDBCMPD2	"B'10000000'" COMPRESSED OPTION
		.1..		BDBFIXD2	"B'01000000'" FIXED OPTION
149	(95)	ADDRESS	3	BDBFXLD2	ADDRESS OF FIX LIST
152	(98)	BITSTRING	2		IORB IDENTIFIER
154	(9A)	BITSTRING	2		RESERVED

CHANNEL PROGRAM PARAMETER LISTS

Dec	Hex	Type	Len	Name (Dim)	Description
156	(9C)	CHAR-ACTER	40	BDBPLD2 (0)	CHANNEL PROGRAM PARAMETERS
158	(9E)	BITSTRING	6	BDBDSKD2	DISK ADDRESS FIELD FOR CKD AND FBM

PARAMETER LISTS FOR FBM CHANNEL PROGRAMS

Dec	Hex	Type	Len	Name (Dim)	Description
156	(9C)	CHAR-ACTER	24	BDBFBD2 (0)	FBM CHANNEL PROGRAMS

DEFINE EXTENT PARAMETER LIST FOR FBM CHANNEL PROGRAM

Dec	Hex	Type	Len	Name (Dim)	Description
156	(9C)	CHAR-ACTER	16	BDBDXD2 (0)	DEFINE EXTENT PARAMETER LIST
156	(9C)	BITSTRING	1	BDBMSD2	MASK BYTE
157	(9D)	BITSTRING	1		UNUSED
158	(9E)	BITSTRING	2	BDBBLD2	FBM BLOCK SIZE (ZERO FOR 512)
160	(A0)	ADDRESS	4	BDBPSD2	PHYSICAL START OF EXTENT
164	(A4)	ADDRESS	4	BDBLSD2	LOGICAL START OF EXTENT
168	(A8)	ADDRESS	4	BDBLED2	LOGICAL END OF EXTENT

LOCATE PARAMETER LIST FOR FBM CHANNEL PROGRAM

Dec	Hex	Type	Len	Name (Dim)	Description
172	(AC)	CHAR-ACTER	8	BDBLPD2 (0)	LOCATE-CCW PARAMETER LIST
172	(AC)	BITSTRING	1	BDBOPD2	OPERATIONS BYTE
		1		BDBWRDD2	"B'00000001'" WRITE DATA OPERATION CODE
		.... ..1.		BDBRRDD2	"B'00000010'" READ REPLICATED DATA OP-CODE
		.... .11.		BDBRDDD2	"B'00000110'" READ DATA OPERATION CODE
173	(AD)	BITSTRING	1	BDBRCD2	REPLICATION COUNT
174	(AE)	BITSTRING	2	BDBBCD2	BLOCK COUNT
176	(B0)	ADDRESS	4	BDBLBD2	LOGICAL BLOCK NUMBER

UNUSED SPACE FOR FBM PARAMETER LIST
PARAMETER LISTS FOR CKD DEVICES

Dec	Hex	Type	Len	Name (Dim)	Description
156	(9C)	CHAR-ACTER	24	BDBCKD2 (0)	CKD PARAMETER LISTS

SEEK-COUNT FIELD

Dec	Hex	Type	Len	Name (Dim)	Description
156	(9C)	CHAR- ACTER	10	BDBSKD2 (0)	SEEK-COUNT FIELD
156	(9C)	BITSTRING	2	BDBBBD2	BIN NUMBER
158	(9E)	CHAR- ACTER	8	BDBCNTD2 (0)	COUNT AREA
158	(9E)	BITSTRING	2	BDBCCD2	CYLINDER NUMBER
160	(A0)	CHAR- ACTER	3	BDBHHRD2 (0)	HEAD AND RECORD NUMBER
160	(A0)	BITSTRING	2	BDBHHD2	HEAD NUMBER
162	(A2)	BITSTRING	1	BDBRD2	RECORD NUMBER
163	(A3)	BITSTRING	1	BDBKLD2	KEY LENGTH
164	(A4)	BITSTRING	2	BDBDLD2	DATA LENGTH

SECTOR NUMBER FOR RPS DEVICES

Dec	Hex	Type	Len	Name (Dim)	Description
166	(A6)	BITSTRING	1	BDBSND2	SECTOR NUMBER FOR RPS DEVICES
167	(A7)	BITSTRING	1	BDBSNRD2	SECTOR NUMBER READ
168	(A8)	BITSTRING	4		UNUSED

PARAMETER LISTS FOR ECKD DEVICES
THE PARAMETER LISTS FOR ECKD DEVICES DO NOT OVERLAY
THE PARAMETER LISTS FOR FBM/CKD DEVICES BECAUSE SOME
OF THE CKD PARAMETER WILL BE USED FOR ECKD TOO.

Dec	Hex	Type	Len	Name (Dim)	Description
172	(AC)	CHAR- ACTER	40	BDBECD2 (0)	ECKD PARAMETER LISTS

DEFINE EXTENT PARAMETER LIST FOR ECKD CHANNEL PROGRAM

Dec	Hex	Type	Len	Name (Dim)	Description
172	(AC)	CHAR- ACTER	16	BDBDED2 (0)	DEFINE EXTENT PARAMETER LIST
172	(AC)	BITSTRING	1	BDBE0D2	MASK BYTE
		.1.1 1...		BDBEDRD2	"B'01011000'" MASK BYTE FOR ECKD READ

```
|| ++------------ INHIBIT ALL SEEK COMMANDS
|| WE WILL ALWAYS OPERATE IN-
|| SIDE LOCATE RECORD DOMAINS
++--------------- INHIBIT ALL WRITES
```

Dec	Hex	Type	Len	Name (Dim)	Description
		...1 1...		BDBEFWD2	"B'00011000'" MASK BYTE FOR ECKD FOR-WRITE

```
|| ++------------ INHIBIT ALL SEEK COMMANDS
|| WE WILL ALWAYS OPERATE IN-
|| SIDE LOCATE RECORD DOMAINS
++--------------- PERMIT MOST WRITES
```

Dec	Hex	Type	Len	Name (Dim)	Description
		1..1 1...		BDBEUWD2	"B'10011000'" MASK BYTE FOR ECKD UPD-WRITE

```
|| ++------------ INHIBIT ALL SEEK COMMANDS
|| WE WILL ALWAYS OPERATE IN-
|| SIDE LOCATE RECORD DOMAINS
++--------------- PERMIT UPDATE WRITES ONLY
```

Dec	Hex	Type	Len	Name (Dim)	Description
173	(AD)	BITSTRING	1	BDBE1D2	GLOBAL ATTRIBUTES
		11.. 1...		BDBEDAD2	"B'11001000'" GLOBAL ATTRIBUTES ECKD READ

```
|||+++----------- INHIBIT CACHE LOADING
||+------------- NOT CKD CONVERSION MODE
++-------------- ECKD MODE
```

Dec	Hex	Type	Len	Name (Dim)	Description
		11.. 11..		BDBEDSD2	"B'11001100'" GLOBAL ATTRIBUTES ECKD READ

```
|||+++----------- SEQUENTIAL ACCESS
||+------------- NOT CKD CONVERSION MODE
++-------------- ECKD MODE
```

Dec	Hex	Type	Len	Name (Dim)	Description
		11.. .1..		BDBEDWD2	"B'11000100'" GLOBAL ATTRIBUTES ECKD WRITE

```
|||+++----------- BYPASS CACHE
||+------------- NOT CKD CONVERSION MODE
++-------------- ECKD MODE
```

Dec	Hex	Type	Len	Name (Dim)	Description
174	(AE)	BITSTRING	2	BDBE2D2	BLOCK SIZE
176	(B0)	BITSTRING	2	BDBE4D2	UNUSED (CACHE FAST WRITE ID)
178	(B2)	BITSTRING	1	BDBE6D2	RESERVED - MUST BE ZERO

Dec	Hex	Type	Len	Name (Dim)	Description
179	(B3)	BITSTRING	1	BDBE7D2	RESERVED - IGNORED
180	(B4)	BITSTRING	4	BDBE8D2 (0)	BEGINN OF EXTENT
180	(B4)	BITSTRING	2	BDBESCD2	ECKD START CC OF EXTENT
182	(B6)	BITSTRING	2	BDBESHD2	ECKD START HH OF EXTENT
184	(B8)	BITSTRING	4	BDBE12D2 (0)	END OF EXTENT
184	(B8)	BITSTRING	2	BDBEECD2	ECKD END CC OF EXTENT
186	(BA)	BITSTRING	2	BDBEEHD2	ECKD END HH OF EXTENT

LOCATE RECORD PARAMETER LIST FOR ECKD CHANNEL PROGRAM

Dec	Hex	Type	Len	Name (Dim)	Description
188	(BC)	CHAR-ACTER	16	BDBLRD2 (0)	LOCATE RECORD CCW PARAMETER
188	(BC)	BITSTRING	1	BDBR0D2	OPERATION BYTE
		...1 .11.		BDBEROD2	"B'00010110'" OPERATION BYTE ECKD READ

```
||++++++--------- READ OPERATION
++--------------- COUNT AREA ORIENTATION
```

| | | 1... .11. | | BDBERRD2 | "B'10000110'" OP BYTE ECKD READ REPLICATED |

```
||++++++--------- READ DATA OPERATION TO
|| CONTINUE ON SAME TRACK
++--------------- DATA AREA ORIENTATION
```

| | | .... ..11 | | BDBEWFD2 | "B'00000011'" OPERATION BYTE FORM. WRITE |

```
||++++++--------- FORMAT WRITE OPERATION
++--------------- COUNT AREA ORIENTATION
```

| | | ....1 | | BDBEWUD2 | "B'00000001'" OPERATION BYTE UPDATE WRITE |

```
||++++++--------- WRITE DATA OPERATION
++--------------- COUNT AREA ORIENTATION
```

Dec	Hex	Type	Len	Name (Dim)	Description
189	(BD)	BITSTRING	1	BDBR1D2	AUXILIARY BYTE
		1...		BDBTYD2	"B'10000000'" AUXILIARY BYTE

```
+--------------- BYTE 14-15 CONTAIN A TLF
```

Dec	Hex	Type	Len	Name (Dim)	Description
190	(BE)	BITSTRING	1	BDBR2D2	RESERVED - MUST BE ZERO
191	(BF)	BITSTRING	1	BDBR3D2	COUNT OF CCWS IN THIS DOMAIN
192	(C0)	BITSTRING	4	BDBR4D2 (0)	SEEK ADDRESS
192	(C0)	BITSTRING	2	BDBRSCD2	SEEK CC
194	(C2)	BITSTRING	2	BDBRSHD2	SEEK HH
196	(C4)	BITSTRING	5	BDBR8D2 (0)	SEARCH ARGUMENT
196	(C4)	BITSTRING	2	BDBRACD2	SEARCH CC
198	(C6)	BITSTRING	2	BDBRAHD2	SEARCH HH
200	(C8)	BITSTRING	1	BDBRARD2	SEARCH R
201	(C9)	BITSTRING	1	BDBESND2	ECKD SECTOR NUMBER
		1111 1111		BDBNSPD2	"X'FF'" SEARCH SN- DEFAULT IS FF MEANS NO SECTOR POSITIONING
202	(CA)	BITSTRING	2	BDBTLFD2	TRANSFER LENGTH FIELD

END OF ECKD LOCATE RECORD PARAMETER LIST

Dec	Hex	Type	Len	Name (Dim)	Description
204	(CC)	CHAR-ACTER	8	BDBECFD2	ECKD READ COUNT FIELD OR COUNT FIELD FOR ONE BLOCK WRITE OPERATIONS IN THE CASE OF BACKUP
212	(D4)	CHAR-ACTER	1	BDBNRCD2	FULL NUMBER OF READ CCWS

POINTERS TO ASSOCIATED CCWS

Dec	Hex	Type	Len	Name (Dim)	Description
213	(D5)	CHAR-ACTER	16	BDBCCWD2 (0)	POINTERS TO ASSOCIATED CCWS
216	(D8)	ADDRESS	4	BDBTICD2	ADDR(2ND TIC CCW IN CP)
216	(D8)	ADDRESS	4	BDBLRCD2	ADDR(LOCATE-RECORD CCW)
220	(DC)	ADDRESS	4	BDBLSTD2	ADDR(LAST CCW IN CP)
224	(E0)	ADDRESS	4	BDBSCPD2	ADDR(LAST CCW IN SHORT CP)
228	(E4)	ADDRESS	4	BDBEBPD2	ADDR(END OF BOUNDARY CCW)

INDEX REQUEST CONTROL SECTION
THE INDEX REQUEST CONTROL SECTION CONTAINS THE
IORB AND CHANNEL PROGRAM PARAMETER LISTS NECESSARY
TO PERFORM A SEQUENCE SET READ OPERATION IN CASE
OF BACKUP. THE INDEX REQUEST CONTROL SECTION IS
PRESENT IN CASE OF RESTORE BUT IS NOT USED

VSE/VSAM BACKUP/RESTORE - IDCDFB10

Dec	Hex	Type	Len	Name (Dim)	Description
232	(E8)	SIGNED	4		
232	(E8)	CHAR-ACTER	48	BDBRCSX (0)	REQUEST CONTROL SECTION

IORB FOR I/O REQUESTS OF ASSOCIATED CHANNEL PROGRAM

Dec	Hex	Type	Len	Name (Dim)	Description
232	(E8)	CHAR-ACTER	24	BDBIOX (0)	I/O REQUEST BLOCK
232	(E8)	BITSTRING	2	BDBRSX	RESIDUAL COUNT
234	(EA)	CHAR-ACTER	4	BDBERX (0)	ERROR BYTES
234	(EA)	BITSTRING	1	BDBCMX	1ST COMMUNICATION BYTE
		1...		BDBWTX	"B'10000000'" TRAFFIC BIT
		..1.		BDBIEX	"B'00100000'" IRRECOVERABLE I/O ERROR
		...1		BDBAEX	"B'00010000'" ACCEPT IRRECOVERABLE I/O ERROR
235	(EB)	BITSTRING	1	BDBCM2X	2ND COMMUNICATION BYTE
		..1.		BDBEOCX	"X'20'" END OF CYLINDER
236	(EC)	BITSTRING	1	BDBCSX	1ST CSW STATUS BYTE
		.... ..1.		BDBUCX	"X'02'" UNIT CHECK
		1		BDBUEX	"B'00000001'" UNIT EXCEPTION
237	(ED)	BITSTRING	1	BDBCS2X	2ND CSW STATUS BYTE
		.1..		BDBLNEX	"X'40'" LENGTH ERROR
238	(EE)	CHAR-ACTER	2	BDBLUX (0)	SYMBOLIC LOGICAL UNIT
238	(EE)	BITSTRING	1	BDBCLX	LOGICAL UNIT CLASS
		.... .1..		BDBIOBX	"B'00000100'" IORB INDICATOR
239	(EF)	BITSTRING	1	BDBLNX	LOGICAL UNIT NUMBER
240	(F0)	BITSTRING	1		RESERVED
241	(F1)	ADDRESS	3	BDBCWX	ADDRESS OF 1ST CCW
244	(F4)	BITSTRING	1		3RD COMMUNICATION BYTE
245	(F5)	ADDRESS	3	BDBCAX	VIRTUAL CCW ADDRESS FROM CSW
248	(F8)	BITSTRING	1	BDBFXOX	FIX LIST OPTIONS
		1...		BDBCMPX	"B'10000000'" COMPRESSED OPTION
		.1..		BDBFIXX	"B'01000000'" FIXED OPTION
249	(F9)	ADDRESS	3	BDBFXLX	ADDRESS OF FIX LIST
252	(FC)	BITSTRING	2		IORB IDENTIFIER
254	(FE)	BITSTRING	2		RESERVED

CHANNEL PROGRAM PARAMETER LISTS

Dec	Hex	Type	Len	Name (Dim)	Description
256	(100)	CHAR-ACTER	40	BDBPLX (0)	CHANNEL PROGRAM PARAMETERS
258	(102)	BITSTRING	6	BDBDSKX	DISK ADDRESS FIELD FOR CKD AND FBM

PARAMETER LISTS FOR FBM CHANNEL PROGRAMS

Dec	Hex	Type	Len	Name (Dim)	Description
256	(100)	CHAR-ACTER	24	BDBFBX (0)	FBM CHANNEL PROGRAMS

DEFINE EXTENT PARAMETER LIST FOR FBM CHANNEL PROGRAM

Dec	Hex	Type	Len	Name (Dim)	Description
256	(100)	CHAR-ACTER	16	BDBDXX (0)	DEFINE EXTENT PARAMETER LIST
256	(100)	BITSTRING	1	BDBMSX	MASK BYTE
257	(101)	BITSTRING	1		UNUSED
258	(102)	BITSTRING	2	BDBBLX	FBM BLOCK SIZE (ZERO FOR 512)
260	(104)	ADDRESS	4	BDBPSX	PHYSICAL START OF EXTENT
264	(108)	ADDRESS	4	BDBLSX	LOGICAL START OF EXTENT
268	(10C)	ADDRESS	4	BDBLEX	LOGICAL END OF EXTENT

LOCATE PARAMETER LIST FOR FBM CHANNEL PROGRAM

Dec	Hex	Type	Len	Name (Dim)	Description
272	(110)	CHAR-ACTER	8	BDBLPX (0)	LOCATE-CCW PARAMETER LIST
272	(110)	BITSTRING	1	BDBOPX	OPERATIONS BYTE
		1		BDBWRDX	"B'00000001'" WRITE DATA OPERATION CODE
		.... ..1.		BDBRRDX	"B'00000010'" READ REPLICATED DATA OP-CODE
		.... .11.		BDBRDDX	"B'00000110'" READ DATA OPERATION CODE
273	(111)	BITSTRING	1	BDBRCX	REPLICATION COUNT
274	(112)	BITSTRING	2	BDBBCX	BLOCK COUNT
276	(114)	ADDRESS	4	BDBLBX	LOGICAL BLOCK NUMBER

UNUSED SPACE FOR FBM PARAMETER LIST
PARAMETER LISTS FOR CKD DEVICES

Dec	Hex	Type	Len	Name (Dim)	Description
256	(100)	CHAR-ACTER	24	BDBCKX (0)	CKD PARAMETER LISTS

SEEK-COUNT FIELD

Dec	Hex	Type	Len	Name (Dim)	Description
256	(100)	CHAR-ACTER	10	BDBSKX (0)	SEEK-COUNT FIELD
256	(100)	BITSTRING	2	BDBBBX	BIN NUMBER
258	(102)	CHAR-ACTER	8	BDBCNTX (0)	COUNT AREA
258	(102)	BITSTRING	2	BDBCCX	CYLINDER NUMBER
260	(104)	CHAR-ACTER	3	BDBHHRX (0)	HEAD AND RECORD NUMBER
260	(104)	BITSTRING	2	BDBHHX	HEAD NUMBER
262	(106)	BITSTRING	1	BDBRX	RECORD NUMBER
263	(107)	BITSTRING	1	BDBKLX	KEY LENGTH
264	(108)	BITSTRING	2	BDBDLX	DATA LENGTH

SECTOR NUMBER FOR RPS DEVICES

Dec	Hex	Type	Len	Name (Dim)	Description
266	(10A)	BITSTRING	1	BDBSNX	SECTOR NUMBER FOR RPS DEVICES
267	(10B)	BITSTRING	1	BDBSNRX	SECTOR NUMBER READ
268	(10C)	BITSTRING	4		UNUSED

PARAMETER LISTS FOR ECKD DEVICES
THE PARAMETER LISTS FOR ECKD DEVICES DO NOT OVERLAY
THE PARAMETER LISTS FOR FBM/CKD DEVICES BECAUSE SOME
OF THE CKD PARAMETER WILL BE USED FOR ECKD TOO.

Dec	Hex	Type	Len	Name (Dim)	Description
272	(110)	CHAR-ACTER	40	BDBECX (0)	ECKD PARAMETER LISTS

DEFINE EXTENT PARAMETER LIST FOR ECKD CHANNEL PROGRAM

Dec	Hex	Type	Len	Name (Dim)	Description
272	(110)	CHAR-ACTER	16	BDBDEX (0)	DEFINE EXTENT PARAMETER LIST
272	(110)	BITSTRING	1	BDBE0X	MASK BYTE
		.1.1 1...		BDBEDRX	"B'01011000'" MASK BYTE FOR ECKD READ

```
|| ++------------ INHIBIT ALL SEEK COMMANDS
|| WE WILL ALWAYS OPERATE IN-
|| SIDE LOCATE RECORD DOMAINS
++--------------- INHIBIT ALL WRITES
```

| | | ...1 1... | | BDBEFWX | "B'00011000'" MASK BYTE FOR ECKD FOR-WRITE |

```
|| ++------------ INHIBIT ALL SEEK COMMANDS
|| WE WILL ALWAYS OPERATE IN-
|| SIDE LOCATE RECORD DOMAINS
++--------------- PERMIT MOST WRITES
```

| | | 1..1 1... | | BDBEUWX | "B'10011000'" MASK BYTE FOR ECKD UPD-WRITE |

```
|| ++------------ INHIBIT ALL SEEK COMMANDS
|| WE WILL ALWAYS OPERATE IN-
|| SIDE LOCATE RECORD DOMAINS
++--------------- PERMIT UPDATE WRITES ONLY
```

273	(111)	BITSTRING	1	BDBE1X	GLOBAL ATTRIBUTES
		11.. 1...		BDBEDAX	"B'11001000'" GLOBAL ATTRIBUTES ECKD READ

		|||+++---------- INHIBIT CACHE LOADING			
		||+------------- NOT CKD CONVERSION MODE			
		++-------------- ECKD MODE			
		11.. 11..		BDBEDSX	"B'11001100'" GLOBAL ATTRIBUTES ECKD READ
		|||+++---------- SEQUENTIAL ACCESS			
		||+------------- NOT CKD CONVERSION MODE			
		++-------------- ECKD MODE			
		11.. .1..		BDBEDWX	"B'11000100'" GLOBAL ATTRIBUTES ECKD WRITE
		|||+++---------- BYPASS CACHE			
		||+------------- NOT CKD CONVERSION MODE			
		++-------------- ECKD MODE			
274	(112)	BITSTRING	2	BDBE2X	BLOCK SIZE
276	(114)	BITSTRING	2	BDBE4X	UNUSED (CACHE FAST WRITE ID)
278	(116)	BITSTRING	1	BDBE6X	RESERVED - MUST BE ZERO
279	(117)	BITSTRING	1	BDBE7X	RESERVED - IGNORED
280	(118)	BITSTRING	4	BDBE8X (0)	BEGINN OF EXTENT
280	(118)	BITSTRING	2	BDBESCX	ECKD START CC OF EXTENT
282	(11A)	BITSTRING	2	BDBESHX	ECKD START HH OF EXTENT
284	(11C)	BITSTRING	4	BDBE12X (0)	END OF EXTENT
284	(11C)	BITSTRING	2	BDBEECX	ECKD END CC OF EXTENT
286	(11E)	BITSTRING	2	BDBEEHX	ECKD END HH OF EXTENT
		LOCATE RECORD PARAMETER LIST FOR ECKD CHANNEL PROGRAM			
288	(120)	CHAR-ACTER	16	BDBLRX (0)	LOCATE RECORD CCW PARAMETER
288	(120)	BITSTRING	1	BDBR0X	OPERATION BYTE
		...1 .11.		BDBEROX	"B'00010110'" OPERATION BYTE ECKD READ
		||++++++--------- READ OPERATION			
		++-------------- COUNT AREA ORIENTATION			
		1... .11.		BDBERRX	"B'10000110'" OP BYTE ECKD READ REPLICATED
		||++++++--------- READ DATA OPERATION TO			
		|| CONTINUE ON SAME TRACK			
		++-------------- DATA AREA ORIENTATION			
		11		BDBEWFX	"B'00000011'" OPERATION BYTE FORM. WRITE
		||++++++--------- FORMAT WRITE OPERATION			
		++-------------- COUNT AREA ORIENTATION			
		1		BDBEWUX	"B'00000001'" OPERATION BYTE UPDATE WRITE
		||++++++--------- WRITE DATA OPERATION			
		++-------------- COUNT AREA ORIENTATION			
289	(121)	BITSTRING	1	BDBR1X	AUXILIARY BYTE
		1...		BDBTYX	"B'10000000'" AUXILIARY BYTE
		+--------------- BYTE 14-15 CONTAIN A TLF			
290	(122)	BITSTRING	1	BDBR2X	RESERVED - MUST BE ZERO
291	(123)	BITSTRING	1	BDBR3X	COUNT OF CCWS IN THIS DOMAIN
292	(124)	BITSTRING	4	BDBR4X (0)	SEEK ADDRESS
292	(124)	BITSTRING	2	BDBRSCX	SEEK CC
294	(126)	BITSTRING	2	BDBRSHX	SEEK HH
296	(128)	BITSTRING	5	BDBR8X (0)	SEARCH ARGUMENT
296	(128)	BITSTRING	2	BDBRACX	SEARCH CC
298	(12A)	BITSTRING	2	BDBRAHX	SEARCH HH
300	(12C)	BITSTRING	1	BDBRARX	SEARCH R
301	(12D)	BITSTRING	1	BDBESNX	ECKD SECTOR NUMBER
		1111 1111		BDBNSPX	"X'FF'" SEARCH SN- DEFAULT IS FF MEANS NO SECTOR POSITIONING
302	(12E)	BITSTRING	2	BDBTLFX	TRANSFER LENGTH FIELD
		END OF ECKD LOCATE RECORD PARAMETER LIST			

Dec	Hex	Type	Len	Name (Dim)	Description
304	(130)	CHAR-ACTER	8	BDBECFX	ECKD READ COUNT FIELD OR COUNT FIELD FOR ONE BLOCK WRITE OPERATIONS IN THE CASE OF BACKUP
312	(138)	CHAR-ACTER	1	BDBNRCX	FULL NUMBER OF READ CCWS

TAPE REQUEST CONTROL SECTION
THE TAPE REQUEST CONTROL SECTION CONTAINS THE
IORB NECESSARY IN ORDER TO PERFORM A TAPE
WRITE (BACKUP) OR READ (RESTORE) OPERATION

VSE/VSAM BACKUP/RESTORE - IDCDFB10

Dec	Hex	Type	Len	Name (Dim)	Description
316	(13C)	SIGNED	4		
316	(13C)	CHAR-ACTER	24	BDBRCST (0)	REQUEST CONTROL SECTION

IORB FOR I/O REQUESTS OF ASSOCIATED CHANNEL PROGRAM

Dec	Hex	Type	Len	Name (Dim)	Description
316	(13C)	CHAR-ACTER	24	BDBIOT (0)	I/O REQUEST BLOCK
316	(13C)	BITSTRING	2	BDBRST	RESIDUAL COUNT
318	(13E)	CHAR-ACTER	4	BDBERT (0)	ERROR BYTES
318	(13E)	BITSTRING	1	BDBCMT	1ST COMMUNICATION BYTE
		1...		BDBWTT	"B'10000000'" TRAFFIC BIT
		..1.		BDBIET	"B'00100000'" IRRECOVERABLE I/O ERROR
		...1		BDBAET	"B'00010000'" ACCEPT IRRECOVERABLE I/O ERROR
319	(13F)	BITSTRING	1	BDBCM2T	2ND COMMUNICATION BYTE
		..1.		BDBEOCT	"X'20'" END OF CYLINDER
320	(140)	BITSTRING	1	BDBCST	1ST CSW STATUS BYTE
		.... ..1.		BDBUCT	"X'02'" UNIT CHECK
		1		BDBUET	"B'00000001'" UNIT EXCEPTION
321	(141)	BITSTRING	1	BDBCS2T	2ND CSW STATUS BYTE
		.1..		BDBLNET	"X'40'" LENGTH ERROR
322	(142)	CHAR-ACTER	2	BDBLUT (0)	SYMBOLIC LOGICAL UNIT
322	(142)	BITSTRING	1	BDBCLT	LOGICAL UNIT CLASS
		.... .1..		BDBIOBT	"B'00000100'" IORB INDICATOR
323	(143)	BITSTRING	1	BDBLNT	LOGICAL UNIT NUMBER
324	(144)	BITSTRING	1		RESERVED
325	(145)	ADDRESS	3	BDBCWT	ADDRESS OF 1ST CCW
328	(148)	BITSTRING	1		3RD COMMUNICATION BYTE
329	(149)	ADDRESS	3	BDBCAT	VIRTUAL CCW ADDRESS FROM CSW
332	(14C)	BITSTRING	1	BDBFXOT	FIX LIST OPTIONS
		1...		BDBCMPT	"B'10000000'" COMPRESSED OPTION
		.1..		BDBFIXT	"B'01000000'" FIXED OPTION
333	(14D)	ADDRESS	3	BDBFXLT	ADDRESS OF FIX LIST
336	(150)	BITSTRING	2		IORB IDENTIFIER
338	(152)	BITSTRING	2		RESERVED

THE TAPE REQUEST CONTROL SECTION IS OVERLAID BY A RE-
QUEST CONTROL SECTION USABLE FOR EACH KIND OF BACKUP
FILE (TAPE OR DISK RESIDENT)

VSE/VSAM BACKUP/RESTORE - IDCDFB10

Dec	Hex	Type	Len	Name (Dim)	Description
316	(13C)	SIGNED	4		
316	(13C)	CHAR-ACTER	64	BDBRCSTD (0)	REQUEST CONTROL SECTION

IORB FOR I/O REQUESTS OF ASSOCIATED CHANNEL PROGRAM

Dec	Hex	Type	Len	Name (Dim)	Description
316	(13C)	CHAR-ACTER	24	BDBIOTD (0)	I/O REQUEST BLOCK
316	(13C)	BITSTRING	2	BDBRSTD	RESIDUAL COUNT
318	(13E)	CHAR-ACTER	4	BDBERTD (0)	ERROR BYTES
318	(13E)	BITSTRING	1	BDBCMTD	1ST COMMUNICATION BYTE
		1...		BDBWTTD	"B'10000000'" TRAFFIC BIT
		..1.		BDBIETD	"B'00100000'" IRRECOVERABLE I/O ERROR

Dec	Hex	Type	Len	Name (Dim)	Description
		...1		BDBAETD	"B'00010000'" ACCEPT IRRECOVERABLE I/O ERROR
319	(13F)	BITSTRING	1	BDBCM2TD	2ND COMMUNICATION BYTE
		..1.		BDBEOCTD	"X'20'" END OF CYLINDER
320	(140)	BITSTRING	1	BDBCSTD	1ST CSW STATUS BYTE
		.... ..1.		BDBUCTD	"X'02'" UNIT CHECK
		1		BDBUETD	"B'00000001'" UNIT EXCEPTION
321	(141)	BITSTRING	1	BDBCS2TD	2ND CSW STATUS BYTE
		.1..		BDBLNETD	"X'40'" LENGTH ERROR
322	(142)	CHAR-ACTER	2	BDBLUTD (0)	SYMBOLIC LOGICAL UNIT
322	(142)	BITSTRING	1	BDBCLTD	LOGICAL UNIT CLASS
		.... .1..		BDBIOBTD	"B'00000100'" IORB INDICATOR
323	(143)	BITSTRING	1	BDBLNTD	LOGICAL UNIT NUMBER
324	(144)	BITSTRING	1		RESERVED
325	(145)	ADDRESS	3	BDBCWTD	ADDRESS OF 1ST CCW
328	(148)	BITSTRING	1		3RD COMMUNICATION BYTE
329	(149)	ADDRESS	3	BDBCATD	VIRTUAL CCW ADDRESS FROM CSW
332	(14C)	BITSTRING	1	BDBFXOTD	FIX LIST OPTIONS
		1...		BDBCMPTD	"B'10000000'" COMPRESSED OPTION
		.1..		BDBFIXTD	"B'01000000'" FIXED OPTION
333	(14D)	ADDRESS	3	BDBFXLTD	ADDRESS OF FIX LIST
336	(150)	BITSTRING	2		IORB IDENTIFIER
338	(152)	BITSTRING	2		RESERVED

CHANNEL PROGRAM PARAMETER LISTS

Dec	Hex	Type	Len	Name (Dim)	Description
340	(154)	CHAR-ACTER	40	BDBPLTD (0)	CHANNEL PROGRAM PARAMETERS
342	(156)	BITSTRING	6	BDBDSKTD	DISK ADDRESS FIELD FOR CKD AND FBM

PARAMETER LISTS FOR FBM CHANNEL PROGRAMS

Dec	Hex	Type	Len	Name (Dim)	Description
340	(154)	CHAR-ACTER	24	BDBFBTD (0)	FBM CHANNEL PROGRAMS

DEFINE EXTENT PARAMETER LIST FOR FBM CHANNEL PROGRAM

Dec	Hex	Type	Len	Name (Dim)	Description
340	(154)	CHAR-ACTER	16	BDBDXTD (0)	DEFINE EXTENT PARAMETER LIST
340	(154)	BITSTRING	1	BDBMSTD	MASK BYTE
341	(155)	BITSTRING	1		UNUSED
342	(156)	BITSTRING	2	BDBBLTD	FBM BLOCK SIZE (ZERO FOR 512)
344	(158)	ADDRESS	4	BDBPSTD	PHYSICAL START OF EXTENT
348	(15C)	ADDRESS	4	BDBLSTD	LOGICAL START OF EXTENT
352	(160)	ADDRESS	4	BDBLETD	LOGICAL END OF EXTENT

LOCATE PARAMETER LIST FOR FBM CHANNEL PROGRAM

Dec	Hex	Type	Len	Name (Dim)	Description
356	(164)	CHAR-ACTER	8	BDBLPTD (0)	LOCATE-CCW PARAMETER LIST
356	(164)	BITSTRING	1	BDBOPTD	OPERATIONS BYTE
		1		BDBWRDTD	"B'00000001'" WRITE DATA OPERATION CODE
		.... ..1.		BDBRRDTD	"B'00000010'" READ REPLICATED DATA OP-CODE
		.... .11.		BDBRDDTD	"B'00000110'" READ DATA OPERATION CODE
357	(165)	BITSTRING	1	BDBRCTD	REPLICATION COUNT
358	(166)	BITSTRING	2	BDBBCTD	BLOCK COUNT
360	(168)	ADDRESS	4	BDBLBTD	LOGICAL BLOCK NUMBER

UNUSED SPACE FOR FBM PARAMETER LIST
PARAMETER LISTS FOR CKD DEVICES

Dec	Hex	Type	Len	Name (Dim)	Description
340	(154)	CHAR-ACTER	24	BDBCKTD (0)	CKD PARAMETER LISTS

SEEK-COUNT FIELD

Dec	Hex	Type	Len	Name (Dim)	Description
340	(154)	CHAR-ACTER	10	BDBSKTD (0)	SEEK-COUNT FIELD
340	(154)	BITSTRING	2	BDBBBTD	BIN NUMBER
342	(156)	CHAR-ACTER	8	BDBCNTTD (0)	COUNT AREA

Dec	Hex	Type	Len	Name (Dim)	Description
342	(156)	BITSTRING	2	BDBCCTD	CYLINDER NUMBER
344	(158)	CHAR-ACTER	3	BDBHHRTD (0)	HEAD AND RECORD NUMBER
344	(158)	BITSTRING	2	BDBHHTD	HEAD NUMBER
346	(15A)	BITSTRING	1	BDBRTD	RECORD NUMBER
347	(15B)	BITSTRING	1	BDBKLTD	KEY LENGTH
348	(15C)	BITSTRING	2	BDBDLTD	DATA LENGTH

SECTOR NUMBER FOR RPS DEVICES

Dec	Hex	Type	Len	Name (Dim)	Description
350	(15E)	BITSTRING	1	BDBSNTD	SECTOR NUMBER FOR RPS DEVICES
351	(15F)	BITSTRING	1	BDBSNRTD	SECTOR NUMBER READ
352	(160)	BITSTRING	4		UNUSED

PARAMETER LISTS FOR ECKD DEVICES
THE PARAMETER LISTS FOR ECKD DEVICES DO NOT OVERLAY
THE PARAMETER LISTS FOR FBM/CKD DEVICES BECAUSE SOME
OF THE CKD PARAMETER WILL BE USED FOR ECKD TOO.

Dec	Hex	Type	Len	Name (Dim)	Description
356	(164)	CHAR-ACTER	40	BDBECTD (0)	ECKD PARAMETER LISTS

DEFINE EXTENT PARAMETER LIST FOR ECKD CHANNEL PROGRAM

Dec	Hex	Type	Len	Name (Dim)	Description
356	(164)	CHAR-ACTER	16	BDBDETD (0)	DEFINE EXTENT PARAMETER LIST
356	(164)	BITSTRING	1	BDBE0TD	MASK BYTE
		.1.1 1...		BDBEDRTD	"B'01011000'" MASK BYTE FOR ECKD READ

```
|| ++----------- INHIBIT ALL SEEK COMMANDS
|| WE WILL ALWAYS OPERATE IN-
|| SIDE LOCATE RECORD DOMAINS
++--------------- INHIBIT ALL WRITES
```

Dec	Hex	Type	Len	Name (Dim)	Description
		...1 1...		BDBEFWTD	"B'00011000'" MASK BYTE FOR ECKD FOR-WRITE

```
|| ++----------- INHIBIT ALL SEEK COMMANDS
|| WE WILL ALWAYS OPERATE IN-
|| SIDE LOCATE RECORD DOMAINS
++--------------- PERMIT MOST WRITES
```

Dec	Hex	Type	Len	Name (Dim)	Description
		1..1 1...		BDBEUWTD	"B'10011000'" MASK BYTE FOR ECKD UPD-WRITE

```
|| ++----------- INHIBIT ALL SEEK COMMANDS
|| WE WILL ALWAYS OPERATE IN-
|| SIDE LOCATE RECORD DOMAINS
++--------------- PERMIT UPDATE WRITES ONLY
```

Dec	Hex	Type	Len	Name (Dim)	Description
357	(165)	BITSTRING	1	BDBE1TD	GLOBAL ATTRIBUTES
		11.. 1...		BDBEDATD	"B'11001000'" GLOBAL ATTRIBUTES ECKD READ

```
|||+++----------- INHIBIT CACHE LOADING
||+------------- NOT CKD CONVERSION MODE
++--------------- ECKD MODE
```

Dec	Hex	Type	Len	Name (Dim)	Description
		11.. 11..		BDBEDSTD	"B'11001100'" GLOBAL ATTRIBUTES ECKD READ

```
|||+++----------- SEQUENTIAL ACCESS
||+------------- NOT CKD CONVERSION MODE
++--------------- ECKD MODE
```

Dec	Hex	Type	Len	Name (Dim)	Description
		11.. .1..		BDBEDWTD	"B'11000100'" GLOBAL ATTRIBUTES ECKD WRITE

```
|||+++----------- BYPASS CACHE
||+------------- NOT CKD CONVERSION MODE
++--------------- ECKD MODE
```

Dec	Hex	Type	Len	Name (Dim)	Description
358	(166)	BITSTRING	2	BDBE2TD	BLOCK SIZE
360	(168)	BITSTRING	2	BDBE4TD	UNUSED (CACHE FAST WRITE ID)
362	(16A)	BITSTRING	1	BDBE6TD	RESERVED - MUST BE ZERO
363	(16B)	BITSTRING	1	BDBE7TD	RESERVED - IGNORED
364	(16C)	BITSTRING	4	BDBE8TD (0)	BEGINN OF EXTENT
364	(16C)	BITSTRING	2	BDBESCTD	ECKD START CC OF EXTENT
366	(16E)	BITSTRING	2	BDBESHTD	ECKD START HH OF EXTENT
368	(170)	BITSTRING	4	BDBE12TD (0)	END OF EXTENT

Dec	Hex	Type	Len	Name (Dim)	Description
368	(170)	BITSTRING	2	BDBEECTD	ECKD END CC OF EXTENT
370	(172)	BITSTRING	2	BDBEEHTD	ECKD END HH OF EXTENT

LOCATE RECORD PARAMETER LIST FOR ECKD CHANNEL PROGRAM

Dec	Hex	Type	Len	Name (Dim)	Description
372	(174)	CHAR-ACTER	16	BDBLRTD (0)	LOCATE RECORD CCW PARAMETER
372	(174)	BITSTRING	1	BDBR0TD	OPERATION BYTE
		...1 .11.		BDBEROTD	"B'00010110'" OPERATION BYTE ECKD READ

```
||++++++--------- READ OPERATION
++-------------- COUNT AREA ORIENTATION
```

Dec	Hex	Type	Len	Name (Dim)	Description
		1... .11.		BDBERRTD	"B'10000110'" OP BYTE ECKD READ REPLICATED

```
||++++++--------- READ DATA OPERATION TO
|| CONTINUE ON SAME TRACK
++-------------- DATA AREA ORIENTATION
```

Dec	Hex	Type	Len	Name (Dim)	Description
		11		BDBEWFTD	"B'00000011'" OPERATION BYTE FORM. WRITE

```
||++++++--------- FORMAT WRITE OPERATION
++-------------- COUNT AREA ORIENTATION
```

Dec	Hex	Type	Len	Name (Dim)	Description
		1		BDBEWUTD	"B'00000001'" OPERATION BYTE UPDATE WRITE

```
||++++++--------- WRITE DATA OPERATION
++-------------- COUNT AREA ORIENTATION
```

Dec	Hex	Type	Len	Name (Dim)	Description
373	(175)	BITSTRING	1	BDBR1TD	AUXILIARY BYTE
		1...		BDBTYTD	"B'10000000'" AUXILIARY BYTE

```
+--------------- BYTE 14-15 CONTAIN A TLF
```

Dec	Hex	Type	Len	Name (Dim)	Description
374	(176)	BITSTRING	1	BDBR2TD	RESERVED - MUST BE ZERO
375	(177)	BITSTRING	1	BDBR3TD	COUNT OF CCWS IN THIS DOMAIN
376	(178)	BITSTRING	4	BDBR4TD (0)	SEEK ADDRESS
376	(178)	BITSTRING	2	BDBRSCTD	SEEK CC
378	(17A)	BITSTRING	2	BDBRSHTD	SEEK HH
380	(17C)	BITSTRING	5	BDBR8TD (0)	SEARCH ARGUMENT
380	(17C)	BITSTRING	2	BDBRACTD	SEARCH CC
382	(17E)	BITSTRING	2	BDBRAHTD	SEARCH HH
384	(180)	BITSTRING	1	BDBRARTD	SEARCH R
385	(181)	BITSTRING	1	BDBESNTD	ECKD SECTOR NUMBER
		1111 1111		BDBNSPTD	"X'FF'" SEARCH SN- DEFAULT IS FF MEANS NO SECTOR POSITIONING
386	(182)	BITSTRING	2	BDBTLFTD	TRANSFER LENGTH FIELD

END OF ECKD LOCATE RECORD PARAMETER LIST

Dec	Hex	Type	Len	Name (Dim)	Description
388	(184)	CHAR-ACTER	8	BDBECFTD	ECKD READ COUNT FIELD OR COUNT FIELD FOR ONE BLOCK WRITE OPERATIONS IN THE CASE OF BACKUP
396	(18C)	CHAR-ACTER	1	BDBNRCTD	FULL NUMBER OF READ CCWS

POINTERS TO ASSOCIATED CCWS

Dec	Hex	Type	Len	Name (Dim)	Description
397	(18D)	CHAR-ACTER	16	BDBCCWTD (0)	POINTERS TO ASSOCIATED CCWS
400	(190)	ADDRESS	4	BDBTICTD	ADDR(2ND TIC CCW IN CP)
400	(190)	ADDRESS	4	BDBLRCTD	ADDR(LOCATE-RECORD CCW)
404	(194)	ADDRESS	4	BDBLSTTD	ADDR(LAST CCW IN CP)
408	(198)	ADDRESS	4	BDBSCPTD	ADDR(LAST CCW IN SHORT CP)
412	(19C)	ADDRESS	4	BDBEBPTD	ADDR(END OF BOUNDARY CCW)
416	(1A0)	DBL WORD	8		DOUBLE-WORD ALIGNMENT

BDB EQUATES

Dec	Hex	Type	Len	Name (Dim)	Description
		EXPRESSION		BDBLEN	"*-BDB" LENGTH OF BDB

Request Control Section (RCS):

VSE/VSAM BACKUP/RESTORE - IDCDFB10: The Request Control Section contains the following infor-mation:

- an IORB for the associated channel program,
- the I/O parameter lists for the associated channel program,
- pointer to individual CCWs of the associated channel program.

Offsets					
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
IORB FOR I/O REQUESTS OF ASSOCIATED CHANNEL PROGRAM					
0	(0)	CHAR-ACTER	24	RCSIO (0)	I/O REQUEST BLOCK
0	(0)	BITSTRING	2	RCSRS	RESIDUAL COUNT
2	(2)	CHAR-ACTER	4	RCSER (0)	ERROR BYTES
2	(2)	BITSTRING	1	RCSCM	1ST COMMUNICATION BYTE
		1...		RCSWT	"B'10000000'" TRAFFIC BIT
		..1.		RCSIE	"B'00100000'" IRRECOVERABLE I/O ERROR
		...1		RCSAE	"B'00010000'" ACCEPT IRRECOVERABLE I/O ERROR
3	(3)	BITSTRING	1	RCSCM2	2ND COMMUNICATION BYTE
		..1.		RCSEOC	"X'20'" END OF CYLINDER
4	(4)	BITSTRING	1	RCSCS	1ST CSW STATUS BYTE
		.... ..1.		RCSUC	"X'02'" UNIT CHECK
		1		RCSUE	"B'00000001'" UNIT EXCEPTION
5	(5)	BITSTRING	1	RCSCS2	2ND CSW STATUS BYTE
		.1..		RCSLNE	"X'40'" LENGTH ERROR
6	(6)	CHAR-ACTER	2	RCSLU (0)	SYMBOLIC LOGICAL UNIT
6	(6)	BITSTRING	1	RCSCL	LOGICAL UNIT CLASS
		.... .1..		RCSIOB	"B'00000100'" IORB INDICATOR
7	(7)	BITSTRING	1	RCSLN	LOGICAL UNIT NUMBER
8	(8)	BITSTRING	1		RESERVED
9	(9)	ADDRESS	3	RCSCW	ADDRESS OF 1ST CCW
12	(C)	BITSTRING	1		3RD COMMUNICATION BYTE
13	(D)	ADDRESS	3	RCSCA	VIRTUAL CCW ADDRESS FROM CSW
16	(10)	BITSTRING	1	RCSFXO	FIX LIST OPTIONS
		1...		RCSCMP	"B'10000000'" COMPRESSED OPTION
		.1..		RCSFIX	"B'01000000'" FIXED OPTION
17	(11)	ADDRESS	3	RCSFXL	ADDRESS OF FIX LIST
20	(14)	BITSTRING	2		IORB IDENTIFIER
22	(16)	BITSTRING	2		RESERVED
CHANNEL PROGRAM PARAMETER LISTS					
24	(18)	CHAR-ACTER	40	RCSPL (0)	CHANNEL PROGRAM PARAMETERS
26	(1A)	BITSTRING	6	RCSDSK	DISK ADDRESS FIELD FOR CKD AND FBM
PARAMETER LISTS FOR FBM CHANNEL PROGRAMS					
24	(18)	CHAR-ACTER	24	RCSFB (0)	FBM CHANNEL PROGRAMS
DEFINE EXTENT PARAMETER LIST FOR FBM CHANNEL PROGRAM					
24	(18)	CHAR-ACTER	16	RCSDX (0)	DEFINE EXTENT PARAMETER LIST
24	(18)	BITSTRING	1	RCSMS	MASK BYTE
25	(19)	BITSTRING	1		UNUSED
26	(1A)	BITSTRING	2	RCSBL	FBM BLOCK SIZE (ZERO FOR 512)
28	(1C)	ADDRESS	4	RCSPS	PHYSICAL START OF EXTENT
32	(20)	ADDRESS	4	RCSLS	LOGICAL START OF EXTENT
36	(24)	ADDRESS	4	RCSLE	LOGICAL END OF EXTENT
LOCATE PARAMETER LIST FOR FBM CHANNEL PROGRAM					

Dec	Hex	Type	Len	Name (Dim)	Description
40	(28)	CHAR-ACTER	8	RCSLP (0)	LOCATE-CCW PARAMETER LIST
40	(28)	BITSTRING	1	RCSOP	OPERATIONS BYTE
		1		RCSWRD	"B'00000001'" WRITE DATA OPERATION CODE
		.... ..1.		RCSRRD	"B'00000010'" READ REPLICATED DATA OP-CODE
		.... .11.		RCSRDD	"B'00000110'" READ DATA OPERATION CODE
41	(29)	BITSTRING	1	RCSRC	REPLICATION COUNT
42	(2A)	BITSTRING	2	RCSBC	BLOCK COUNT
44	(2C)	ADDRESS	4	RCSLB	LOGICAL BLOCK NUMBER

UNUSED SPACE FOR FBM PARAMETER LIST
PARAMETER LISTS FOR CKD DEVICES

Dec	Hex	Type	Len	Name (Dim)	Description
24	(18)	CHAR-ACTER	24	RCSCK (0)	CKD PARAMETER LISTS

SEEK-COUNT FIELD

Dec	Hex	Type	Len	Name (Dim)	Description
24	(18)	CHAR-ACTER	10	RCSSK (0)	SEEK-COUNT FIELD
24	(18)	BITSTRING	2	RCSBB	BIN NUMBER
26	(1A)	CHAR-ACTER	8	RCSCNT (0)	COUNT AREA
26	(1A)	BITSTRING	2	RCSCC	CYLINDER NUMBER
28	(1C)	CHAR-ACTER	3	RCSHHR (0)	HEAD AND RECORD NUMBER
28	(1C)	BITSTRING	2	RCSHH	HEAD NUMBER
30	(1E)	BITSTRING	1	RCSR	RECORD NUMBER
31	(1F)	BITSTRING	1	RCSKL	KEY LENGTH
32	(20)	BITSTRING	2	RCSDL	DATA LENGTH

SECTOR NUMBER FOR RPS DEVICES

Dec	Hex	Type	Len	Name (Dim)	Description
34	(22)	BITSTRING	1	RCSSN	SECTOR NUMBER FOR RPS DEVICES
35	(23)	BITSTRING	1	RCSSNR	SECTOR NUMBER READ
36	(24)	BITSTRING	4		UNUSED

PARAMETER LISTS FOR ECKD DEVICES
THE PARAMETER LISTS FOR ECKD DEVICES DO NOT OVERLAY
THE PARAMETER LISTS FOR FBM/CKD DEVICES BECAUSE SOME
OF THE CKD PARAMETER WILL BE USED FOR ECKD TOO.

Dec	Hex	Type	Len	Name (Dim)	Description
40	(28)	CHAR-ACTER	40	RCSEC (0)	ECKD PARAMETER LISTS

DEFINE EXTENT PARAMETER LIST FOR ECKD CHANNEL PROGRAM

Dec	Hex	Type	Len	Name (Dim)	Description
40	(28)	CHAR-ACTER	16	RCSDE (0)	DEFINE EXTENT PARAMETER LIST
40	(28)	BITSTRING	1	RCSE0	MASK BYTE
		.1.1 1...		RCSEDR	"B'01011000'" MASK BYTE FOR ECKD READ

```
|| ++------------ INHIBIT ALL SEEK COMMANDS
|| WE WILL ALWAYS OPERATE IN-
|| SIDE LOCATE RECORD DOMAINS
++--------------- INHIBIT ALL WRITES
```

Dec	Hex	Type	Len	Name (Dim)	Description
		...1 1...		RCSEFW	"B'00011000'" MASK BYTE FOR ECKD FOR-WRITE

```
|| ++------------ INHIBIT ALL SEEK COMMANDS
|| WE WILL ALWAYS OPERATE IN-
|| SIDE LOCATE RECORD DOMAINS
++--------------- PERMIT MOST WRITES
```

Dec	Hex	Type	Len	Name (Dim)	Description
		1..1 1...		RCSEUW	"B'10011000'" MASK BYTE FOR ECKD UPD-WRITE

```
|| ++------------ INHIBIT ALL SEEK COMMANDS
|| WE WILL ALWAYS OPERATE IN-
|| SIDE LOCATE RECORD DOMAINS
++--------------- PERMIT UPDATE WRITES ONLY
```

Dec	Hex	Type	Len	Name (Dim)	Description
41	(29)	BITSTRING	1	RCSE1	GLOBAL ATTRIBUTES
		11.. 1...		RCSEDA	"B'11001000'" GLOBAL ATTRIBUTES ECKD READ

Dec	Hex	Type	Len	Name (Dim)	Description

‖‖‖+++----------- INHIBIT CACHE LOADING
‖‖+------------- NOT CKD CONVERSION MODE
++--------------- ECKD MODE

| | | 11.. 11.. | | RCSEDS | "B'11001100'" GLOBAL ATTRIBUTES ECKD READ |

‖‖‖+++----------- SEQUENTIAL ACCESS
‖‖+------------- NOT CKD CONVERSION MODE
++--------------- ECKD MODE

| | | 11.. .1.. | | RCSEDW | "B'11000100'" GLOBAL ATTRIBUTES ECKD WRITE |

‖‖‖+++----------- BYPASS CACHE
‖‖+------------- NOT CKD CONVERSION MODE
++--------------- ECKD MODE

42	(2A)	BITSTRING	2	RCSE2	BLOCK SIZE
44	(2C)	BITSTRING	2	RCSE4	UNUSED (CACHE FAST WRITE ID)
46	(2E)	BITSTRING	1	RCSE6	RESERVED - MUST BE ZERO
47	(2F)	BITSTRING	1	RCSE7	RESERVED - IGNORED
48	(30)	BITSTRING	4	RCSE8 (0)	BEGINN OF EXTENT
48	(30)	BITSTRING	2	RCSESC	ECKD START CC OF EXTENT
50	(32)	BITSTRING	2	RCSESH	ECKD START HH OF EXTENT
52	(34)	BITSTRING	4	RCSE12 (0)	END OF EXTENT
52	(34)	BITSTRING	2	RCSEEC	ECKD END CC OF EXTENT
54	(36)	BITSTRING	2	RCSEEH	ECKD END HH OF EXTENT

LOCATE RECORD PARAMETER LIST FOR ECKD CHANNEL PROGRAM

56	(38)	CHAR-ACTER	16	RCSLR (0)	LOCATE RECORD CCW PARAMETER
56	(38)	BITSTRING	1	RCSR0	OPERATION BYTE
		...1 .11.		RCSERO	"B'00010110'" OPERATION BYTE ECKD READ

‖‖++++++--------- READ OPERATION
++--------------- COUNT AREA ORIENTATION

| | | 1... .11. | | RCSERR | "B'10000110'" OP BYTE ECKD READ REPLICATED |

‖‖++++++--------- READ DATA OPERATION TO
‖ CONTINUE ON SAME TRACK
++--------------- DATA AREA ORIENTATION

| | | .... ..11 | | RCSEWF | "B'00000011'" OPERATION BYTE FORM. WRITE |

‖‖++++++--------- FORMAT WRITE OPERATION
++--------------- COUNT AREA ORIENTATION

| | | ....1 | | RCSEWU | "B'00000001'" OPERATION BYTE UPDATE WRITE |

‖‖++++++--------- WRITE DATA OPERATION
++--------------- COUNT AREA ORIENTATION

| 57 | (39) | BITSTRING | 1 | RCSR1 | AUXILIARY BYTE |
| | | 1... .... | | RCSTY | "B'10000000'" AUXILIARY BYTE |

+--------------- BYTE 14-15 CONTAIN A TLF

58	(3A)	BITSTRING	1	RCSR2	RESERVED - MUST BE ZERO
59	(3B)	BITSTRING	1	RCSR3	COUNT OF CCWS IN THIS DOMAIN
60	(3C)	BITSTRING	4	RCSR4 (0)	SEEK ADDRESS
60	(3C)	BITSTRING	2	RCSRSC	SEEK CC
62	(3E)	BITSTRING	2	RCSRSH	SEEK HH
64	(40)	BITSTRING	5	RCSR8 (0)	SEARCH ARGUMENT
64	(40)	BITSTRING	2	RCSRAC	SEARCH CC
66	(42)	BITSTRING	2	RCSRAH	SEARCH HH
68	(44)	BITSTRING	1	RCSRAR	SEARCH R
69	(45)	BITSTRING	1	RCSESN	ECKD SECTOR NUMBER
		1111 1111		RCSNSP	"X'FF'" SEARCH SN- DEFAULT IS FF MEANS NO SECTOR POSITIONING
70	(46)	BITSTRING	2	RCSTLF	TRANSFER LENGTH FIELD

END OF ECKD LOCATE RECORD PARAMETER LIST

Offsets					
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
72	(48)	CHAR-ACTER	8	RCSECF	ECKD READ COUNT FIELD OR COUNT FIELD FOR ONE BLOCK WRITE OPERATIONS IN THE CASE OF BACKUP
80	(50)	CHAR-ACTER	1	RCSNRC	FULL NUMBER OF READ CCWS

POINTERS TO ASSOCIATED CCWS

81	(51)	CHAR-ACTER	16	RCSCCW (0)	POINTERS TO ASSOCIATED CCWS
84	(54)	ADDRESS	4	RCSTIC	ADDR(2ND TIC CCW IN CP)
84	(54)	ADDRESS	4	RCSLRC	ADDR(LOCATE-RECORD CCW)
88	(58)	ADDRESS	4	RCSLST	ADDR(LAST CCW IN CP)
92	(5C)	ADDRESS	4	RCSSCP	ADDR(LAST CCW IN SHORT CP)
96	(60)	ADDRESS	4	RCSEBP	ADDR(END OF BOUNDARY CCW)

RCS EQUATES

		.11. .1..		RCSLEN	"*-RCS"

Index Buffer Block (XBB):

VSE/VSAM BACKUP/RESTORE - IDCDFB11: Index Buffer Blocks are used to control the index buffers and the channel programs related with the index buffers. The XBB contains the address of the associated buffer, pointers to the associated channel programs, and a request control section containing an IORB and the I/O parameter lists necessary for the I/O requests that are performed for the index buffer associated with the Index Buffer Block.

Offsets Dec	Hex	Type	Len	Name (Dim)	Description
		INDEX BUFFER ASSOCIATED WITH XBB			
0	(0)	ADDRESS	4	XBBBFR	ADDRESS OF ASSOCIATED INDEX BUFFER
		CHANNEL PROGRAM AND COUNT AREA POINTERS			
4	(4)	ADDRESS	4	XBBFWCP	ADDRESS OF FORMAT-WRITE CHANNEL PGM
8	(8)	ADDRESS	4	XBBCNT	ADDRESS OF 1ST COUNT AREA
12	(C)	ADDRESS	4	XBBUWCP	ADDRESS OF UPDATE-WRITE CHANNEL PGM
16	(10)	ADDRESS	4	XBBRDCP	ADDRESS OF READ CHANNEL PROGRAM
20	(14)	CHAR-ACTER	48	XBBRCS (0)	REQUEST CONTROL SECTION
		IORB FOR I/O REQUESTS OF ASSOCIATED CHANNEL PROGRAM			
20	(14)	CHAR-ACTER	24	XBBIO (0)	IORB FOR I/O REQUESTS
20	(14)	BITSTRING	2	XBBRS	RESIDUAL COUNT
22	(16)	CHAR-ACTER	4	XBBER (0)	ERROR BYTES
22	(16)	BITSTRING	1	XBBCM	1ST COMMUNICATION BYTE
		1...		XBBWT	"B'10000000'" TRAFFIC BIT
		..1.		XBBIE	"B'00100000'" IRRECOVERABLE I/O ERROR
		...1		XBBAE	"B'00010000'" ACCEPT IRRECOVERABLE I/O ERROR
23	(17)	BITSTRING	1		2ND COMMUNICATION BYTE
24	(18)	BITSTRING	1	XBBCS	1ST CSW STATUS BYTE
		1		XBBUE	"B'00000001'" UNIT EXCEPTION
25	(19)	BITSTRING	1		2ND CSW STATUS BYTE
26	(1A)	CHAR-ACTER	2	XBBLU (0)	SYMBOLIC LOGICAL UNIT
26	(1A)	BITSTRING	1	XBBCL	LOGICAL UNIT CLASS
27	(1B)	BITSTRING	1	XBBLN	LOGICAL UNIT NUMBER
28	(1C)	BITSTRING	1		RESERVED
29	(1D)	ADDRESS	3	XBBCW	ADDRESS OF 1ST CCW
32	(20)	BITSTRING	1		3RD COMMUNICATION BYTE
33	(21)	ADDRESS	3	XBBCA	VIRTUAL CCW ADDRESS FROM CSW
36	(24)	BITSTRING	1	XBBFXO	FIX LIST OPTIONS
		1...		XBBCMP	"B'10000000'" COMPRESSED OPTION
		.1..		XBBFIX	"B'01000000'" FIXED OPTION
37	(25)	ADDRESS	3	XBBFXL	ADDRESS OF FIX LIST
40	(28)	BITSTRING	2		IORB IDENTIFIER
42	(2A)	BITSTRING	2		RESERVED
		CHANNEL PROGRAM PARAMETER LISTS			
44	(2C)	CHAR-ACTER	24	XBBPL (0)	CHANNEL PROGRAM PARAMETER LISTS
46	(2E)	BITSTRING	6	XBBDSK	DISK ADDRESS FIELD FOR CKD AND FBM
		PARAMETER LISTS FOR FBM CHANNEL PROGRAMS			
44	(2C)	CHAR-ACTER	24	XBBFB (0)	FBM CHANNEL PROGRAMS
		DEFINE EXTENT PARAMETER LIST FOR FBM CHANNEL PROGRAM			
44	(2C)	CHAR-ACTER	16	XBBDX (0)	DEFINE EXTENT PARAMETER LIST
44	(2C)	BITSTRING	1	XBBMS	MASK BYTE
45	(2D)	BITSTRING	1		UNUSED
46	(2E)	BITSTRING	2	XBBBL	FBM BLOCK SIZE (ZERO FOR 512)

Dec	Hex	Type	Len	Name (Dim)	Description
48	(30)	ADDRESS	4	XBBPS	PHYSICAL START OF EXTENT
52	(34)	ADDRESS	4	XBBLS	LOGICAL START OF EXTENT
56	(38)	ADDRESS	4	XBBLE	LOGICAL END OF EXTENT

LOCATE PARAMETER LIST FOR FBM CHANNEL PROGRAM

Dec	Hex	Type	Len	Name (Dim)	Description
60	(3C)	CHAR-ACTER	8	XBBLP (0)	LOCATE-CCW PARAMETER LIST
60	(3C)	BITSTRING	1	XBBOP	OPERATIONS BYTE
		1		XBBWRD	"B'00000001'" WRITE DATA OPERATION CODE
		.... ..1.		XBBRRD	"B'00000010'" READ REPLICATED DATA OP-CODE
		.... .11.		XBBRDD	"B'00000110'" READ DATA OPERATION CODE
61	(3D)	BITSTRING	1	XBBRC	REPLICATION COUNT
62	(3E)	BITSTRING	2	XBBBC	BLOCK COUNT
64	(40)	ADDRESS	4	XBBLB	LOGICAL BLOCK NUMBER

PARAMETER LISTS FOR CKD DEVICES
THE PARAMETER LISTS FOR CKD DEVICES OVERLAY THE
THE PARAMETER LISTS FOR FBM DEVICES BECAUSE THEY
ARE NOT NEEDED CONCURRENTLY

Dec	Hex	Type	Len	Name (Dim)	Description
44	(2C)	CHAR-ACTER	24	XBBCK (0)	CKD PARAMETER LISTS

SEEK-COUNT FIELD

Dec	Hex	Type	Len	Name (Dim)	Description
44	(2C)	CHAR-ACTER	10	XBBSK (0)	SEEK-COUNT FIELD
44	(2C)	BITSTRING	2	XBBBB	BIN NUMBER
46	(2E)	CHAR-ACTER	8	XBBCNTA (0)	COUNT AREA
46	(2E)	BITSTRING	2	XBBCC	CYLINDER NUMBER
48	(30)	CHAR-ACTER	3	XBBHHR (0)	HEAD AND RECORD NUMBER
48	(30)	BITSTRING	2	XBBHH	HEAD NUMBER
50	(32)	BITSTRING	1	XBBR	RECORD NUMBER
51	(33)	BITSTRING	1	XBBKL	KEY LENGTH
52	(34)	BITSTRING	2	XBBDL	DATA LENGTH

SECTOR NUMBER FOR RPS DEVICES

Dec	Hex	Type	Len	Name (Dim)	Description
54	(36)	BITSTRING	1	XBBSN	SECTOR NUMBER FOR RPS DEVICES
55	(37)	BITSTRING	1		UNUSED

PARAMETER LISTS FOR ECKD DEVICES
THE PARAMETER LISTS FOR ECKD DEVICES DO NOT OVERLAY
THE PARAMETER LISTS FOR FBM/CKD DEVICES BECAUSE SOME
OF THE CKD PARAMETERS WILL BE USED FOR ECKD TOO.

Dec	Hex	Type	Len	Name (Dim)	Description
56	(38)	CHAR-ACTER	40	XBBEC (0)	ECKD PARAMETER LISTS

DEFINE EXTENT PARAMETER LIST FOR ECKD CHANNEL PROGRAM

Dec	Hex	Type	Len	Name (Dim)	Description
56	(38)	CHAR-ACTER	16	XBBDE (0)	DEFINE EXTENT PARAMETER LIST
56	(38)	BITSTRING	1		XBBE0	MASK BYTE
		.1.1 1...		XBBEDR	"B'01011000'" MASK BYTE FOR ECKD READ

```
|| ++------------ INHIBIT ALL SEEK COMMANDS
|| WE WILL ALWAYS OPERATE IN-
|| SIDE LOCATE RECORD DOMAINS
++--------------- INHIBIT ALL WRITES
```

Dec	Hex	Type	Len	Name (Dim)	Description
		...1 1...		XBBEFW	"B'00011000'" MASK BYTE FOR ECKD FOR-WRITE

```
|| ++------------ INHIBIT ALL SEEK COMMANDS
|| WE WILL ALWAYS OPERATE IN-
|| SIDE LOCATE RECORD DOMAINS
++--------------- PERMIT MOST WRITES
```

Dec	Hex	Type	Len	Name (Dim)	Description
		1..1 1...		XBBEUW	"B'10011000'" MASK BYTE FOR ECKD UPD-WRITE

Offsets					
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
		‖ ++------------ INHIBIT ALL SEEK COMMANDS ‖ WE WILL ALWAYS OPERATE IN- ‖ SIDE LOCATE RECORD DOMAINS ++--------------- PERMIT UPDATE WRITES ONLY			
57	(39)	BITSTRING 11.. 1...	1	XBBE1 XBBEDA	GLOBAL ATTRIBUTES "B'11001000'" GLOBAL ATTRIBUTES ECKD READ
		‖‖‖+++----------- INHIBIT CACHE LOADING ‖+-------------- NOT CKD CONVERSION MODE ++--------------- ECKD MODE			
		11.. .1..		XBBEDW	"B'11000100'" GLOBAL ATTRIBUTES ECKD WRITE
		‖‖‖+++----------- BYPASS CACHE ‖+-------------- NOT CKD CONVERSION MODE ++--------------- ECKD MODE			
58	(3A)	BITSTRING	2	XBBE2	BLOCK SIZE
60	(3C)	BITSTRING	2	XBBE4	UNUSED (CACHE FAST WRITE ID)
62	(3E)	BITSTRING	1	XBBE6	RESERVED - MUST BE ZERO
63	(3F)	BITSTRING	1	XBBE7	RESERVED - IGNORED
64	(40)	BITSTRING	4	XBBE8 (0)	BEGINN OF EXTENT
64	(40)	BITSTRING	2	XBBESC	ECKD START CC OF EXTENT
66	(42)	BITSTRING	2	XBBESH	ECKD START HH OF EXTENT
68	(44)	BITSTRING	4	XBBE12 (0)	END OF EXTENT
68	(44)	BITSTRING	2	XBBEEC	ECKD END CC OF EXTENT
70	(46)	BITSTRING	2	XBBEEH	ECKD END HH OF EXTENT
		LOCATE RECORD PARAMETER LIST FOR ECKD CHANNEL PROGRAM			
72	(48)	CHAR- ACTER	16	XBBLR (0)	LOCATE RECORD CCW PARAMETER
72	(48)	BITSTRING ...1 .11.	1	XBBR0 XBBERO	OPERATION BYTE "B'00010110'" OPERATION BYTE ECKD READ
		‖‖++++++--------- READ OPERATION ++--------------- COUNT AREA ORIENTATION			
		1... .11.		XBBERR	"B'10000110'" OP BYTE ECKD READ REPLICATED
		‖‖++++++--------- READ DATA OPERATION TO ‖ CONTINUE ON SAME TRACK ++--------------- DATA AREA ORIENTATION			
		11		XBBEWF	"B'00000011'" OPERATION BYTE FORM. WRITE
		‖‖++++++--------- FORMAT WRITE OPERATION ++--------------- COUNT AREA ORIENTATION			
		1		XBBEWU	"B'00000001'" OPERATION BYTE UPDATE WRITE
		‖‖++++++--------- WRITE DATA OPERATION ++--------------- COUNT AREA ORIENTATION			
73	(49)	BITSTRING 1...	1	XBBR1 XBBTY	AUXILIARY BYTE "B'10000000'" AUXILIARY BYTE
		+---------------- BYTE 14-15 CONTAIN A TLF			
74	(4A)	BITSTRING	1	XBBR2	RESERVED - MUST BE ZERO
75	(4B)	BITSTRING	1	XBBR3	COUNT OF CCWS IN THIS DOMAIN
76	(4C)	BITSTRING	4	XBBR4 (0)	SEEK ADDRESS
76	(4C)	BITSTRING	2	XBBRSC	SEEK CC
78	(4E)	BITSTRING	2	XBBRSH	SEEK HH
80	(50)	BITSTRING	5	XBBR8 (0)	SEARCH ARGUMENT
80	(50)	BITSTRING	2	XBBRAC	SEARCH CC
82	(52)	BITSTRING	2	XBBRAH	SEARCH HH
84	(54)	BITSTRING	1	XBBRAR	SEARCH R
85	(55)	BITSTRING 1111 1111	1	XBBESN XBBNSP	ECKD SECTOR NUMBER "X'FF'" SEARCH SN- DEFAULT IS FF MEANS NO SECTOR POSITIONING
86	(56)	BITSTRING	2	XBBTLF	TRANSFER LENGTH FIELD

Dec	Hex	Type	Len	Name (Dim)	Description
		END OF ECKD LOCATE RECORD PARAMETER LIST			
88	(58)	CHAR-ACTER	1	XBBCNTFW	FULL DOMAIN COUNT FORM.WRITE
89	(59)	CHAR-ACTER	1	XBBCNTUW	FULL DOMAIN COUNT UPD.-WRITE
90	(5A)	CHAR-ACTER	1	XBBCNTRD	FULL DOMAIN COUNT READ
96	(60)	DBL WORD	8		DOUBLEWORD ALIGNMENT
		XBB EQUATES			
		.11.		XBBLEN	"*-XBB"

Volume List Block (VLB) and Volume List Entry (VLE):

VSE/VSAM BACKUP/RESTORE - IDCDFB15:

Volume List Block (VLB) Layout: This dummy section describes the layout of a Volume List Block. The Volume List Block is used on backup to keep the volume serial numbers of the backup file.

Offsets					
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
0	(0)	ADDRESS	4	VLBNVLB	ADDRESS OF NEXT VOLUME LIST BLOCK
4	(4)	ADDRESS	4	VLBPVLB	ADDRESS OF PREV VOLUME LIST BLOCK
		...1 .1..		VLBNVLE	"20" NUMBER OF ENTRIES IN VLB
8	(8)	BITSTRING	6	VLBELST (0)	VLB ENTRY LIST
		1...		VLBEND	"*" END OF VOLUME LIST BLOCK

VLB EQUATES					
		1...		VLBLEN	"*-VLB" LENGTH OF VOLUME LIST BLOCK

VOLUME LIST ENTRY (VLE) LAYOUT
THIS DUMMY SECTION DESCRIBES THE LAYOUT
OF AN ENTRY OF THE VOLUME LIST BLOCK

Offsets					
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
0	(0)	BITSTRING	6	VLEVSR	VOLUME LIST ENTRY

VLE EQUATES					
		.... .11.		VLELEN	"*-VLE" LENGTH OF A VOLUME LIST ENTRY

Channel Command Word (CCW):

VSE/VSAM BACKUP/RESTORE - IDCDFB16: This dummy section describes the layout of a Channel Command Word. It also contains the equates for the individual command codes and the byte counts to be used in connection with the appropriate commands.

Offsets

Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	BITSTRING	1	CCWOP	COMMAND CODE
1	(1)	ADDRESS	3	CCWARG	ARGUMENT ADDRESS
4	(4)	BITSTRING	1	CCWFLAG	COMMAND FLAGS
		1...		CCWDCH	"B'10000000'" DATA CHAINING FLAG
		.1..		CCWCCH	"B'01000000'" COMMAND CHAINING FLAG
		..1.		CCWSLI	"B'00100000'" SUPPRESS INCORRECT LENGTH INDICATION
		...1		CCWSKIP	"B'00010000'" SKIP DATA TRANSFER FLAG
5	(5)	BITSTRING	1		RESERVED
6	(6)	BITSTRING	2	CCWCNT	BYTE COUNT

CCW LENGTH AND SHIFT COUNT

		.... 1...		CCWLEN	"*-CCW" LENGTH OF CCW
		11		CCWSFT	"3" CCW SHIFT COUNT TO CALCULATE LENGTH

COMMAND CODES
TAPE COMMAND CODES

		1		CCWWR	"X'01'" WRITE COMMAND CODE
		.... ..1.		CCWRDF	"X'02'" READ FORWARD COMMAND CODE
		...1 1111		CCWWTM	"X'1F'" WRITE-TAPE-MARK COMMAND CODE
		.... .111		CCWRWD	"X'07'" REWIND COMMAND CODE
		..11 1111		CCWFSF	"X'3F'" FORWARD-SPACE-FILE COMMAND CODE

CKD COMMAND CODES

		...1 ..1.		CCWRDC	"X'12'" READ-COUNT COMMAND CODE
		1..1 ..1.		CCWRDCM	"X'92'" READ-COUNT MT COMMAND CODE
		.... .11.		CCWRDD	"X'06'" READ-DATA COMMAND CODE
		1... .11.		CCWRDM	"X'86'" READ-DATA MULTI-TRACK COMMAND CODE
		..1. ..1.		CCWRS	"X'22'" READ-SECTOR COMMAND CODE
		.... .111		CCWSEEK	"X'07'" SEEK COMMAND CODE
		..1. ..11		CCWSS	"X'23'" SET-SECTOR COMMAND CODE
		..11 ...1		CCWSE	"X'31'" SEARCH-ID-EQUAL COMMAND CODE
		.111 ...1		CCWSHE	"X'71'" SEARCH-ID-HIGH-OR-EQUAL COMMAND CODE
		...1 11.1		CCWWCKD	"X'1D'" WRITE-COUNT-KEY-DATA COMMAND CODE
		.... .1.1		CCWWRD	"X'05'" WRITE-DATA COMMAND CODE

ECKD COMMAND CODES

		.11. ..11		CCWDEX	"X'63'" ECKD DEFINE-EXTENT OPCODE
		.1.. .111		CCWLRC	"X'47'" ECKD LOCATE-RECORD OPCODE
		1..1 11.1		CCWCKDNT	"X'9D'" ECKD WRITE CKD NEXT TRACK
		1... .1.1		CCWWUD	"X'85'" ECKD WRITE UPDATE DATE

FBM COMMAND CODES

		.11. ..11		CCWDFX	"X'63'" DEFINE-EXTENT COMMAND CODE
		.1.. ..11		CCWLOC	"X'43'" LOCATE COMMAND CODE
		.1.. ..1.		CCWFBRD	"X'42'" FBM READ COMMAND CODE
		.1.. ...1		CCWFBWR	"X'41'" FBM WRITE COMMAND CODE

TIC COMMAND CODE

		.... 1...		CCWTIC	"X'08'" TIC COMMAND CODE

BYTE COUNTS

		1		CCWRWCNT	"1" REWIND BYTE COUNT
		1		CCWFSCNT	"1" FORWARD-SPACE-FILE BYTE COUNT
		.... .11.		CCWSKCNT	"6" SEEK BYTE COUNT
		1		CCWSSCNT	"1" SET-SECTOR BYTE COUNT
		1		CCWRSCNT	"1" READ-SECTOR BYTE COUNT
		.... .1.1		CCWSICNT	"5" SEARCH-ID BYTE COUNT

Dec	Hex	Type		Len	Name (Dim)	Description
		....	1...		CCWRDCNT	"8" READ-COUNT BYTE COUNT
		....	...1		CCWTMCNT	"1" WRITE-TAPE-MARK BYTE COUNT
		...1	....		CCWDFCNT	"16" DEFINE-EXTENT BYTE COUNT
		....	1...		CCWLOCNT	"8" LOCATE BYTE COUNT
		...1	....		CCWLRCNT	"16" LOCATE RECORD BYTE COUNT
		....	...1		CCWTICNT	"1" TIC BYTE COUNT

COUNT AREA FOR WRITE-COUNT-KEY-DATA (CNT)
THIS DUMMY SECTION DESCRIBES THE LAYOUT OF THE
COUNT AREA FOR A WRITE-COUNT-KEY-DATA CCW

Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	CHAR-ACTER	4	CNTCCHH (0)	CYLINDER AND HEAD NUMBER
0	(0)	BITSTRING	2	CNTCC	CYLINDER NUMBER
2	(2)	BITSTRING	2	CNTHH	HEAD NUMBER
4	(4)	BITSTRING	1	CNTR	RECORD NUMBER
5	(5)	BITSTRING	1	CNTKL	KEY LENGTH
6	(6)	BITSTRING	2	CNTDD	DATA LENGTH

LENGTH OF COUNT AREA

		.... 1...		CNTLEN	"*-CNT" LENGTH OF COUNT AREA

Volume Characteristics Block (VCTBLK):

VSE/VSAM BACKUP/RESTORE - IDCDFB24:

Volume Characteristics List Entry (VCTENT): This dummy section describes the layout of a Volume Characteristics Table Block. The volume characteristics table is used during backup to save tracks-per-cylinder constants of disk volume that have been processed. The constant is used during conversion of allocation information to device independent units.

Offsets					
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
0	(0)	ADDRESS	4	VCTNLNK	ADDRESS OF NEXT VOLUME LIST BLOCK
4	(4)	ADDRESS	4	VCTPLNK	RESERVED
		 1111		VCTNUME	"15" NUMBER OF ENTRIES IN VCT BLOCK
8	(8)	BITSTRING	8	VCTELST (0)	VCT ENTRY LIST
		1...		VCTEND	"*" END OF VOLUME CHARACTERISTICS BLOCK

VCT EQUATES

		1...		VCTBLEN	"*-VCTBLK" LENGTH OF VOLUME CHARACTERISTICS BLK

VOLUME CHARACTERISTICS ENTRY (VCT) LAYOUT
THIS DUMMY SECTION DESCRIBES THE LAYOUT
OF AN ENTRY OF THE VOLUME CHARACTERISTICS BLOCK

Offsets					
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
0	(0)	BITSTRING	6	VCSER	VOLUME SERIAL NUMBER
6	(6)	SIGNED	2	VCTPC	TRACKS-PER-CYLINDER CONSTANT

VLE EQUATES

		.... 1...		VCTELEN	"*-VCTENT" LENGTH OF VOL CHARACTERISTICS ENTRY

Backup Catalog Area (BCA):

VSE/VSAM BACKUP/RESTORE - IDCDFB30: The backup catalog area contains fields, control blocks, and work areas necessary for the catalog access during the execution of the backup command.

Offsets Dec	Hex	Type	Len	Name (Dim)	Description
		CONTROL BLOCKS, WORK AREAS, AND CHANNEL PROGRAMS FOR THE CATALOG EXCP ACCESS LEVEL			
0	(0)	SIGNED	4	BCAEXCP (0)	EXCP ACCESS BLOCKS, WORKAS, AND CPS
		COMPONENT DEFINITION BLOCK FOR RBA CONVERSION FOR CATALOG EXCP ACCESS			
		VSE/VSAM BACKUP/RESTORE - IDCDFB07			
0	(0)	SIGNED	4	BCACDB (0)	COMPONENT DEFINITION BLOCK
		TYPE OF COMPONENT DEFINITION BLOCK			
0	(0)	BITSTRING	1	BCATYP	DATA COMPONENT DEFINITION BLOCK
		1...		BCADCDB	"B'10000000'" NON-SAM-ESDS DATA CDB
		1... ...1		BCASDCDB	"B'10000001'" SAM-ESDS DATA CDB
1	(1)	BITSTRING	3		NOT USED
		COMPONENT CHARACTERISTICS THIS SECTION OF THE COMPONENT DEFINITION BLOCK CONTAINS LOGICAL AND PHYSICAL CHARACTERISTICS FOR THE COMPONENT DESCRIBED BY THE COMPONENT DEFINITION BLOCK			
4	(4)	CHAR-ACTER	32	BCACCS (0)	COMPONENT CHARACTERISTICS
		DATA COMPONENT BUFFER CHARACTERISTICS THIS SECTION CONTAINS THE CHARACTERISTICS OF THE DATA COMPONENT WHICH INFLUENCE THE CHANNEL PROGRAM CONSTRUCT-ION FOR THE DATA COMPONENT OF THE REPRESENTED OBJECT			
4	(4)	CHAR-ACTER	12	BCADCC (0)	DATA COMPONENT CHARACTERISTICS
4	(4)	CHAR-ACTER	8	BCABCC (0)	BASIC COMPONENT CHARACTERISTICS
4	(4)	BITSTRING	1	BCADVT	DEVICE TYPE IMFORMATION
		1...		BCAFBM	"B'10000000'" FBM DEVICE
		.1..		BCACKD	"B'01000000'" CKD DEVICE
		..1.		BCARPS	"B'00100000'" RPS DEVICE
		.... 1...		BCAECK	"B'00001000'" EXTENDED CKD DEVICE
5	(5)	BITSTRING	1		NOT USED
6	(6)	BITSTRING	2		NOT USED
8	(8)	ADDRESS	4	BCAPBS	PHYSICAL BLOCK SIZE
12	(C)	ADDRESS	4	BCABPI	BLOCK OFFSET DUE TO IMBEDDED SS
16	(10)	SIGNED	4	BCARPF	REPLICATION FACTOR
20	(14)	ADDRESS	4	BCABCV	NUMBER OF BLOCKS PER CNV
24	(18)	SIGNED	4	BCACNV	CONTROL INTERVAL SIZE
28	(1C)	SIGNED	4	BCACNA	CONTROL AREA SIZE
32	(20)	ADDRESS	4	BCABCA	NUMBER OF BLOCKS PER CNA
		DEVICE GEOMETRY			
36	(24)	CHAR-ACTER	4	BCADVG (0)	DEVICE GEOMETRY
36	(24)	SIGNED	2	BCABPT	NUMBER OF BLOCKS PER TRACK
38	(26)	SIGNED	2	BCATPC	NUMBER OF TRACKS PER CYLINDER
		VSAM CONTROL BLOCK POINTERS THIS SECTION CONTAINS THE POINTERS TO THE VSAM INTERNAL CONTROL BLOCKS AND THE RPS TABLE RELEVANT FOR THE COM-PONENT DESCRIBED BY THIS COMPONENT DEFINITION BLOCK			
40	(28)	CHAR-ACTER	24	BCAVCB (0)	VSAM CONTROL BLOCK POINTERS
40	(28)	ADDRESS	4	BCAAMB	ADDRESS OF AMBL

Dec	Hex	Type	Len	Name (Dim)	Description
44	(2C)	ADDRESS	4	BCAAMD	ADDRESS OF COMPONENT AMDSB
48	(30)	ADDRESS	4	BCAARD	ADDRESS OF 1ST COMPONENT ARDB
52	(34)	ADDRESS	4	BCALPM	ADDRESS OF COMPONENT LPMB
56	(38)	ADDRESS	4	BCARPT	ADDRESS OF COMPONENT RPS TABLE
60	(3C)	ADDRESS	4	BCAEDB	ADDRESS OF 1ST COMPONENT EDB

COMPONENT PLACE HOLDER
THIS SECTION CONTAINS INFORMATION RELEVANT FOR THE
CURRENT POSITION IN THE COMPONENT REPRESENTED BY
THE COMPONENT DEFINITION BLOCK

Dec	Hex	Type	Len	Name (Dim)	Description
64	(40)	CHARACTER	36	BCACPH (0)	COMPONENT PLACE HOLDER
64	(40)	ADDRESS	4	BCACEB	CURRENT EDB
68	(44)	ADDRESS	4	BCAELR	CURRENT EXTENT LOW RBA
72	(48)	ADDRESS	4	BCAEHR	CURRENT EXTENT HIGH RBA
76	(4C)	ADDRESS	4	BCAELB	CURRENT EXTENT LOW BBBB
80	(50)	ADDRESS	4	BCARBA	CURRENT RBA
84	(54)	ADDRESS	4	BCAHRB	CURRENT HI-RBA
88	(58)	ADDRESS	4	BCAHUR	CURRENT ARDB HI-USED RBA
92	(5C)	CHARACTER	2	BCALUB (0)	CURRENT SYMBOLIC UNIT ADDRESS
92	(5C)	BITSTRING	1	BCASUC	SYMBOLIC UNIT CLASS
		.... .1..		BCAIOB	"B'00000100'" IORB INDICATOR
93	(5D)	BITSTRING	1	BCASUN	SYMBOLIC UNIT NUMBER

CURRENT DISK ADDRESS FIELD

Dec	Hex	Type	Len	Name (Dim)	Description
94	(5E)	CHARACTER	6	BCADSK (0)	CURRENT DISK ADDRESS

FORMAT OF DISK ADDRESS FIELD FOR CKD DEVICES

Dec	Hex	Type	Len	Name (Dim)	Description
94	(5E)	SIGNED	2	BCACC	CYLINDER NUMBER FOR CKD DEVICES
96	(60)	SIGNED	2	BCAHH	HEAD NUMBER FOR CKD DEVICES
98	(62)	CHARACTER	2	BCARX (0)	RECORD NUMBER PLUS KEY LENGTH
98	(62)	BITSTRING	1	BCAR	RECORD NUMBER
99	(63)	BITSTRING	1	BCAKL	KEY LENGTH (MUST BE ZERO)

FORMAT OF DISK ADDRESS FIELD FOR FBM DEVICES

Dec	Hex	Type	Len	Name (Dim)	Description
94	(5E)	SIGNED	2	BCABL	FBM BLOCK SIZE OR ZERO
96	(60)	ADDRESS	4	BCAPBN	PHYSICAL BLOCK NUMBER

END OF COMPONENT DEFINITION BLOCK

Dec	Hex	Type	Len	Name (Dim)	Description
100	(64)	SIGNED	4	BCAEND (0)	END OF COMPONENT DEFINITION BLOCK

CCB USED FOR EXCP REQUESTS TO THE CATALOG

Dec	Hex	Type	Len	Name (Dim)	Description
100	(64)	CHARACTER	16	BCAIO (0)	I/O REQUEST BLOCK
100	(64)	BITSTRING	2		RESIDUAL COUNT
102	(66)	BITSTRING	1	BCACM	1ST COMMUNICATION BYTE
		1...		BCAWT	"B'10000000'" TRAFFIC BIT
		..1.		BCAIE	"B'00100000'" IRRECOVERABLE I/O ERROR
103	(67)	BITSTRING	1		2ND COMMUNICATION BYTE
104	(68)	BITSTRING	1		1ST CSW STATUS BYTE
105	(69)	BITSTRING	1		2ND CSW STATUS BYTE
106	(6A)	BITSTRING	2	BCALU	SYMBOLIC LOGICAL UNIT
108	(6C)	BITSTRING	1		RESERVED
109	(6D)	ADDRESS	3	BCACW	ADDRESS OF 1ST CCW
112	(70)	BITSTRING	1		3RD COMMUNICATION BYTE
113	(71)	ADDRESS	3		VIRTUAL CCW ADDRESS FROM CSW

PARAMETER LISTS FOR FBM CHANNEL PROGRAMS
USED FOR EXCP REQUESTS TO THE CATALOG

Dec	Hex	Type	Len	Name (Dim)	Description
116	(74)	CHARACTER	24	BCAFBMPL (0)	FBM PARAMETER LISTS

DEFINE EXTENT PARAMETER LIST

Dec	Hex	Type	Len	Name (Dim)	Description
116	(74)	CHAR-ACTER	16	BCADX (0)	DEFINE EXTENT PARAMETER LIST
116	(74)	BITSTRING	1		MASK BYTE
117	(75)	BITSTRING	1		UNUSED
118	(76)	BITSTRING	2		FBM BLOCK SIZE (ZERO FOR 512)
120	(78)	ADDRESS	4	BCAPS	PHYSICAL START OF EXTENT
124	(7C)	ADDRESS	4		LOGICAL START OF EXTENT
128	(80)	ADDRESS	4		LOGICAL END OF EXTENT

LOCATE PARAMETER LIST

Dec	Hex	Type	Len	Name (Dim)	Description
132	(84)	CHAR-ACTER	8	BCALP (0)	LOCATE-CCW PARAMETER LIST
132	(84)	BITSTRING	1		READ-DATA OPERATION CODE
133	(85)	BITSTRING	1		REPLICATION COUNT
134	(86)	BITSTRING	2		BLOCK COUNT
136	(88)	ADDRESS	4		LOGICAL BLOCK NUMBER

PARAMETER LISTS FOR CKD CHANNEL PROGRAMS
USED FOR EXCP REQUESTS TO THE CATALOG

Dec	Hex	Type	Len	Name (Dim)	Description
140	(8C)	CHAR-ACTER	11	BCACKDPL (0)	CKD PARAMETER LISTS

SEEK-COUNT FIELD

Dec	Hex	Type	Len	Name (Dim)	Description
140	(8C)	CHAR-ACTER	10	BCASK (0)	SEEK-COUNT FIELD
140	(8C)	BITSTRING	2		BIN NUMBER
142	(8E)	CHAR-ACTER	6	BCACF (0)	DISK ADDRESS FIELD
142	(8E)	BITSTRING	2		CYLINDER NUMBER
144	(90)	CHAR-ACTER	3		HEAD AND RECORD NUMBER
144	(90)	BITSTRING	2		HEAD NUMBER
146	(92)	BITSTRING	1		RECORD NUMBER
147	(93)	BITSTRING	1		KEY LENGTH
148	(94)	BITSTRING	2		DATA LENGTH

SECTOR NUMBER FOR RPS DEVICES

Dec	Hex	Type	Len	Name (Dim)	Description
150	(96)	BITSTRING	1	BCASN	SECTOR NUMBER FOR RPS DEVICES
151	(97)	BITSTRING	1		UNUSED

CHANNEL PROGRAMS FOR EXCP ACCESS TO CATALOG
IN ORDER TO DETERMINE THE ENTRY NAME AND THE MASTER
PASSWORD OF THE CATALOG OR OF THE BASE CLUSTER OF
AN ALTERNATE INDEX WHICH IS BACKED UP WITHOUT ITS
ASSOCIATED BASE CLUSTER, PHYSICAL IOCS IS USED. THIS
SECTION OF THE CATALOG CONTROL AREA CONTAINS THE
CHANNEL PROGRAMS NECESSARY FOR THE CATALOG ACCESS
FBM CHANNEL PROGRAMS FOR
EXCP ACCESS TO CATALOG

Dec	Hex	Type	Len	Name (Dim)	Description
152	(98)	DBL WORD	8		DOUBLEWORD ALIGNMENT
152	(98)	CHAR-ACTER	24	BCACP0 (0)	FBM CHANNEL PROGRAM
152	(98)	ADDRESS	1		DEFINE-EXTENT COMMAND CODE
153	(99)	ADDRESS	3		ADDRESS OF DEFINE-EXTENT LIST
156	(9C)	ADDRESS	1		COMMAND CHAINING TO LOCATE CCW
157	(9D)	BITSTRING	1		NOT USED
158	(9E)	ADDRESS	2		DEFINE-EXTENT BYTE COUNT
160	(A0)	ADDRESS	1		LOCATE COMMAND CODE
161	(A1)	ADDRESS	3		ADDRESS OF LOCATE-CCW PARM LIST
164	(A4)	ADDRESS	1		COMMAND CHAINING TO READ CCW
165	(A5)	BITSTRING	1		NOT USED
166	(A6)	ADDRESS	2		LOCATE-CCW BYTE COUNT
168	(A8)	ADDRESS	1		FBM READ COMMAND CODE
169	(A9)	ADDRESS	3		ADDRESS OF I/O AREA
172	(AC)	ADDRESS	1		SUPPRESS-INCORRECT-LENGTH

Dec	Hex	Type	Len	Name (Dim)	Description
173	(AD)	BITSTRING	1		NOT USED
174	(AE)	ADDRESS	2		LENGTH OF DATA READ

CKD CHANNEL PROGRAMS FOR
ECXP ACCESS TO CATALOG
PROLOG FOR NON-RPS CKD CHANNEL PROGRAM

Dec	Hex	Type	Len	Name (Dim)	Description
176	(B0)	CHAR-ACTER	16	BCACP1 (0)	NON-RPS CHANNEL PROGAM PROLOG
176	(B0)	ADDRESS	1		SEEK OPERATION CODE
177	(B1)	ADDRESS	3		ADDRESS OF SEEK FIELD
180	(B4)	ADDRESS	1		COMMAND CHAINING TO TIC CCW
181	(B5)	BITSTRING	1		NOT USED
182	(B6)	ADDRESS	2		SEEK BYTE COUNT
184	(B8)	ADDRESS	1		TIC COMMAND CODE
185	(B9)	ADDRESS	3		POINT TO SEARCH CCW
188	(BC)	ADDRESS	1		COMMAND CHAINING TO SEARCH CCW
189	(BD)	BITSTRING	1		NOT USED
190	(BE)	ADDRESS	2		TIC BYTE COUNT

PROLOG FOR RPS CKD CHANNEL PROGRAM

Dec	Hex	Type	Len	Name (Dim)	Description
192	(C0)	CHAR-ACTER	16	BCACP2 (0)	RPS CHANNEL PROGRAM PROLOG
192	(C0)	ADDRESS	1		SEEK OPERATION CODE
193	(C1)	ADDRESS	3		ADDRESS OF SEEK FIELD
196	(C4)	ADDRESS	1		COMMAND CHAINING TO SET-SECTOR CCW
197	(C5)	BITSTRING	1		NOT USED
198	(C6)	ADDRESS	2		SEEK BYTE COUNT
200	(C8)	ADDRESS	1		SET-SECTOR COMMAND CODE
201	(C9)	ADDRESS	3		ADDRESS OF SECTOR FIELD
204	(CC)	ADDRESS	1		COMMAND CHAINING TO SEARCH CCW
205	(CD)	BITSTRING	1		NOT USED
206	(CE)	ADDRESS	2		SET-SECTOR BYTE COUNT

CKD CHANNEL PROGRAM BODY

Dec	Hex	Type	Len	Name (Dim)	Description
208	(D0)	CHAR-ACTER	24	BCACP3 (0)	CKD CHANNEL PROGRAM BODY
208	(D0)	ADDRESS	1		SEARCH-ID-EQUAL COMMAND CODE
209	(D1)	ADDRESS	3		ADDRESS OF COUNT FIELD
212	(D4)	ADDRESS	1		COMMAND CHAINING TO TIC CCW
213	(D5)	BITSTRING	1		NOT USED
214	(D6)	ADDRESS	2		SEARCH-ID BYTE COUNT
216	(D8)	ADDRESS	1		TIC COMMAND CODE
217	(D9)	ADDRESS	3		POINT TIC BACK TO SEARCH-ID CCW
220	(DC)	ADDRESS	1		COMMAND CHAINING TO NEXT CCW
221	(DD)	BITSTRING	1		NOT USED
222	(DE)	ADDRESS	2		TIC BYTE COUNT
224	(E0)	ADDRESS	1		READ-DATA COMMAND CODE
225	(E1)	ADDRESS	3		ADDRESS OF I/O AREA
228	(E4)	ADDRESS	1		SUPPRESS-INCORRECT-LENGTH FLAG
229	(E5)	BITSTRING	1		NOT USED
230	(E6)	ADDRESS	2		LENGTH OF DATA READ

CONTROL BLOCKS AND WORK AREAS FOR THE
CATALOG ACCESS BY MEANS VSAM REQUESTS

Dec	Hex	Type	Len	Name (Dim)	Description
232	(E8)	SIGNED	4	BCAVSAM (0)	VSAM CATALOG ACCESS CBS AND WORKAS

OPEN/CLOSE INTERFACE
FOR VSAM CATALOG ACCESS

Dec	Hex	Type	Len	Name (Dim)	Description
232	(E8)	ADDRESS	4	BCAPACB	ADDRESS OF ACB FOR CATALOG ACCESS

VSAM ACB FOR CATALOG ACCESS
VSAM - ACB - 5686-03702(CF7) - VERSION 2 RELEASE 1.0
VSAM - IKQACB1 - 5686-037(C66) VERSION 2 RELEASE 1.0
VSAM - IKQACBG - 5686-037(C66) - VERSION 2 RELEASE 1.0

Dec	Hex	Type	Len	Name (Dim)	Description
240	(F0)	SIGNED	4	BCAACB (0)	

Dec	Hex	Type	Len	Name (Dim)	Description
240	(F0)	BITSTRING	1		. ACBID
241	(F1)	BITSTRING	1		. ACB SUBTYPE FIELD
242	(F2)	ADDRESS	2		. ACB LENGTH
244	(F4)	ADDRESS	4		. ACBAMBL POINTER
248	(F8)	ADDRESS	4		. VSAM REC.MGT. MODULE ADDRESS
252	(FC)	BITSTRING	1		. TEST & SET BYTE
253	(FD)	BITSTRING	1		. CRA FLAG-BYTE
254	(FE)	ADDRESS	2		. NUMBER OF DATA BUFFERS
256	(100)	ADDRESS	2		. NUMBER OF INDEX BUFFERS
258	(102)	BITSTRING	1		. MACRF(1) BYTE
259	(103)	BITSTRING	1		. MACRF(2) BYTE
260	(104)	ADDRESS	1		. AM/0 DOS DTF ID
261	(105)	BITSTRING	1		. OPEN / CLOSE FLAGS
262	(106)	ADDRESS	1		. NUMBER OF STRINGS
263	(107)	ADDRESS	1		. ERROR FLAGS
264	(108)	ADDRESS	4		. BUFFER SPACE
268	(10C)	CHAR-ACTER	8		. DDNAME
276	(114)	ADDRESS	4		
280	(118)	ADDRESS	4		. PTR TO USER WORK AREA
284	(11C)	ADDRESS	4		. BUFFER ADDRESS
288	(120)	ADDRESS	4		. EXIT LIST POINTER
292	(124)	ADDRESS	4		. PTR TO BAM PARM LIST
296	(128)	ADDRESS	1		. DSN STRING NUMBER
297	(129)	BITSTRING	1		. MORE O/C FLAGS
298	(12A)	ADDRESS	2		. MESSAGE AREA LENGTH
300	(12C)	ADDRESS	4		.
304	(130)	ADDRESS	4		. PTR TO 44 CHAR NAME
308	(134)	BITSTRING	1		. MACRF(3) BYTE
309	(135)	BITSTRING	1		. MACRF(4) BYTE(NOT USED)
310	(136)	ADDRESS	1		SHRPOOL DEFAULT VALUE
311	(137)	BITSTRING	1		. RESERVED 1 BYTE
312	(138)	SIGNED	4		. RESERVED WORD

CATALOG PASSWORD/DSNAME COMBINATION

Dec	Hex	Type	Len	Name (Dim)	Description
316	(13C)	CHAR-ACTER	53	BCACTLG (0)	CATALOG PASSWORD/DSNAME
316	(13C)	CHAR-ACTER	9	BCACTPWD (0)	CATALOG MASTER PASSWORD STRUCTURE
316	(13C)	BITSTRING	1		LENGTH OF PASSWORD
317	(13D)	BITSTRING	8		CATALOG MASTER PASSWORD
325	(145)	CHAR-ACTER	44	BCACTDSN	CATALOG DATA SET NAME
369	(171)	CHAR-ACTER	1		END INDICATOR (MUST BE BLANK)
370	(172)	BITSTRING	2		NOT USED

RPLS FOR VSAM CATALOG ACCESS
RPL FOR HIGH-KEY-RANGE ACCESS
VSAM - RPL - 5745-SC-VCM(G07) - RELEASE 1 MODIFICATION 0
VSAM - IKQRPL1 - 5745-SC-VSM(G07) - RELEASE 1 MODIFICATION 0
VSAM - IKQRPLG - 5745-SC-VSM(G07) - RELEASE 1 MODIFICATION 0

Dec	Hex	Type	Len	Name (Dim)	Description
372	(174)	SIGNED	4	BCARPL1 (0)	
372	(174)	ADDRESS	1		RPL ID FIELD
373	(175)	BITSTRING	1		. RPL SUBTYPE FIELD
374	(176)	ADDRESS	2		RPL LENGTH
376	(178)	BITSTRING	4		. RBA
380	(17C)	ADDRESS	4		. SEARCH ARGUMENT PTR
384	(180)	ADDRESS	4		
388	(184)	ADDRESS	4		. RECORD LENGTH
392	(188)	ADDRESS	4		. I/O AREA LENGTH
396	(18C)	ADDRESS	4		
400	(190)	BITSTRING	1		. STRING ID
401	(191)	BITSTRING	1		REQUEST TYPE
402	(192)	ADDRESS	2		. KEY LENGTH

Dec	Hex	Type	Len	Name (Dim)	Description
404	(194)	BITSTRING	1		OPTCD BYTE 1
405	(195)	BITSTRING	1		OPTCD BYTE 2
406	(196)	ADDRESS	1		. RESERVED
407	(197)	ADDRESS	1		. TEST AND SET BYTE
408	(198)	BITSTRING	1		. FLAG BYTE
409	(199)	BITSTRING	3		FEEDBACK CODES
412	(19C)	ADDRESS	4		. POINTER TO NEXT RPL
416	(1A0)	BITSTRING	1		. AIX FLAG BYTE
417	(1A1)	ADDRESS	1		. RESERVED
418	(1A2)	BITSTRING	2		NUMBER OF POINTERS
420	(1A4)	ADDRESS	1		. TRANSACTION ID
421	(1A5)	ADDRESS	3		. RESERVED

RPL FOR LOW-KEY-RANGE ACCESS
VSAM - RPL - 5745-SC-VCM(G07) - RELEASE 1 MODIFICATION 0
VSAM - IKQRPL1 - 5745-SC-VSM(G07) - RELEASE 1 MODIFICATION 0
VSAM - IKQRPLG - 5745-SC-VSM(G07) - RELEASE 1 MODIFICATION 0

Dec	Hex	Type	Len	Name (Dim)	Description
424	(1A8)	SIGNED	4	BCARPL2 (0)	
424	(1A8)	ADDRESS	1		RPL ID FIELD
425	(1A9)	BITSTRING	1		. RPL SUBTYPE FIELD
426	(1AA)	ADDRESS	2		RPL LENGTH
428	(1AC)	BITSTRING	4		. RBA
432	(1B0)	ADDRESS	4		
436	(1B4)	ADDRESS	4		
440	(1B8)	ADDRESS	4		. RECORD LENGTH
444	(1BC)	ADDRESS	4		. I/O AREA LENGTH
448	(1C0)	ADDRESS	4		
452	(1C4)	BITSTRING	1		. STRING ID
453	(1C5)	BITSTRING	1		REQUEST TYPE
454	(1C6)	ADDRESS	2		. KEY LENGTH
456	(1C8)	BITSTRING	1		OPTCD BYTE 1
457	(1C9)	BITSTRING	1		OPTCD BYTE 2
458	(1CA)	ADDRESS	1		. RESERVED
459	(1CB)	ADDRESS	1		. TEST AND SET BYTE
460	(1CC)	BITSTRING	1		. FLAG BYTE
461	(1CD)	BITSTRING	3		FEEDBACK CODES
464	(1D0)	ADDRESS	4		. POINTER TO NEXT RPL
468	(1D4)	BITSTRING	1		. AIX FLAG BYTE
469	(1D5)	ADDRESS	1		. RESERVED
470	(1D6)	BITSTRING	2		NUMBER OF POINTERS
472	(1D8)	ADDRESS	1		. TRANSACTION ID
473	(1D9)	ADDRESS	3		. RESERVED

ARGUMENT FIELD FOR DIRECT VSAM REQUESTS

Dec	Hex	Type	Len	Name (Dim)	Description
476	(1DC)	ADDRESS	4	BCAARG	ARGUMENT FIELD FOR DIRECT REQUESTS

INPUT AREA FOR CATALOG
HIGH-KEY-RANGE RECORDS

Dec	Hex	Type	Len	Name (Dim)	Description
480	(1E0)	BITSTRING	48	BCAREA1 (0)	AREA FOR HIGH-KEY-RANGE RECORDS
480	(1E0)	CHAR-ACTER	44	BCATRNM	TRUE NAME OF CATALOG RECORD
524	(20C)	BITSTRING	3	BCACIN	LOW-KEY-RANGE RECORD CI-NUMBER
527	(20F)	BITSTRING	1		NOT USED

INPUT AREA FOR CATALOG
LOW-KEY-RANGE RECORDS

Dec	Hex	Type	Len	Name (Dim)	Description
528	(210)	CHAR-ACTER	512	BCAREA2 (0)	AREA FOR LOW-KEY-RANGE RECORDS
528	(210)	BITSTRING	1		MISCELLANEOUS
572	(23C)	CHAR-ACTER	1	BCAENTYP	CATALOG RECORD ENTRY TYPE
		11.. ..11		BCACL	"C'C'" CLUSTER RECORD
		11.. .111		BCAAIX	"C'G'" ALTERNATE INDEX CATALOG RECORD
573	(23D)	BITSTRING	1		MISCELLANEOUS

Dec	Hex	Type	Len	Name (Dim)	Description
					CONTROL BLOCKS AND WORK AREAS FOR LOC-ATING THE ADDRESS OF THE CATALOG ACB
1040	(410)	SIGNED	4	BCACTLC (0)	
					CATALOG PARAMETER LIST IN ORDER TO LOCATE THE ADDRESS OF THE CATALOG ACB
					VSE/VSAM BACKUP/RESTORE -IDCDFB34
1040	(410)	SIGNED	4	CTLPL (0)	CATALOG PARAMETER LIST (CPL)
1040	(410)	BITSTRING	1		BYPASS PASSWORD CHECKING
1041	(411)	BITSTRING	1		SECOND OPTION INDICATOR
1042	(412)	BITSTRING	1		LOCATE REQUEST, ONE CATALOG ONLY
1043	(413)	BITSTRING	1		RESERVED FOR OS
1044	(414)	ADDRESS	4		USER ENTRY ADDRESS
1048	(418)	ADDRESS	4		ADDRESS OF CATALOG DSNAME
1052	(41C)	ADDRESS	4		ADDRESS OF CALLER'S WORK AREA
1056	(420)	BITSTRING	1		CATALOG MANAGEMENT SERVICES OPTIONS
1057	(421)	BITSTRING	1		CRA OPEN FLAGS
1058	(422)	BITSTRING	1		TYPE OF CATALOG RECORD
1059	(423)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFIELD
1060	(424)	BITSTRING	2		MODULE NAME FEEDBACK
1062	(426)	BITSTRING	2		REASON CODE FEEDBACK
1064	(428)	ADDRESS	4		ADDRESS OF CALLER'S PASSWORD
1068	(42C)	ADDRESS	4		ADDRESS OF UCAT FILENAME
1072	(430)	ADDRESS	4		ADDRESS OF CRA FILENAME
1076	(434)	ADDRESS	4		FIELD POINTERS
1076	(434)	ADDRESS	4		1ST FIELD POINTER
					FIELD PARAMETER LIST IN ORDER TO LOC-ATE THE ADDRESS OF THE CATALOG ACB
					VSE/VSAM BACKUP/RESTORE -IDCDFB36
1080	(438)	CHAR-ACTER	24	CTLFL (0)	CATALOG FIELD PARAMETER LIST
1080	(438)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1081	(439)	BITSTRING	1		TEST CONDITION
1082	(43A)	BITSTRING	1		GROUP CODE NUMBER
1083	(43B)	BITSTRING	1		TEST FIELD RESULTS
1084	(43C)	ADDRESS	4		WORK AREA
1088	(440)	ADDRESS	4		ADDRESS OF FIELD NAME
1092	(444)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1096	(448)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1096	(448)	SIGNED	4		DATA LENGTH
1100	(44C)	ADDRESS	4		FIELD POINTER
					FIELD NAME FOR FIELD PARAMETER LIST USED TO LOCATE THE ADDRESS OF THE CATALOG ACB
1104	(450)	CHAR-ACTER	8	CTLACB	CATACB FIELD NAME
					WORK AREA FOR LOCATING THE ADDRESS OF THE CATALOG ACB
1112	(458)	CHAR-ACTER	8	CTLWKA (0)	WORK AREA FOR LOCATING CATACB
1112	(458)	ADDRESS	2		LENGTH OF WORK AREA
1114	(45A)	SIGNED	2		FIELD FOR RETURNED LENGTH
1116	(45C)	ADDRESS	4	CTLPACB	ADDRESS OF CATALOG ACB
					CONTROL BLOCKS AND WORK AREAS FOR LOCATING VOLUME DEVICE CHARACTERISTICS NEEDED TO CONVERT ALLOCATION UNITS.
1120	(460)	SIGNED	4	BCVCTL (0)	

Dec	Hex	Type	Len	Name (Dim)	Description
					CATALOG PARAMETER LIST IN ORDER TO
					LOCATE THE VOLUME DEVICE CHARACTERISTICS.
					VSE/VSAM BACKUP/RESTORE -IDCDFB34
1120	(460)	SIGNED	4	CVCPL (0)	CATALOG PARAMETER LIST (CPL)
1120	(460)	BITSTRING	1		BYPASS AND DSNAME SPECIFIED
1121	(461)	BITSTRING	1		SECOND OPTION INDICATOR
1122	(462)	BITSTRING	1		LOCATE REQUEST, ONE CATALOG ONLY
1123	(463)	BITSTRING	1		RESERVED FOR OS
1124	(464)	ADDRESS	4		USER ENTRY ADDRESS
1128	(468)	ADDRESS	4		ADDRESS OF CATALOG DSNAME
1132	(46C)	ADDRESS	4		ADDRESS OF CALLER'S WORK AREA
1136	(470)	BITSTRING	1		CATALOG MANAGEMENT SERVICES OPTIONS
1137	(471)	BITSTRING	1		CRA OPEN FLAGS
1138	(472)	BITSTRING	1		TYPE OF CATALOG RECORD
1139	(473)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFIELD
1140	(474)	BITSTRING	2		MODULE NAME FEEDBACK
1142	(476)	BITSTRING	2		REASON CODE FEEDBACK
1144	(478)	ADDRESS	4		ADDRESS OF CALLER'S PASSWORD
1148	(47C)	ADDRESS	4		ADDRESS OF UCAT FILENAME
1152	(480)	ADDRESS	4		ADDRESS OF CRA FILENAME
1156	(484)	ADDRESS	4		FIELD POINTERS
1156	(484)	ADDRESS	4		1ST FIELD POINTER
					FIELD PARAMETER LIST IN ORDER TO LOC-
					ATE THE VOLUME DEVICE CHARACTERISTICS.
					VSE/VSAM BACKUP/RESTORE -IDCDFB36
1160	(488)	CHAR-ACTER	24	CVCFL (0)	CATALOG FIELD PARAMETER LIST
1160	(488)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1161	(489)	BITSTRING	1		TEST CONDITION
1162	(48A)	BITSTRING	1		GROUP CODE NUMBER
1163	(48B)	BITSTRING	1		TEST FIELD RESULTS
1164	(48C)	ADDRESS	4		WORK AREA
1168	(490)	ADDRESS	4		ADDRESS OF FIELD NAME
1172	(494)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1176	(498)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1176	(498)	SIGNED	4		DATA LENGTH
1180	(49C)	ADDRESS	4		FIELD POINTER
					FIELD NAME FOR FIELD PARAMETER LIST USED
					TO LOCATE THE VOLUME DEVICE CHARACTERISTICS
1184	(4A0)	CHAR-ACTER	8	CVCNAM	VOLUME DEVICE CHARACTERISTIC
					ENTRY NAME FOR VOLUME DEVICE CHARACTERISTICS LOCATE.
					ENTRY NAME CONSISTS OF VOLUME SERIAL NUMBER PADDED TO
					THE RIGHT WITH ZEROS OUT TO 44 CHARACTERS.
1192	(4A8)	BITSTRING	44	CVCENTN	VOLUME LOCATE ENTRY NAME
					WORK AREA FOR LOCATING THE
					VOLUME DEVICE CHARACTERISTICS
1236	(4D4)	CHAR-ACTER	24	CVCWKA (0)	WORK AREA FOR DEVICE CHAR
1236	(4D4)	ADDRESS	2		LENGTH OF WORK AREA
1238	(4D6)	SIGNED	2		FIELD FOR RETURNED LENGTH
1240	(4D8)	BITSTRING	10		UNUSED CHARACTERISTICS
1250	(4E2)	SIGNED	2	CVCTPC	TRACKS-PER-CYLINDER
1252	(4E4)	BITSTRING	6		UNUSED CHARACTERISTICS

				CONTROL BLOCKS AND WORK AREAS FOR LOCATING THE CATALOG INFORMATION FOR THE OBJECTS BEING BACKED UP LOCATE CONTROL LISTS	
				VSE/VSAM BACKUP/RESTORE -IDCDFB32	
1260	(4EC)	SIGNED	4	LCL1 (0)	LOCATE CONTROL LIST
1260	(4EC)	ADDRESS	4		POINTER TO NEXT LCL
1264	(4F0)	ADDRESS	1		LEVEL OF LOCATE CONTROL LIST
1265	(4F1)	BITSTRING	1		RETURN CODE INFORMATION
1266	(4F2)	BITSTRING	1		OBJECT TYPE
1267	(4F3)	BITSTRING	1		NUMBER OF CPLS USED
1268	(4F4)	CHARACTER	12		FIRST CPL DESCRIPTOR
1268	(4F4)	ADDRESS	4		ADDRESS OF 1ST CPL
1272	(4F8)	ADDRESS	4		ADDRESS OF 1ST CATALOG WORK AREA
1276	(4FC)	SIGNED	4		LENGTH OF 1ST CATALOG WORK AREA
1280	(500)	CHARACTER	12		SECOND CPL DESCRIPTOR
1280	(500)	ADDRESS	4		ADDRESS OF 2ND CPL
1284	(504)	ADDRESS	4		ADDRESS OF 2ND CATALOG WORK AREA
1288	(508)	SIGNED	4		LENGTH OF 2ND CATALOG WORK AREA
1292	(50C)	CHARACTER	12		THIRD CPL DESCRIPTOR
1292	(50C)	ADDRESS	4		ADDRESS OF 3RD CPL
1296	(510)	ADDRESS	4		ADDRESS OF 3RD CATALOG WORK AREA
1300	(514)	SIGNED	4		LENGTH OF 3RD CATALOG WORK AREA
1304	(518)	ADDRESS	4		ADDRESS OF ENTRY NAME
1308	(51C)	ADDRESS	4		ADDRESS OF CI-NUMBER
1312	(520)	ADDRESS	4		ADDRESS OF EXTERNAL DIRECTORY ENTRY
1316	(524)	ADDRESS	4		ADDRESS OF INTERNAL DIRECTORY ENTRY
1320	(528)	ADDRESS	4		ADDRESS OF PARENT STRUCTURE
1324	(52C)	ADDRESS	4		ADDRESS OF PASSWORD
				VSE/VSAM BACKUP/RESTORE -IDCDFB32	
1328	(530)	SIGNED	4	LCL2 (0)	LOCATE CONTROL LIST
1328	(530)	ADDRESS	4		POINTER TO NEXT LCL
1332	(534)	ADDRESS	1		LEVEL OF LOCATE CONTROL LIST
1333	(535)	BITSTRING	1		RETURN CODE INFORMATION
1334	(536)	BITSTRING	1		OBJECT TYPE
1335	(537)	BITSTRING	1		NUMBER OF CPLS USED
1336	(538)	CHARACTER	12		FIRST CPL DESCRIPTOR
1336	(538)	ADDRESS	4		ADDRESS OF 1ST CPL
1340	(53C)	ADDRESS	4		ADDRESS OF 1ST CATALOG WORK AREA
1344	(540)	SIGNED	4		LENGTH OF 1ST CATALOG WORK AREA
1348	(544)	CHARACTER	12		SECOND CPL DESCRIPTOR
1348	(544)	ADDRESS	4		ADDRESS OF 2ND CPL
1352	(548)	ADDRESS	4		ADDRESS OF 2ND CATALOG WORK AREA
1356	(54C)	SIGNED	4		LENGTH OF 2ND CATALOG WORK AREA
1360	(550)	CHARACTER	12		THIRD CPL DESCRIPTOR
1360	(550)	ADDRESS	4		ADDRESS OF 3RD CPL
1364	(554)	ADDRESS	4		ADDRESS OF 3RD CATALOG WORK AREA
1368	(558)	SIGNED	4		LENGTH OF 3RD CATALOG WORK AREA
1372	(55C)	ADDRESS	4		ADDRESS OF ENTRY NAME
1376	(560)	ADDRESS	4		ADDRESS OF CI-NUMBER
1380	(564)	ADDRESS	4		ADDRESS OF EXTERNAL DIRECTORY ENTRY
1384	(568)	ADDRESS	4		ADDRESS OF INTERNAL DIRECTORY ENTRY
1388	(56C)	ADDRESS	4		ADDRESS OF PARENT STRUCTURE
1392	(570)	ADDRESS	4		ADDRESS OF PASSWORD
				VSE/VSAM BACKUP/RESTORE -IDCDFB32	
1396	(574)	SIGNED	4	LCL3 (0)	LOCATE CONTROL LIST

Dec	Hex	Type	Len	Name (Dim)	Description
1396	(574)	ADDRESS	4		POINTER TO NEXT LCL
1400	(578)	ADDRESS	1		LEVEL OF LOCATE CONTROL LIST
1401	(579)	BITSTRING	1		RETURN CODE INFORMATION
1402	(57A)	BITSTRING	1		OBJECT TYPE
1403	(57B)	BITSTRING	1		NUMBER OF CPLS USED
1404	(57C)	CHAR-ACTER	12		FIRST CPL DESCRIPTOR
1404	(57C)	ADDRESS	4		ADDRESS OF 1ST CPL
1408	(580)	ADDRESS	4		ADDRESS OF 1ST CATALOG WORK AREA
1412	(584)	SIGNED	4		LENGTH OF 1ST CATALOG WORK AREA
1416	(588)	CHAR-ACTER	12		SECOND CPL DESCRIPTOR
1416	(588)	ADDRESS	4		ADDRESS OF 2ND CPL
1420	(58C)	ADDRESS	4		ADDRESS OF 2ND CATALOG WORK AREA
1424	(590)	SIGNED	4		LENGTH OF 2ND CATALOG WORK AREA
1428	(594)	CHAR-ACTER	12		THIRD CPL DESCRIPTOR
1428	(594)	ADDRESS	4		ADDRESS OF 3RD CPL
1432	(598)	ADDRESS	4		ADDRESS OF 3RD CATALOG WORK AREA
1436	(59C)	SIGNED	4		LENGTH OF 3RD CATALOG WORK AREA
1440	(5A0)	ADDRESS	4		ADDRESS OF ENTRY NAME
1444	(5A4)	ADDRESS	4		ADDRESS OF CI-NUMBER
1448	(5A8)	ADDRESS	4		ADDRESS OF EXTERNAL DIRECTORY ENTRY
1452	(5AC)	ADDRESS	4		ADDRESS OF INTERNAL DIRECTORY ENTRY
1456	(5B0)	ADDRESS	4		ADDRESS OF PARENT STRUCTURE
1460	(5B4)	ADDRESS	4		ADDRESS OF PASSWORD

PARENT STRUCTURES

Dec	Hex	Type	Len	Name (Dim)	Description
1464	(5B8)	BITSTRING	53	PAR1	LEVEL 1 PARENT STRUCTURE
1517	(5ED)	BITSTRING	53	PAR2	LEVEL 2 PARENT STRUCTURE
1570	(622)	BITSTRING	53	PAR3	LEVEL 3 PARENT STRUCTURE
1623	(657)	BITSTRING	1		NOT USED

CATALOG PARAMETER LISTS FOR LOC-ATING THE CATALOG INFORMATION OF THE OBJECT BEING BACKED UP

VSE/VSAM BACKUP/RESTORE -IDCDFB34

Dec	Hex	Type	Len	Name (Dim)	Description
1624	(658)	SIGNED	4	CPL1 (0)	CATALOG PARAMETER LIST (CPL)
1624	(658)	BITSTRING	1		FIRST OPTION INDICATOR
1625	(659)	BITSTRING	1		SECOND OPTION INDICATOR
1626	(65A)	BITSTRING	1		LOCATE REQUEST, ONE CATALOG ONLY
1627	(65B)	BITSTRING	1		RESERVED FOR OS
1628	(65C)	ADDRESS	4		USER ENTRY ADDRESS
1628	(65C)	ADDRESS	4		ADDRESS OF CALLER'S FVT
1632	(660)	ADDRESS	4		ADDRESS OF CATALOG DSNAME
1636	(664)	ADDRESS	4		ADDRESS OF CALLER'S WORK AREA
1640	(668)	BITSTRING	1		CATALOG MANAGEMENT SERVICES OPTIONS
1641	(669)	BITSTRING	1		CRA OPEN FLAGS
1642	(66A)	BITSTRING	1		TYPE OF CATALOG RECORD
1643	(66B)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFIELD
1644	(66C)	BITSTRING	2		MODULE NAME FEEDBACK
1646	(66E)	BITSTRING	2		REASON CODE FEEDBACK
1648	(670)	ADDRESS	4		ADDRESS OF CALLER'S PASSWORD
1652	(674)	ADDRESS	4		ADDRESS OF UCAT FILENAME
1656	(678)	ADDRESS	4		ADDRESS OF CRA FILENAME
1660	(67C)	ADDRESS	4		FIELD POINTERS
1660	(67C)	ADDRESS	4		1ST FIELD POINTER
1664	(680)	ADDRESS	4		2ND FIELD POINTER
1668	(684)	ADDRESS	4		3RD FIELD POINTER
1672	(688)	ADDRESS	4		4TH FIELD POINTER
1676	(68C)	ADDRESS	4		5TH FIELD POINTER
1680	(690)	ADDRESS	4		6TH FIELD POINTER
1684	(694)	ADDRESS	4		7TH FIELD POINTER
1688	(698)	ADDRESS	4		8TH FIELD POINTER
1692	(69C)	ADDRESS	4		9TH FIELD POINTER

Dec	Hex	Type	Len	Name (Dim)	Description
1696	(6A0)	ADDRESS	4		10TH FIELD POINTER
1700	(6A4)	ADDRESS	4		11TH FIELD POINTER
1704	(6A8)	ADDRESS	4		12TH FIELD POINTER
1708	(6AC)	ADDRESS	4		13TH FIELD POINTER
1712	(6B0)	ADDRESS	4		14TH FIELD POINTER
1716	(6B4)	ADDRESS	4		15TH FIELD POINTER
1720	(6B8)	ADDRESS	4		16TH FIELD POINTER
1724	(6BC)	ADDRESS	4		17TH FIELD POINTER
1728	(6C0)	ADDRESS	4		18TH FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB34

Dec	Hex	Type	Len	Name (Dim)	Description
1732	(6C4)	SIGNED	4	CPL2 (0)	CATALOG PARAMETER LIST (CPL)
1732	(6C4)	BITSTRING	1		FIRST OPTION INDICATOR
1733	(6C5)	BITSTRING	1		SECOND OPTION INDICATOR
1734	(6C6)	BITSTRING	1		LOCATE REQUEST, ONE CATALOG ONLY
1735	(6C7)	BITSTRING	1		RESERVED FOR OS
1736	(6C8)	ADDRESS	4		USER ENTRY ADDRESS
1736	(6C8)	ADDRESS	4		ADDRESS OF CALLER'S FVT
1740	(6CC)	ADDRESS	4		ADDRESS OF CATALOG DSNAME
1744	(6D0)	ADDRESS	4		ADDRESS OF CALLER'S WORK AREA
1748	(6D4)	BITSTRING	1		CATALOG MANAGEMENT SERVICES OPTIONS
1749	(6D5)	BITSTRING	1		CRA OPEN FLAGS
1750	(6D6)	BITSTRING	1		TYPE OF CATALOG RECORD
1751	(6D7)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFIELD
1752	(6D8)	BITSTRING	2		MODULE NAME FEEDBACK
1754	(6DA)	BITSTRING	2		REASON CODE FEEDBACK
1756	(6DC)	ADDRESS	4		ADDRESS OF CALLER'S PASSWORD
1760	(6E0)	ADDRESS	4		ADDRESS OF UCAT FILENAME
1764	(6E4)	ADDRESS	4		ADDRESS OF CRA FILENAME
1768	(6E8)	ADDRESS	4		FIELD POINTERS
1768	(6E8)	ADDRESS	4		1ST FIELD POINTER
1772	(6EC)	ADDRESS	4		2ND FIELD POINTER
1776	(6F0)	ADDRESS	4		3RD FIELD POINTER
1780	(6F4)	ADDRESS	4		4TH FIELD POINTER
1784	(6F8)	ADDRESS	4		5TH FIELD POINTER
1788	(6FC)	ADDRESS	4		6TH FIELD POINTER
1792	(700)	ADDRESS	4		7TH FIELD POINTER
1796	(704)	ADDRESS	4		8TH FIELD POINTER
1800	(708)	ADDRESS	4		9TH FIELD POINTER
1804	(70C)	ADDRESS	4		10TH FIELD POINTER
1808	(710)	ADDRESS	4		11TH FIELD POINTER
1812	(714)	ADDRESS	4		12TH FIELD POINTER
1816	(718)	ADDRESS	4		13TH FIELD POINTER
1820	(71C)	ADDRESS	4		14TH FIELD POINTER
1824	(720)	ADDRESS	4		15TH FIELD POINTER
1828	(724)	ADDRESS	4		16TH FIELD POINTER
1832	(728)	ADDRESS	4		17TH FIELD POINTER
1836	(72C)	ADDRESS	4		18TH FIELD POINTER
1840	(730)	ADDRESS	4		19TH FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB34

Dec	Hex	Type	Len	Name (Dim)	Description
1844	(734)	SIGNED	4	CPL3 (0)	CATALOG PARAMETER LIST (CPL)
1844	(734)	BITSTRING	1		FIRST OPTION INDICATOR
1845	(735)	BITSTRING	1		SECOND OPTION INDICATOR
1846	(736)	BITSTRING	1		LOCATE REQUEST, ONE CATALOG ONLY
1847	(737)	BITSTRING	1		RESERVED FOR OS
1848	(738)	ADDRESS	4		USER ENTRY ADDRESS
1848	(738)	ADDRESS	4		ADDRESS OF CALLER'S FVT
1852	(73C)	ADDRESS	4		ADDRESS OF CATALOG DSNAME
1856	(740)	ADDRESS	4		ADDRESS OF CALLER'S WORK AREA
1860	(744)	BITSTRING	1		CATALOG MANAGEMENT SERVICES OPTIONS
1861	(745)	BITSTRING	1		CRA OPEN FLAGS
1862	(746)	BITSTRING	1		TYPE OF CATALOG RECORD
1863	(747)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFIELD
1864	(748)	BITSTRING	2		MODULE NAME FEEDBACK

Dec	Hex	Type	Len	Name (Dim)	Description
1866	(74A)	BITSTRING	2		REASON CODE FEEDBACK
1868	(74C)	ADDRESS	4		ADDRESS OF CALLER'S PASSWORD
1872	(750)	ADDRESS	4		ADDRESS OF UCAT FILENAME
1876	(754)	ADDRESS	4		ADDRESS OF CRA FILENAME
1880	(758)	ADDRESS	4		FIELD POINTERS
1880	(758)	ADDRESS	4		1ST FIELD POINTER
1884	(75C)	ADDRESS	4		2ND FIELD POINTER
1888	(760)	ADDRESS	4		3RD FIELD POINTER
1892	(764)	ADDRESS	4		4TH FIELD POINTER
1896	(768)	ADDRESS	4		5TH FIELD POINTER
1900	(76C)	ADDRESS	4		6TH FIELD POINTER
1904	(770)	ADDRESS	4		7TH FIELD POINTER
1908	(774)	ADDRESS	4		8TH FIELD POINTER
1912	(778)	ADDRESS	4		9TH FIELD POINTER
1916	(77C)	ADDRESS	4		10TH FIELD POINTER
1920	(780)	ADDRESS	4		11TH FIELD POINTER
1924	(784)	ADDRESS	4		12TH FIELD POINTER
1928	(788)	ADDRESS	4		13TH FIELD POINTER
1932	(78C)	ADDRESS	4		14TH FIELD POINTER
1936	(790)	ADDRESS	4		15TH FIELD POINTER
1940	(794)	ADDRESS	4		16TH FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB34

Dec	Hex	Type	Len	Name (Dim)	Description
1944	(798)	SIGNED	4	CPL4 (0)	CATALOG PARAMETER LIST (CPL)
1944	(798)	BITSTRING	1		FIRST OPTION INDICATOR
1945	(799)	BITSTRING	1		SECOND OPTION INDICATOR
1946	(79A)	BITSTRING	1		LOCATE REQUEST, ONE CATALOG ONLY
1947	(79B)	BITSTRING	1		RESERVED FOR OS
1948	(79C)	ADDRESS	4		USER ENTRY ADDRESS
1948	(79C)	ADDRESS	4		ADDRESS OF CALLER'S FVT
1952	(7A0)	ADDRESS	4		ADDRESS OF CATALOG DSNAME
1956	(7A4)	ADDRESS	4		ADDRESS OF CALLER'S WORK AREA
1960	(7A8)	BITSTRING	1		CATALOG MANAGEMENT SERVICES OPTIONS
1961	(7A9)	BITSTRING	1		CRA OPEN FLAGS
1962	(7AA)	BITSTRING	1		TYPE OF CATALOG RECORD
1963	(7AB)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFIELD
1964	(7AC)	BITSTRING	2		MODULE NAME FEEDBACK
1966	(7AE)	BITSTRING	2		REASON CODE FEEDBACK
1968	(7B0)	ADDRESS	4		ADDRESS OF CALLER'S PASSWORD
1972	(7B4)	ADDRESS	4		ADDRESS OF UCAT FILENAME
1976	(7B8)	ADDRESS	4		ADDRESS OF CRA FILENAME
1980	(7BC)	ADDRESS	4		FIELD POINTERS
1980	(7BC)	ADDRESS	4		1ST FIELD POINTER
1984	(7C0)	ADDRESS	4		2ND FIELD POINTER
1988	(7C4)	ADDRESS	4		3RD FIELD POINTER
1992	(7C8)	ADDRESS	4		4TH FIELD POINTER
1996	(7CC)	ADDRESS	4		5TH FIELD POINTER
2000	(7D0)	ADDRESS	4		6TH FIELD POINTER
2004	(7D4)	ADDRESS	4		7TH FIELD POINTER
2008	(7D8)	ADDRESS	4		8TH FIELD POINTER
2012	(7DC)	ADDRESS	4		9TH FIELD POINTER
2016	(7E0)	ADDRESS	4		10TH FIELD POINTER
2020	(7E4)	ADDRESS	4		11TH FIELD POINTER
2024	(7E8)	ADDRESS	4		12TH FIELD POINTER
2028	(7EC)	ADDRESS	4		13TH FIELD POINTER
2032	(7F0)	ADDRESS	4		14TH FIELD POINTER
2036	(7F4)	ADDRESS	4		15TH FIELD POINTER
2040	(7F8)	ADDRESS	4		16TH FIELD POINTER
2044	(7FC)	ADDRESS	4		17TH FIELD POINTER

FIELD PARAMETER LIST FIELD NAMES

Dec	Hex	Type	Len	Name (Dim)	Description
2048	(800)	CHAR-ACTER	8	FENTYPE	ENTYPE FPL FIELD NAME
2056	(808)	CHAR-ACTER	8	FENTNAME	ENTNAME FPL FIELD NAME

Dec	Hex	Type	Len	Name (Dim)	Description
2064	(810)	CHAR-ACTER	8	FDSATTR	DSATTR FPL FIELD NAME
2072	(818)	CHAR-ACTER	8	FOWNERID	OWNERID FPL FIELD NAME
2080	(820)	CHAR-ACTER	8	FDSETCRD	DSETCRDT FPL FIELD NAME
2088	(828)	CHAR-ACTER	8	FDSETEXD	DSETEXDT FPL FIELD NAME
2096	(830)	CHAR-ACTER	8	FBUFSIZE	BUFSIZE FPL FIELD NAME
2104	(838)	CHAR-ACTER	8	FLRECL	LRECL FPL FIELD NAME
2112	(840)	CHAR-ACTER	8	FSPACPAR	SPACPARM FPL FIELD NAME
2120	(848)	CHAR-ACTER	8	FPASWALL	PASSWALL FPL FIELD NAME
2128	(850)	CHAR-ACTER	8	FLOKEYV	LOKEYV FPL FIELD NAME
2136	(858)	CHAR-ACTER	8	FHIKEYV	HIKEYV FPL FIELD NAME
2144	(860)	CHAR-ACTER	8	FVOLSER	VOLSER FPL FIELD NAME
2152	(868)	CHAR-ACTER	8	FAMDSB	AMDSBCAT FPL FIELD NAME
2160	(870)	CHAR-ACTER	8	FEXCPXIT	EXCPEXIT FPL FIELD NAME
2168	(878)	CHAR-ACTER	8	FRGATTR	RGATTR FPL FIELD NAME
2176	(880)	CHAR-ACTER	8	FENTIDNO	ENTIDNO FPL FIELD NAME
2184	(888)	CHAR-ACTER	8	FNAMEDS	NAMEDS FPL FIELD NAME
2192	(890)	CHAR-ACTER	8	FITYPEXT	ITYPEXT CATALOG FIELD NAME
2200	(898)	CHAR-ACTER	8	FVOLFLG	VOLFLG FPL FIELD NAME
2208	(8A0)	CHAR-ACTER	8	FPHYBLKS	PHYBLKSZ CATALOG FIELD NAME
2216	(8A8)	CHAR-ACTER	8	FNOBLKTR	NOBLKTRK CATALOG FIELD NAME
2224	(8B0)	CHAR-ACTER	8	FNOTRKAU	NOTRKAU CATALOG FIELD NAME

FIELD PARAMETER LISTS (FPL) FOR LOC-
ATING THE CATALOG INFORMATION OF THE
OBJECTS BEING BACKED UP
FIELD PARAMETER LISTS FOR CLUSTER/AIX/PATH CPL

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
2232	(8B8)	CHAR-ACTER	24	PENTYPE (0)	CATALOG FIELD PARAMETER LIST
2232	(8B8)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
2233	(8B9)	BITSTRING	1		TEST CONDITION
2234	(8BA)	BITSTRING	1		GROUP CODE NUMBER
2235	(8BB)	BITSTRING	1		TEST FIELD RESULTS
2236	(8BC)	ADDRESS	4		WORK AREA
2240	(8C0)	ADDRESS	4		ADDRESS OF FIELD NAME
2244	(8C4)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
2248	(8C8)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
2248	(8C8)	SIGNED	4		DATA LENGTH
2252	(8CC)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
2256	(8D0)	CHAR-ACTER	24	PENTNAME (0)	CATALOG FIELD PARAMETER LIST

Dec	Hex	Type	Len	Name (Dim)	Description
2256	(8D0)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
2257	(8D1)	BITSTRING	1		TEST CONDITION
2258	(8D2)	BITSTRING	1		GROUP CODE NUMBER
2259	(8D3)	BITSTRING	1		TEST FIELD RESULTS
2260	(8D4)	ADDRESS	4		WORK AREA
2264	(8D8)	ADDRESS	4		ADDRESS OF FIELD NAME
2268	(8DC)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
2272	(8E0)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
2272	(8E0)	SIGNED	4		DATA LENGTH
2276	(8E4)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
2280	(8E8)	CHAR-ACTER	24	PDSATTR (0)	CATALOG FIELD PARAMETER LIST
2280	(8E8)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
2281	(8E9)	BITSTRING	1		TEST CONDITION
2282	(8EA)	BITSTRING	1		GROUP CODE NUMBER
2283	(8EB)	BITSTRING	1		TEST FIELD RESULTS
2284	(8EC)	ADDRESS	4		WORK AREA
2288	(8F0)	ADDRESS	4		ADDRESS OF FIELD NAME
2292	(8F4)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
2296	(8F8)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
2296	(8F8)	SIGNED	4		DATA LENGTH
2300	(8FC)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
2304	(900)	CHAR-ACTER	24	POWNERID (0)	CATALOG FIELD PARAMETER LIST
2304	(900)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
2305	(901)	BITSTRING	1		TEST CONDITION
2306	(902)	BITSTRING	1		GROUP CODE NUMBER
2307	(903)	BITSTRING	1		TEST FIELD RESULTS
2308	(904)	ADDRESS	4		WORK AREA
2312	(908)	ADDRESS	4		ADDRESS OF FIELD NAME
2316	(90C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
2320	(910)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
2320	(910)	SIGNED	4		DATA LENGTH
2324	(914)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
2328	(918)	CHAR-ACTER	24	PDSETCRD (0)	CATALOG FIELD PARAMETER LIST
2328	(918)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
2329	(919)	BITSTRING	1		TEST CONDITION
2330	(91A)	BITSTRING	1		GROUP CODE NUMBER
2331	(91B)	BITSTRING	1		TEST FIELD RESULTS
2332	(91C)	ADDRESS	4		WORK AREA
2336	(920)	ADDRESS	4		ADDRESS OF FIELD NAME
2340	(924)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
2344	(928)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
2344	(928)	SIGNED	4		DATA LENGTH
2348	(92C)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
2352	(930)	CHAR-ACTER	24	PDSETEXD (0)	CATALOG FIELD PARAMETER LIST
2352	(930)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
2353	(931)	BITSTRING	1		TEST CONDITION
2354	(932)	BITSTRING	1		GROUP CODE NUMBER
2355	(933)	BITSTRING	1		TEST FIELD RESULTS
2356	(934)	ADDRESS	4		WORK AREA

| Offsets					
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
2360	(938)	ADDRESS	4		ADDRESS OF FIELD NAME
2364	(93C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
2368	(940)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
2368	(940)	SIGNED	4		DATA LENGTH
2372	(944)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

2376	(948)	CHAR-ACTER	24	PBUFSIZE (0)	CATALOG FIELD PARAMETER LIST
2376	(948)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
2377	(949)	BITSTRING	1		TEST CONDITION
2378	(94A)	BITSTRING	1		GROUP CODE NUMBER
2379	(94B)	BITSTRING	1		TEST FIELD RESULTS
2380	(94C)	ADDRESS	4		WORK AREA
2384	(950)	ADDRESS	4		ADDRESS OF FIELD NAME
2388	(954)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
2392	(958)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
2392	(958)	SIGNED	4		DATA LENGTH
2396	(95C)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

2400	(960)	CHAR-ACTER	24	PLRECL (0)	CATALOG FIELD PARAMETER LIST
2400	(960)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
2401	(961)	BITSTRING	1		TEST CONDITION
2402	(962)	BITSTRING	1		GROUP CODE NUMBER
2403	(963)	BITSTRING	1		TEST FIELD RESULTS
2404	(964)	ADDRESS	4		WORK AREA
2408	(968)	ADDRESS	4		ADDRESS OF FIELD NAME
2412	(96C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
2416	(970)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
2416	(970)	SIGNED	4		DATA LENGTH
2420	(974)	ADDRESS	4		FIELD POINTER
2424	(978)	CHAR-ACTER	24	PSPACPAR (0)	CATALOG FIELD PARAMETER LIST
2424	(978)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
2425	(979)	BITSTRING	1		TEST CONDITION
2426	(97A)	BITSTRING	1		GROUP CODE NUMBER
2427	(97B)	BITSTRING	1		TEST FIELD RESULTS
2428	(97C)	ADDRESS	4		WORK AREA
2432	(980)	ADDRESS	4		ADDRESS OF FIELD NAME
2436	(984)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
2440	(988)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
2440	(988)	SIGNED	4		DATA LENGTH
2444	(98C)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

2448	(990)	CHAR-ACTER	24	PPASWALL (0)	CATALOG FIELD PARAMETER LIST
2448	(990)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
2449	(991)	BITSTRING	1		TEST CONDITION
2450	(992)	BITSTRING	1		GROUP CODE NUMBER
2451	(993)	BITSTRING	1		TEST FIELD RESULTS
2452	(994)	ADDRESS	4		WORK AREA
2456	(998)	ADDRESS	4		ADDRESS OF FIELD NAME
2460	(99C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
2464	(9A0)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
2464	(9A0)	SIGNED	4		DATA LENGTH
2468	(9A4)	ADDRESS	4		FIELD POINTER

Dec	Hex	Type	Len	Name (Dim)	Description
		VSE/VSAM BACKUP/RESTORE -IDCDFB36			
2472	(9A8)	CHAR- ACTER	24	PLOKEYV (0)	CATALOG FIELD PARAMETER LIST
2472	(9A8)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
2473	(9A9)	BITSTRING	1		TEST CONDITION
2474	(9AA)	BITSTRING	1		GROUP CODE NUMBER
2475	(9AB)	BITSTRING	1		TEST FIELD RESULTS
2476	(9AC)	ADDRESS	4		WORK AREA
2480	(9B0)	ADDRESS	4		ADDRESS OF FIELD NAME
2484	(9B4)	ADDRESS	4		ADDRESS OF NEXT FPL
2488	(9B8)	CHAR- ACTER	8		FIELD LENGTH AND DATA ADDRESS
2488	(9B8)	SIGNED	4		DATA LENGTH
2492	(9BC)	ADDRESS	4		FIELD POINTER
		VSE/VSAM BACKUP/RESTORE -IDCDFB36			
2496	(9C0)	CHAR- ACTER	24	PHIKEYV (0)	CATALOG FIELD PARAMETER LIST
2496	(9C0)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
2497	(9C1)	BITSTRING	1		TEST CONDITION
2498	(9C2)	BITSTRING	1		GROUP CODE NUMBER
2499	(9C3)	BITSTRING	1		TEST FIELD RESULTS
2500	(9C4)	ADDRESS	4		WORK AREA
2504	(9C8)	ADDRESS	4		ADDRESS OF FIELD NAME
2508	(9CC)	ADDRESS	4		ADDRESS OF NEXT FPL
2512	(9D0)	CHAR- ACTER	8		FIELD LENGTH AND DATA ADDRESS
2512	(9D0)	SIGNED	4		DATA LENGTH
2516	(9D4)	ADDRESS	4		FIELD POINTER
		VSE/VSAM BACKUP/RESTORE -IDCDFB36			
2520	(9D8)	CHAR- ACTER	24	PVOLSER (0)	CATALOG FIELD PARAMETER LIST
2520	(9D8)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
2521	(9D9)	BITSTRING	1		TEST CONDITION
2522	(9DA)	BITSTRING	1		GROUP CODE NUMBER
2523	(9DB)	BITSTRING	1		TEST FIELD RESULTS
2524	(9DC)	ADDRESS	4		WORK AREA
2528	(9E0)	ADDRESS	4		ADDRESS OF FIELD NAME
2532	(9E4)	ADDRESS	4		ADDRESS OF NEXT FPL
2536	(9E8)	CHAR- ACTER	8		FIELD LENGTH AND DATA ADDRESS
2536	(9E8)	SIGNED	4		DATA LENGTH
2540	(9EC)	ADDRESS	4		FIELD POINTER
		VSE/VSAM BACKUP/RESTORE -IDCDFB36			
2544	(9F0)	CHAR- ACTER	24	PAMDSB (0)	CATALOG FIELD PARAMETER LIST
2544	(9F0)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
2545	(9F1)	BITSTRING	1		TEST CONDITION
2546	(9F2)	BITSTRING	1		GROUP CODE NUMBER
2547	(9F3)	BITSTRING	1		TEST FIELD RESULTS
2548	(9F4)	ADDRESS	4		WORK AREA
2552	(9F8)	ADDRESS	4		ADDRESS OF FIELD NAME
2556	(9FC)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
2560	(A00)	CHAR- ACTER	8		FIELD LENGTH AND DATA ADDRESS
2560	(A00)	SIGNED	4		DATA LENGTH
2564	(A04)	ADDRESS	4		FIELD POINTER
		VSE/VSAM BACKUP/RESTORE -IDCDFB36			
2568	(A08)	CHAR- ACTER	24	PEXCPXIT (0)	CATALOG FIELD PARAMETER LIST
2568	(A08)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT

Dec	Hex	Type	Len	Name (Dim)	Description
2569	(A09)	BITSTRING	1		TEST CONDITION
2570	(A0A)	BITSTRING	1		GROUP CODE NUMBER
2571	(A0B)	BITSTRING	1		TEST FIELD RESULTS
2572	(A0C)	ADDRESS	4		WORK AREA
2576	(A10)	ADDRESS	4		ADDRESS OF FIELD NAME
2580	(A14)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
2584	(A18)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
2584	(A18)	SIGNED	4		DATA LENGTH
2588	(A1C)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

2592	(A20)	CHAR-ACTER	24	PRGATTR (0)	CATALOG FIELD PARAMETER LIST
2592	(A20)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
2593	(A21)	BITSTRING	1		TEST CONDITION
2594	(A22)	BITSTRING	1		GROUP CODE NUMBER
2595	(A23)	BITSTRING	1		TEST FIELD RESULTS
2596	(A24)	ADDRESS	4		WORK AREA
2600	(A28)	ADDRESS	4		ADDRESS OF FIELD NAME
2604	(A2C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
2608	(A30)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
2608	(A30)	SIGNED	4		DATA LENGTH
2612	(A34)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

2616	(A38)	CHAR-ACTER	24	PENTIDNO (0)	CATALOG FIELD PARAMETER LIST
2616	(A38)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
2617	(A39)	BITSTRING	1		TEST CONDITION
2618	(A3A)	BITSTRING	1		GROUP CODE NUMBER
2619	(A3B)	BITSTRING	1		TEST FIELD RESULTS
2620	(A3C)	ADDRESS	4		WORK AREA
2624	(A40)	ADDRESS	4		ADDRESS OF FIELD NAME
2628	(A44)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
2632	(A48)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
2632	(A48)	SIGNED	4		DATA LENGTH
2636	(A4C)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

2640	(A50)	CHAR-ACTER	24	PNAMEDS (0)	CATALOG FIELD PARAMETER LIST
2640	(A50)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
2641	(A51)	BITSTRING	1		TEST CONDITION
2642	(A52)	BITSTRING	1		GROUP CODE NUMBER
2643	(A53)	BITSTRING	1		TEST FIELD RESULTS
2644	(A54)	ADDRESS	4		WORK AREA
2648	(A58)	ADDRESS	4		ADDRESS OF FIELD NAME
2652	(A5C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
2656	(A60)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
2656	(A60)	SIGNED	4		DATA LENGTH
2660	(A64)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

2664	(A68)	CHAR-ACTER	24	PITYPEXT (0)	CATALOG FIELD PARAMETER LIST
2664	(A68)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
2665	(A69)	BITSTRING	1		TM-FOR-ZEROS TEST CONDITION
2666	(A6A)	BITSTRING	1		GROUP CODE NUMBER
2667	(A6B)	BITSTRING	1		TEST FIELD RESULTS
2668	(A6C)	ADDRESS	4		WORK AREA
2672	(A70)	ADDRESS	4		ADDRESS OF FIELD NAME

Dec	Hex	Type	Len	Name (Dim)	Description
2676	(A74)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
2680	(A78)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
2680	(A78)	ADDRESS	4		DATA LENGTH
2684	(A7C)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
2688	(A80)	CHAR-ACTER	24	PLVOLFLG (0)	CATALOG FIELD PARAMETER LIST
2688	(A80)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
2689	(A81)	BITSTRING	1		TM-FOR-ZEROS TEST CONDITION
2690	(A82)	BITSTRING	1		GROUP CODE NUMBER
2691	(A83)	BITSTRING	1		TEST FIELD RESULTS
2692	(A84)	ADDRESS	4		WORK AREA
2696	(A88)	ADDRESS	4		ADDRESS OF FIELD NAME
2700	(A8C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
2704	(A90)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
2704	(A90)	ADDRESS	4		DATA LENGTH
2708	(A94)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
2712	(A98)	CHAR-ACTER	24	PHVOLFLG (0)	CATALOG FIELD PARAMETER LIST
2712	(A98)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
2713	(A99)	BITSTRING	1		TM-FOR-ZEROS TEST CONDITION
2714	(A9A)	BITSTRING	1		GROUP CODE NUMBER
2715	(A9B)	BITSTRING	1		TEST FIELD RESULTS
2716	(A9C)	ADDRESS	4		WORK AREA
2720	(AA0)	ADDRESS	4		ADDRESS OF FIELD NAME
2724	(AA4)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
2728	(AA8)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
2728	(AA8)	ADDRESS	4		DATA LENGTH
2732	(AAC)	ADDRESS	4		FIELD POINTER

FIELD PARAMETER LISTS FOR DATA COMPONENT CPL

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
2736	(AB0)	CHAR-ACTER	24	DENTYPE (0)	CATALOG FIELD PARAMETER LIST
2736	(AB0)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
2737	(AB1)	BITSTRING	1		TEST CONDITION
2738	(AB2)	BITSTRING	1		GROUP CODE NUMBER
2739	(AB3)	BITSTRING	1		TEST FIELD RESULTS
2740	(AB4)	ADDRESS	4		WORK AREA
2744	(AB8)	ADDRESS	4		ADDRESS OF FIELD NAME
2748	(ABC)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
2752	(AC0)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
2752	(AC0)	SIGNED	4		DATA LENGTH
2756	(AC4)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
2760	(AC8)	CHAR-ACTER	24	DENTNAME (0)	CATALOG FIELD PARAMETER LIST
2760	(AC8)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
2761	(AC9)	BITSTRING	1		TEST CONDITION
2762	(ACA)	BITSTRING	1		GROUP CODE NUMBER
2763	(ACB)	BITSTRING	1		TEST FIELD RESULTS
2764	(ACC)	ADDRESS	4		WORK AREA
2768	(AD0)	ADDRESS	4		ADDRESS OF FIELD NAME
2772	(AD4)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
2776	(AD8)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
2776	(AD8)	SIGNED	4		DATA LENGTH

Dec	Hex	Type	Len	Name (Dim)	Description
2780	(ADC)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
2784	(AE0)	CHARACTER	24	DDSATTR (0)	CATALOG FIELD PARAMETER LIST
2784	(AE0)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
2785	(AE1)	BITSTRING	1		TEST CONDITION
2786	(AE2)	BITSTRING	1		GROUP CODE NUMBER
2787	(AE3)	BITSTRING	1		TEST FIELD RESULTS
2788	(AE4)	ADDRESS	4		WORK AREA
2792	(AE8)	ADDRESS	4		ADDRESS OF FIELD NAME
2796	(AEC)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
2800	(AF0)	CHARACTER	8		FIELD LENGTH AND DATA ADDRESS
2800	(AF0)	SIGNED	4		DATA LENGTH
2804	(AF4)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
2808	(AF8)	CHARACTER	24	DOWNERID (0)	CATALOG FIELD PARAMETER LIST
2808	(AF8)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
2809	(AF9)	BITSTRING	1		TEST CONDITION
2810	(AFA)	BITSTRING	1		GROUP CODE NUMBER
2811	(AFB)	BITSTRING	1		TEST FIELD RESULTS
2812	(AFC)	ADDRESS	4		WORK AREA
2816	(B00)	ADDRESS	4		ADDRESS OF FIELD NAME
2820	(B04)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
2824	(B08)	CHARACTER	8		FIELD LENGTH AND DATA ADDRESS
2824	(B08)	SIGNED	4		DATA LENGTH
2828	(B0C)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
2832	(B10)	CHARACTER	24	DDSETCRD (0)	CATALOG FIELD PARAMETER LIST
2832	(B10)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
2833	(B11)	BITSTRING	1		TEST CONDITION
2834	(B12)	BITSTRING	1		GROUP CODE NUMBER
2835	(B13)	BITSTRING	1		TEST FIELD RESULTS
2836	(B14)	ADDRESS	4		WORK AREA
2840	(B18)	ADDRESS	4		ADDRESS OF FIELD NAME
2844	(B1C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
2848	(B20)	CHARACTER	8		FIELD LENGTH AND DATA ADDRESS
2848	(B20)	SIGNED	4		DATA LENGTH
2852	(B24)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
2856	(B28)	CHARACTER	24	DDSETEXD (0)	CATALOG FIELD PARAMETER LIST
2856	(B28)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
2857	(B29)	BITSTRING	1		TEST CONDITION
2858	(B2A)	BITSTRING	1		GROUP CODE NUMBER
2859	(B2B)	BITSTRING	1		TEST FIELD RESULTS
2860	(B2C)	ADDRESS	4		WORK AREA
2864	(B30)	ADDRESS	4		ADDRESS OF FIELD NAME
2868	(B34)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
2872	(B38)	CHARACTER	8		FIELD LENGTH AND DATA ADDRESS
2872	(B38)	SIGNED	4		DATA LENGTH
2876	(B3C)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
2880	(B40)	CHARACTER	24	DBUFSIZE (0)	CATALOG FIELD PARAMETER LIST

Dec	Hex	Type	Len	Name (Dim)	Description
2880	(B40)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
2881	(B41)	BITSTRING	1		TEST CONDITION
2882	(B42)	BITSTRING	1		GROUP CODE NUMBER
2883	(B43)	BITSTRING	1		TEST FIELD RESULTS
2884	(B44)	ADDRESS	4		WORK AREA
2888	(B48)	ADDRESS	4		ADDRESS OF FIELD NAME
2892	(B4C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
2896	(B50)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
2896	(B50)	SIGNED	4		DATA LENGTH
2900	(B54)	ADDRESS	4		FIELD POINTER
		VSE/VSAM BACKUP/RESTORE -IDCDFB36			
2904	(B58)	CHAR-ACTER	24	DLRECL (0)	CATALOG FIELD PARAMETER LIST
2904	(B58)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
2905	(B59)	BITSTRING	1		TEST CONDITION
2906	(B5A)	BITSTRING	1		GROUP CODE NUMBER
2907	(B5B)	BITSTRING	1		TEST FIELD RESULTS
2908	(B5C)	ADDRESS	4		WORK AREA
2912	(B60)	ADDRESS	4		ADDRESS OF FIELD NAME
2916	(B64)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
2920	(B68)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
2920	(B68)	SIGNED	4		DATA LENGTH
2924	(B6C)	ADDRESS	4		FIELD POINTER
		VSE/VSAM BACKUP/RESTORE -IDCDFB36			
2928	(B70)	CHAR-ACTER	24	DSPACPAR (0)	CATALOG FIELD PARAMETER LIST
2928	(B70)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
2929	(B71)	BITSTRING	1		TEST CONDITION
2930	(B72)	BITSTRING	1		GROUP CODE NUMBER
2931	(B73)	BITSTRING	1		TEST FIELD RESULTS
2932	(B74)	ADDRESS	4		WORK AREA
2936	(B78)	ADDRESS	4		ADDRESS OF FIELD NAME
2940	(B7C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
2944	(B80)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
2944	(B80)	SIGNED	4		DATA LENGTH
2948	(B84)	ADDRESS	4		FIELD POINTER
		VSE/VSAM BACKUP/RESTORE -IDCDFB36			
2952	(B88)	CHAR-ACTER	24	DPASWALL (0)	CATALOG FIELD PARAMETER LIST
2952	(B88)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
2953	(B89)	BITSTRING	1		TEST CONDITION
2954	(B8A)	BITSTRING	1		GROUP CODE NUMBER
2955	(B8B)	BITSTRING	1		TEST FIELD RESULTS
2956	(B8C)	ADDRESS	4		WORK AREA
2960	(B90)	ADDRESS	4		ADDRESS OF FIELD NAME
2964	(B94)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
2968	(B98)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
2968	(B98)	SIGNED	4		DATA LENGTH
2972	(B9C)	ADDRESS	4		FIELD POINTER
		VSE/VSAM BACKUP/RESTORE -IDCDFB36			
2976	(BA0)	CHAR-ACTER	24	DLOKEYV (0)	CATALOG FIELD PARAMETER LIST
2976	(BA0)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
2977	(BA1)	BITSTRING	1		TEST CONDITION
2978	(BA2)	BITSTRING	1		GROUP CODE NUMBER
2979	(BA3)	BITSTRING	1		TEST FIELD RESULTS
2980	(BA4)	ADDRESS	4		WORK AREA

| **Offsets** | | | | | |
Dec	Hex	Type	Len	Name (Dim)	Description
2984	(BA8)	ADDRESS	4		ADDRESS OF FIELD NAME
2988	(BAC)	ADDRESS	4		ADDRESS OF NEXT FPL
2992	(BB0)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
2992	(BB0)	SIGNED	4		DATA LENGTH
2996	(BB4)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

3000	(BB8)	CHAR-ACTER	24	DHIKEYV (0)	CATALOG FIELD PARAMETER LIST
3000	(BB8)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
3001	(BB9)	BITSTRING	1		TEST CONDITION
3002	(BBA)	BITSTRING	1		GROUP CODE NUMBER
3003	(BBB)	BITSTRING	1		TEST FIELD RESULTS
3004	(BBC)	ADDRESS	4		WORK AREA
3008	(BC0)	ADDRESS	4		ADDRESS OF FIELD NAME
3012	(BC4)	ADDRESS	4		ADDRESS OF NEXT FPL
3016	(BC8)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
3016	(BC8)	SIGNED	4		DATA LENGTH
3020	(BCC)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

3024	(BD0)	CHAR-ACTER	24	DVOLSER (0)	CATALOG FIELD PARAMETER LIST
3024	(BD0)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
3025	(BD1)	BITSTRING	1		TEST CONDITION
3026	(BD2)	BITSTRING	1		GROUP CODE NUMBER
3027	(BD3)	BITSTRING	1		TEST FIELD RESULTS
3028	(BD4)	ADDRESS	4		WORK AREA
3032	(BD8)	ADDRESS	4		ADDRESS OF FIELD NAME
3036	(BDC)	ADDRESS	4		ADDRESS OF NEXT FPL
3040	(BE0)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
3040	(BE0)	SIGNED	4		DATA LENGTH
3044	(BE4)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

3048	(BE8)	CHAR-ACTER	24	DAMDSB (0)	CATALOG FIELD PARAMETER LIST
3048	(BE8)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
3049	(BE9)	BITSTRING	1		TEST CONDITION
3050	(BEA)	BITSTRING	1		GROUP CODE NUMBER
3051	(BEB)	BITSTRING	1		TEST FIELD RESULTS
3052	(BEC)	ADDRESS	4		WORK AREA
3056	(BF0)	ADDRESS	4		ADDRESS OF FIELD NAME
3060	(BF4)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
3064	(BF8)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
3064	(BF8)	SIGNED	4		DATA LENGTH
3068	(BFC)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

3072	(C00)	CHAR-ACTER	24	DEXCPXIT (0)	CATALOG FIELD PARAMETER LIST
3072	(C00)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
3073	(C01)	BITSTRING	1		TEST CONDITION
3074	(C02)	BITSTRING	1		GROUP CODE NUMBER
3075	(C03)	BITSTRING	1		TEST FIELD RESULTS
3076	(C04)	ADDRESS	4		WORK AREA
3080	(C08)	ADDRESS	4		ADDRESS OF FIELD NAME
3084	(C0C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
3088	(C10)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
3088	(C10)	SIGNED	4		DATA LENGTH

Dec	Hex	Type	Len	Name (Dim)	Description
3092	(C14)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
3096	(C18)	CHAR-ACTER	24	DRGATTR (0)	CATALOG FIELD PARAMETER LIST
3096	(C18)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
3097	(C19)	BITSTRING	1		TEST CONDITION
3098	(C1A)	BITSTRING	1		GROUP CODE NUMBER
3099	(C1B)	BITSTRING	1		TEST FIELD RESULTS
3100	(C1C)	ADDRESS	4		WORK AREA
3104	(C20)	ADDRESS	4		ADDRESS OF FIELD NAME
3108	(C24)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
3112	(C28)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
3112	(C28)	SIGNED	4		DATA LENGTH
3116	(C2C)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
3120	(C30)	CHAR-ACTER	24	DITYPEXT (0)	CATALOG FIELD PARAMETER LIST
3120	(C30)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
3121	(C31)	BITSTRING	1		TM-FOR-ZEROS TEST CONDITION
3122	(C32)	BITSTRING	1		GROUP CODE NUMBER
3123	(C33)	BITSTRING	1		TEST FIELD RESULTS
3124	(C34)	ADDRESS	4		WORK AREA
3128	(C38)	ADDRESS	4		ADDRESS OF FIELD NAME
3132	(C3C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
3136	(C40)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
3136	(C40)	ADDRESS	4		DATA LENGTH
3140	(C44)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
3144	(C48)	CHAR-ACTER	24	DPHYBLKS (0)	CATALOG FIELD PARAMETER LIST
3144	(C48)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
3145	(C49)	BITSTRING	1		TEST CONDITION
3146	(C4A)	BITSTRING	1		GROUP CODE NUMBER
3147	(C4B)	BITSTRING	1		TEST FIELD RESULTS
3148	(C4C)	ADDRESS	4		WORK AREA
3152	(C50)	ADDRESS	4		ADDRESS OF FIELD NAME
3156	(C54)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
3160	(C58)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
3160	(C58)	SIGNED	4		DATA LENGTH
3164	(C5C)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
3168	(C60)	CHAR-ACTER	24	DNOBLKTR (0)	CATALOG FIELD PARAMETER LIST
3168	(C60)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
3169	(C61)	BITSTRING	1		TEST CONDITION
3170	(C62)	BITSTRING	1		GROUP CODE NUMBER
3171	(C63)	BITSTRING	1		TEST FIELD RESULTS
3172	(C64)	ADDRESS	4		WORK AREA
3176	(C68)	ADDRESS	4		ADDRESS OF FIELD NAME
3180	(C6C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
3184	(C70)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
3184	(C70)	SIGNED	4		DATA LENGTH
3188	(C74)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
3192	(C78)	CHAR-ACTER	24	DNOTRKAU (0)	CATALOG FIELD PARAMETER LIST

Dec	Hex	Type	Len	Name (Dim)	Description
3192	(C78)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
3193	(C79)	BITSTRING	1		TEST CONDITION
3194	(C7A)	BITSTRING	1		GROUP CODE NUMBER
3195	(C7B)	BITSTRING	1		TEST FIELD RESULTS
3196	(C7C)	ADDRESS	4		WORK AREA
3200	(C80)	ADDRESS	4		ADDRESS OF FIELD NAME
3204	(C84)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
3208	(C88)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
3208	(C88)	SIGNED	4		DATA LENGTH
3212	(C8C)	ADDRESS	4		FIELD POINTER

FIELD PARAMETER LISTS FOR INDEX COMPONENT CPL

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
3216	(C90)	CHAR-ACTER	24	DLVOLFLG (0)	CATALOG FIELD PARAMETER LIST
3216	(C90)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
3217	(C91)	BITSTRING	1		TM-FOR-ZEROS TEST CONDITION
3218	(C92)	BITSTRING	1		GROUP CODE NUMBER
3219	(C93)	BITSTRING	1		TEST FIELD RESULTS
3220	(C94)	ADDRESS	4		WORK AREA
3224	(C98)	ADDRESS	4		ADDRESS OF FIELD NAME
3228	(C9C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
3232	(CA0)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
3232	(CA0)	ADDRESS	4		DATA LENGTH
3236	(CA4)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
3240	(CA8)	CHAR-ACTER	24	DHVOLFLG (0)	CATALOG FIELD PARAMETER LIST
3240	(CA8)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
3241	(CA9)	BITSTRING	1		TM-FOR-ZEROS TEST CONDITION
3242	(CAA)	BITSTRING	1		GROUP CODE NUMBER
3243	(CAB)	BITSTRING	1		TEST FIELD RESULTS
3244	(CAC)	ADDRESS	4		WORK AREA
3248	(CB0)	ADDRESS	4		ADDRESS OF FIELD NAME
3252	(CB4)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
3256	(CB8)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
3256	(CB8)	ADDRESS	4		DATA LENGTH
3260	(CBC)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
3264	(CC0)	CHAR-ACTER	24	XENTYPE (0)	CATALOG FIELD PARAMETER LIST
3264	(CC0)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
3265	(CC1)	BITSTRING	1		TEST CONDITION
3266	(CC2)	BITSTRING	1		GROUP CODE NUMBER
3267	(CC3)	BITSTRING	1		TEST FIELD RESULTS
3268	(CC4)	ADDRESS	4		WORK AREA
3272	(CC8)	ADDRESS	4		ADDRESS OF FIELD NAME
3276	(CCC)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
3280	(CD0)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
3280	(CD0)	SIGNED	4		DATA LENGTH
3284	(CD4)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
3288	(CD8)	CHAR-ACTER	24	XENTNAME (0)	CATALOG FIELD PARAMETER LIST
3288	(CD8)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
3289	(CD9)	BITSTRING	1		TEST CONDITION
3290	(CDA)	BITSTRING	1		GROUP CODE NUMBER
3291	(CDB)	BITSTRING	1		TEST FIELD RESULTS

Dec	Hex	Type	Len	Name (Dim)	Description
3292	(CDC)	ADDRESS	4		WORK AREA
3296	(CE0)	ADDRESS	4		ADDRESS OF FIELD NAME
3300	(CE4)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
3304	(CE8)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
3304	(CE8)	SIGNED	4		DATA LENGTH
3308	(CEC)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
3312	(CF0)	CHAR-ACTER	24	XDSATTR (0)	CATALOG FIELD PARAMETER LIST
3312	(CF0)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
3313	(CF1)	BITSTRING	1		TEST CONDITION
3314	(CF2)	BITSTRING	1		GROUP CODE NUMBER
3315	(CF3)	BITSTRING	1		TEST FIELD RESULTS
3316	(CF4)	ADDRESS	4		WORK AREA
3320	(CF8)	ADDRESS	4		ADDRESS OF FIELD NAME
3324	(CFC)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
3328	(D00)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
3328	(D00)	SIGNED	4		DATA LENGTH
3332	(D04)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
3336	(D08)	CHAR-ACTER	24	XOWNERID (0)	CATALOG FIELD PARAMETER LIST
3336	(D08)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
3337	(D09)	BITSTRING	1		TEST CONDITION
3338	(D0A)	BITSTRING	1		GROUP CODE NUMBER
3339	(D0B)	BITSTRING	1		TEST FIELD RESULTS
3340	(D0C)	ADDRESS	4		WORK AREA
3344	(D10)	ADDRESS	4		ADDRESS OF FIELD NAME
3348	(D14)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
3352	(D18)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
3352	(D18)	SIGNED	4		DATA LENGTH
3356	(D1C)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
3360	(D20)	CHAR-ACTER	24	XDSETCRD (0)	CATALOG FIELD PARAMETER LIST
3360	(D20)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
3361	(D21)	BITSTRING	1		TEST CONDITION
3362	(D22)	BITSTRING	1		GROUP CODE NUMBER
3363	(D23)	BITSTRING	1		TEST FIELD RESULTS
3364	(D24)	ADDRESS	4		WORK AREA
3368	(D28)	ADDRESS	4		ADDRESS OF FIELD NAME
3372	(D2C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
3376	(D30)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
3376	(D30)	SIGNED	4		DATA LENGTH
3380	(D34)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
3384	(D38)	CHAR-ACTER	24	XDSETEXD (0)	CATALOG FIELD PARAMETER LIST
3384	(D38)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
3385	(D39)	BITSTRING	1		TEST CONDITION
3386	(D3A)	BITSTRING	1		GROUP CODE NUMBER
3387	(D3B)	BITSTRING	1		TEST FIELD RESULTS
3388	(D3C)	ADDRESS	4		WORK AREA
3392	(D40)	ADDRESS	4		ADDRESS OF FIELD NAME
3396	(D44)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
3400	(D48)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS

Offsets					
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
3400	(D48)	SIGNED	4		DATA LENGTH
3404	(D4C)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

3408	(D50)	CHAR-ACTER	24	XBUFSIZE (0)	CATALOG FIELD PARAMETER LIST
3408	(D50)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
3409	(D51)	BITSTRING	1		TEST CONDITION
3410	(D52)	BITSTRING	1		GROUP CODE NUMBER
3411	(D53)	BITSTRING	1		TEST FIELD RESULTS
3412	(D54)	ADDRESS	4		WORK AREA
3416	(D58)	ADDRESS	4		ADDRESS OF FIELD NAME
3420	(D5C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
3424	(D60)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
3424	(D60)	SIGNED	4		DATA LENGTH
3428	(D64)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

3432	(D68)	CHAR-ACTER	24	XLRECL (0)	CATALOG FIELD PARAMETER LIST
3432	(D68)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
3433	(D69)	BITSTRING	1		TEST CONDITION
3434	(D6A)	BITSTRING	1		GROUP CODE NUMBER
3435	(D6B)	BITSTRING	1		TEST FIELD RESULTS
3436	(D6C)	ADDRESS	4		WORK AREA
3440	(D70)	ADDRESS	4		ADDRESS OF FIELD NAME
3444	(D74)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
3448	(D78)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
3448	(D78)	SIGNED	4		DATA LENGTH
3452	(D7C)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

3456	(D80)	CHAR-ACTER	24	XSPACPAR (0)	CATALOG FIELD PARAMETER LIST
3456	(D80)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
3457	(D81)	BITSTRING	1		TEST CONDITION
3458	(D82)	BITSTRING	1		GROUP CODE NUMBER
3459	(D83)	BITSTRING	1		TEST FIELD RESULTS
3460	(D84)	ADDRESS	4		WORK AREA
3464	(D88)	ADDRESS	4		ADDRESS OF FIELD NAME
3468	(D8C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
3472	(D90)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
3472	(D90)	SIGNED	4		DATA LENGTH
3476	(D94)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

3480	(D98)	CHAR-ACTER	24	XPASWALL (0)	CATALOG FIELD PARAMETER LIST
3480	(D98)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
3481	(D99)	BITSTRING	1		TEST CONDITION
3482	(D9A)	BITSTRING	1		GROUP CODE NUMBER
3483	(D9B)	BITSTRING	1		TEST FIELD RESULTS
3484	(D9C)	ADDRESS	4		WORK AREA
3488	(DA0)	ADDRESS	4		ADDRESS OF FIELD NAME
3492	(DA4)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
3496	(DA8)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
3496	(DA8)	SIGNED	4		DATA LENGTH
3500	(DAC)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Offsets					
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
3504	(DB0)	CHAR-ACTER	24	XLOKEYV (0)	CATALOG FIELD PARAMETER LIST
3504	(DB0)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
3505	(DB1)	BITSTRING	1		TEST CONDITION
3506	(DB2)	BITSTRING	1		GROUP CODE NUMBER
3507	(DB3)	BITSTRING	1		TEST FIELD RESULTS
3508	(DB4)	ADDRESS	4		WORK AREA
3512	(DB8)	ADDRESS	4		ADDRESS OF FIELD NAME
3516	(DBC)	ADDRESS	4		ADDRESS OF NEXT FPL
3520	(DC0)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
3520	(DC0)	SIGNED	4		DATA LENGTH
3524	(DC4)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

3528	(DC8)	CHAR-ACTER	24	XHIKEYV (0)	CATALOG FIELD PARAMETER LIST
3528	(DC8)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
3529	(DC9)	BITSTRING	1		TEST CONDITION
3530	(DCA)	BITSTRING	1		GROUP CODE NUMBER
3531	(DCB)	BITSTRING	1		TEST FIELD RESULTS
3532	(DCC)	ADDRESS	4		WORK AREA
3536	(DD0)	ADDRESS	4		ADDRESS OF FIELD NAME
3540	(DD4)	ADDRESS	4		ADDRESS OF NEXT FPL
3544	(DD8)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
3544	(DD8)	SIGNED	4		DATA LENGTH
3548	(DDC)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

3552	(DE0)	CHAR-ACTER	24	XVOLSER (0)	CATALOG FIELD PARAMETER LIST
3552	(DE0)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
3553	(DE1)	BITSTRING	1		TEST CONDITION
3554	(DE2)	BITSTRING	1		GROUP CODE NUMBER
3555	(DE3)	BITSTRING	1		TEST FIELD RESULTS
3556	(DE4)	ADDRESS	4		WORK AREA
3560	(DE8)	ADDRESS	4		ADDRESS OF FIELD NAME
3564	(DEC)	ADDRESS	4		ADDRESS OF NEXT FPL
3568	(DF0)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
3568	(DF0)	SIGNED	4		DATA LENGTH
3572	(DF4)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

3576	(DF8)	CHAR-ACTER	24	XAMDSB (0)	CATALOG FIELD PARAMETER LIST
3576	(DF8)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
3577	(DF9)	BITSTRING	1		TEST CONDITION
3578	(DFA)	BITSTRING	1		GROUP CODE NUMBER
3579	(DFB)	BITSTRING	1		TEST FIELD RESULTS
3580	(DFC)	ADDRESS	4		WORK AREA
3584	(E00)	ADDRESS	4		ADDRESS OF FIELD NAME
3588	(E04)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
3592	(E08)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
3592	(E08)	SIGNED	4		DATA LENGTH
3596	(E0C)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

3600	(E10)	CHAR-ACTER	24	XEXCPXIT (0)	CATALOG FIELD PARAMETER LIST
3600	(E10)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
3601	(E11)	BITSTRING	1		TEST CONDITION
3602	(E12)	BITSTRING	1		GROUP CODE NUMBER

Dec	Hex	Type	Len	Name (Dim)	Description
3603	(E13)	BITSTRING	1		TEST FIELD RESULTS
3604	(E14)	ADDRESS	4		WORK AREA
3608	(E18)	ADDRESS	4		ADDRESS OF FIELD NAME
3612	(E1C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
3616	(E20)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
3616	(E20)	SIGNED	4		DATA LENGTH
3620	(E24)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
3624	(E28)	CHAR-ACTER	24	XRGATTR (0)	CATALOG FIELD PARAMETER LIST
3624	(E28)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
3625	(E29)	BITSTRING	1		TEST CONDITION
3626	(E2A)	BITSTRING	1		GROUP CODE NUMBER
3627	(E2B)	BITSTRING	1		TEST FIELD RESULTS
3628	(E2C)	ADDRESS	4		WORK AREA
3632	(E30)	ADDRESS	4		ADDRESS OF FIELD NAME
3636	(E34)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
3640	(E38)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
3640	(E38)	SIGNED	4		DATA LENGTH
3644	(E3C)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
3648	(E40)	CHAR-ACTER	24	XITYPEXT (0)	CATALOG FIELD PARAMETER LIST
3648	(E40)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
3649	(E41)	BITSTRING	1		TM-FOR-ZEROS TEST CONDITION
3650	(E42)	BITSTRING	1		GROUP CODE NUMBER
3651	(E43)	BITSTRING	1		TEST FIELD RESULTS
3652	(E44)	ADDRESS	4		WORK AREA
3656	(E48)	ADDRESS	4		ADDRESS OF FIELD NAME
3660	(E4C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
3664	(E50)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
3664	(E50)	ADDRESS	4		DATA LENGTH
3668	(E54)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
3672	(E58)	CHAR-ACTER	24	XLVOLFLG (0)	CATALOG FIELD PARAMETER LIST
3672	(E58)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
3673	(E59)	BITSTRING	1		TM-FOR-ZEROS TEST CONDITION
3674	(E5A)	BITSTRING	1		GROUP CODE NUMBER
3675	(E5B)	BITSTRING	1		TEST FIELD RESULTS
3676	(E5C)	ADDRESS	4		WORK AREA
3680	(E60)	ADDRESS	4		ADDRESS OF FIELD NAME
3684	(E64)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
3688	(E68)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
3688	(E68)	ADDRESS	4		DATA LENGTH
3692	(E6C)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
3696	(E70)	CHAR-ACTER	24	XHVOLFLG (0)	CATALOG FIELD PARAMETER LIST
3696	(E70)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
3697	(E71)	BITSTRING	1		TM-FOR-ZEROS TEST CONDITION
3698	(E72)	BITSTRING	1		GROUP CODE NUMBER
3699	(E73)	BITSTRING	1		TEST FIELD RESULTS
3700	(E74)	ADDRESS	4		WORK AREA
3704	(E78)	ADDRESS	4		ADDRESS OF FIELD NAME
3708	(E7C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO

Dec	Hex	Type	Len	Name (Dim)	Description
3712	(E80)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
3712	(E80)	ADDRESS	4		DATA LENGTH
3716	(E84)	ADDRESS	4		FIELD POINTER

FPL WORK AREAS

Dec	Hex	Type	Len	Name (Dim)	Description
3720	(E88)	BITSTRING	1	BCASSFLG	ITYPEXT TEST BYTE
3721	(E89)	BITSTRING	1	OVFLOW	OVERFLOW VOLUME TEST FLAG
3722	(E8A)	BITSTRING	2		NOT USED

BCA EQUATES
CCW EQUATES

Type	Name (Dim)	Description
.... .111	BCASEEK	"X'07'" SEEK COMMAND CODE
.... 1...	BCATIC	"X'08'" TIC COMMAND CODE
..1. ..11	BCASS	"X'23'" SET-SECTOR COMMAND CODE
..11 ...1	BCASE	"X'31'" SEARCH-ID-EQUAL COMMAND CODE
.... .11.	BCARDD	"X'06'" READ-DATA COMMAND CODE
.11. ..11	BCADFX	"X'63'" DEFINE-EXTENT COMMAND CODE
.1.. ..11	BCALOC	"X'43'" LOCATE COMMAND CODE
.1.. ..1.	BCAFBRD	"X'42'" FBM READ COMMAND CODE
.... .11.	BCASKCNT	"6" SEEK BYTE COUNT
....1	BCATICNT	"1" TIC BYTE COUNT
....1	BCASSCNT	"1" SET-SECTOR BYTE COUNT
.... .1.1	BCASICNT	"5" SEARCH-ID BYTE COUNT
...1	BCADFCNT	"16" DEFINE-EXTENT BYTE COUNT
.... 1...	BCALOCNT	"8" LOCATE BYTE COUNT
.1..	BCACCH	"B'01000000'" COMMAND CHAINING FLAG
..1.	BCASLI	"B'00100000'" SUPPRESS-INCORRECT-LENGTH FLAG

LENGTH OF BACKUP CATALOG AREA

Type	Name (Dim)	Description
EXPRESSION	BCALEN	"*-BCA" LENGTH OF BACKUP CATALOG AREA

Restore Catalog Area (RCA):

VSE/VSAM BACKUP/RESTORE - IDCDFB31: The restore catalog area contains fields and work areas necessary for the catalog access during the execution of the restore command.

LOCATE TABLES
THIS SECTION OF THE RESTORE CATALOG AREA CONTAINS
THE CATALOG TABLES AND WORK AREAS NECESSARY FOR LOC-
ATE OPERATIONS PERFORMED DURING THE RESTORE COMMAND

Offsets Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	SIGNED	4	RCALOC (0)	CATALOG LOCATE TABLES

CATALOG PARAMETER LIST IN ORDER TO
LOCATE THE ADDRESS OF THE CATALOG ACB
VSE/VSAM BACKUP/RESTORE -IDCDFB34

Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	SIGNED	4	CTLPL (0)	CATALOG PARAMETER LIST (CPL)
0	(0)	BITSTRING	1		BYPASS AND CATALOG DSN
1	(1)	BITSTRING	1		SECOND OPTION INDICATOR
2	(2)	BITSTRING	1		LOCATE REQUEST, ONE CATALOG ONLY
3	(3)	BITSTRING	1		RESERVED FOR OS
4	(4)	ADDRESS	4		USER ENTRY ADDRESS
8	(8)	ADDRESS	4		ADDRESS OF CATALOG DSNAME
12	(C)	ADDRESS	4		ADDRESS OF CALLER'S WORK AREA
16	(10)	BITSTRING	1		CATALOG MANAGEMENT SERVICES OPTIONS
17	(11)	BITSTRING	1		CRA OPEN FLAGS
18	(12)	BITSTRING	1		TYPE OF CATALOG RECORD
19	(13)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFIELD
20	(14)	BITSTRING	2		MODULE NAME FEEDBACK
22	(16)	BITSTRING	2		REASON CODE FEEDBACK
24	(18)	ADDRESS	4		ADDRESS OF CALLER'S PASSWORD
28	(1C)	ADDRESS	4		ADDRESS OF UCAT FILENAME
32	(20)	ADDRESS	4		ADDRESS OF CRA FILENAME
36	(24)	ADDRESS	4		FIELD POINTERS
36	(24)	ADDRESS	4		1ST FIELD POINTER

FIELD PARAMETER LIST IN ORDER TO LOC-
ATE THE ADDRESS OF THE CATALOG ACB
VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
40	(28)	CHAR- ACTER	24	CTLFL (0)	CATALOG FIELD PARAMETER LIST
40	(28)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
41	(29)	BITSTRING	1		TEST CONDITION
42	(2A)	BITSTRING	1		GROUP CODE NUMBER
43	(2B)	BITSTRING	1		TEST FIELD RESULTS
44	(2C)	ADDRESS	4		WORK AREA
48	(30)	ADDRESS	4		ADDRESS OF FIELD NAME
52	(34)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
56	(38)	CHAR- ACTER	8		FIELD LENGTH AND DATA ADDRESS
56	(38)	SIGNED	4		DATA LENGTH
60	(3C)	ADDRESS	4		FIELD POINTER

FIELD NAME FOR FIELD PARAMETER LIST USED
TO LOCATE THE ADDRESS OF THE CATALOG ACB

Dec	Hex	Type	Len	Name (Dim)	Description
64	(40)	CHAR- ACTER	8	CTLACB	CATACB FIELD NAME

CI-NUMBER FOR LOCATE OF CATALOG ACB ADDRESS

Dec	Hex	Type	Len	Name (Dim)	Description
72	(48)	BITSTRING	3	CTLCIN	CI-NUMBER FOR LOCATE OF CATACB
75	(4B)	BITSTRING	1		NOT USED

WORK AREA FOR LOCATING THE
ADDRESS OF THE CATALOG ACB

Offsets					
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
76	(4C)	CHAR-ACTER	8	CTLWKA (0)	WORKA AREA FOR LOCATING CATACB
76	(4C)	SIGNED	2		LENGTH OF WORK AREA
78	(4E)	SIGNED	2		LENGTH FIELD FOR RETURNED LENGTH
80	(50)	ADDRESS	4	CTLPACB	ADDRESS OF CATALOG ACB

DEFINE TABLES
THIS SECTION OF THE RESTORE CATALOG AREA CONTAINS
THE TABLES AND WORK AREAS NECESSARY FOR CATALOG
DEFINE OPERATIONS DURING THE RESTORE COMMAND

84	(54)	SIGNED	4	RCADEF (0)	DEFINE TABLES

DEFINE CONTROL LISTS (DCL) USED AS PARAMETER
LISTS FOR THE CONSTRUCTION OF THE FIELD
VECTOR TABLES (FVT) REQUIRED FOR A DEFINE
VSE/VSAM BACKUP/RESTORE -IDCDFB33

84	(54)	SIGNED	4	DCLCL (0)	DEFINE CONTROL LIST
84	(54)	ADDRESS	4		ADDRESS OF FIELD VECTOR TABLE
88	(58)	ADDRESS	4		ADDRESS OF FPL SET
92	(5C)	ADDRESS	4		ADDRESS OF CONVERSION TABLE
96	(60)	ADDRESS	4		ADDRESS OF DICTIONARY
100	(64)	ADDRESS	4		ADDRESS OF CATALOG WORK AREA

VSE/VSAM BACKUP/RESTORE -IDCDFB33

104	(68)	SIGNED	4	DCLAIX (0)	DEFINE CONTROL LIST
104	(68)	ADDRESS	4		ADDRESS OF FIELD VECTOR TABLE
108	(6C)	ADDRESS	4		ADDRESS OF FPL SET
112	(70)	ADDRESS	4		ADDRESS OF CONVERSION TABLE
116	(74)	ADDRESS	4		ADDRESS OF DICTIONARY
120	(78)	ADDRESS	4		ADDRESS OF CATALOG WORK AREA

VSE/VSAM BACKUP/RESTORE -IDCDFB33

124	(7C)	SIGNED	4	DCLPTH (0)	DEFINE CONTROL LIST
124	(7C)	ADDRESS	4		ADDRESS OF FIELD VECTOR TABLE
128	(80)	ADDRESS	4		ADDRESS OF FPL SET
132	(84)	ADDRESS	4		ADDRESS OF CONVERSION TABLE
136	(88)	ADDRESS	4		ADDRESS OF DICTIONARY
140	(8C)	ADDRESS	4		ADDRESS OF CATALOG WORK AREA

VSE/VSAM BACKUP/RESTORE -IDCDFB33

144	(90)	SIGNED	4	DCLDTA (0)	DEFINE CONTROL LIST
144	(90)	ADDRESS	4		ADDRESS OF FIELD VECTOR TABLE
148	(94)	ADDRESS	4		ADDRESS OF FPL SET
152	(98)	ADDRESS	4		ADDRESS OF CONVERSION TABLE
156	(9C)	ADDRESS	4		ADDRESS OF DICTIONARY
160	(A0)	ADDRESS	4		ADDRESS OF CATALOG WORK AREA

VSE/VSAM BACKUP/RESTORE -IDCDFB33

164	(A4)	SIGNED	4	DCLIX (0)	DEFINE CONTROL LIST
164	(A4)	ADDRESS	4		ADDRESS OF FIELD VECTOR TABLE
168	(A8)	ADDRESS	4		ADDRESS OF FPL SET
172	(AC)	ADDRESS	4		ADDRESS OF CONVERSION TABLE
176	(B0)	ADDRESS	4		ADDRESS OF DICTIONARY
180	(B4)	ADDRESS	4		ADDRESS OF CATALOG WORK AREA

DICTIONARY-TO-FVT CONVERSION TABLES
CLUSTER COMPONENT CONVERSION TABLE

184	(B8)	SIGNED	4	CVTCL (0)	CLUSTER CONVERSION TABLE
184	(B8)	ADDRESS	1		NO FPL FOR ENTYPE
185	(B9)	ADDRESS	1		NO FPL FOR ENTNAME
186	(BA)	ADDRESS	1		DSATTR NOT APPLICABLE FOR CLUSTER
187	(BB)	ADDRESS	1		OWNERID FPL ADDRESS OFFSET
188	(BC)	ADDRESS	1		DSETCRDT FPL ADDRESS OFFSET
189	(BD)	ADDRESS	1		DSETEXDT FPL ADDRESS OFFSET
190	(BE)	ADDRESS	1		BUFSIZE FPL ADDRESS OFFSET

Offsets					
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
191	(BF)	ADDRESS	1		LRECL FPL ADDRESS OFFSET
192	(C0)	ADDRESS	1		SPACPARM FPL ADDRESS OFFSET
193	(C1)	ADDRESS	1		PASSWALL FPL ADDRESS OFFSET
194	(C2)	ADDRESS	1		NO FPL FOR LOKEYV
195	(C3)	ADDRESS	1		NO FPL FOR HIKEYV
196	(C4)	ADDRESS	1		NO FPL FOR VOLSER
197	(C5)	ADDRESS	1		AMDSBCAT FPL ADDRESS OFFSET
198	(C6)	ADDRESS	1		EXCPEXIT FPL ADDRESS OFFSET
199	(C7)	ADDRESS	1		RGATTR NOT APPLICABLE FOR CLUSTER

ALTERNATE INDEX RECORD CONVERSION TABLE

Offsets					
200	(C8)	SIGNED	4	CVTAIX (0)	ALTERNATE INDEX CONVERSION TABLE
200	(C8)	ADDRESS	1		NO FPL FOR ENTYPE
201	(C9)	ADDRESS	1		NO FPL FOR ENTNAME
202	(CA)	ADDRESS	1		DSATTR NOT APPLICABLE FOR AIX
203	(CB)	ADDRESS	1		OWNERID FPL ADDRESS OFFSET
204	(CC)	ADDRESS	1		DSETCRDT FPL ADDRESS OFFSET
205	(CD)	ADDRESS	1		DSETEXDT FPL ADDRESS OFFSET
206	(CE)	ADDRESS	1		BUFSIZE FPL ADDRESS OFFSET
207	(CF)	ADDRESS	1		LRECL FPL ADDRESS OFFSET
208	(D0)	ADDRESS	1		SPACPARM FPL ADDRESS OFFSET
209	(D1)	ADDRESS	1		PASSWALL FPL ADDRESS OFFSET
210	(D2)	ADDRESS	1		NO FPL FOR LOKEYV
211	(D3)	ADDRESS	1		NO FPL FOR HIKEYV
212	(D4)	ADDRESS	1		NO FPL FOR VOLSER
213	(D5)	ADDRESS	1		AMDSBCAT FPL ADDRESS OFFSET
214	(D6)	ADDRESS	1		EXCPEXIT FPL ADDRESS OFFSET
215	(D7)	ADDRESS	1		RGATTR FPL ADDRESS OFFSET

PATH RECORD CONVERSION TABLE

Offsets					
216	(D8)	SIGNED	4	CVTPTH (0)	PATH CONVERSION TABLE
216	(D8)	ADDRESS	1		NO FPL FOR ENTYPE
217	(D9)	ADDRESS	1		NO FPL FOR ENTNAME
218	(DA)	ADDRESS	1		DSATTR NOT APPLICABLE FOR PATH
219	(DB)	ADDRESS	1		OWNERID FPL ADDRESS OFFSET
220	(DC)	ADDRESS	1		DSETCRDT FPL ADDRESS OFFSET
221	(DD)	ADDRESS	1		DSETEXDT FPL ADDRESS OFFSET
222	(DE)	ADDRESS	1		BUFSIZE NOT APPLICABLE FOR PATH
223	(DF)	ADDRESS	1		LRECL NOT APPLICABLE FOR PATHT
224	(E0)	ADDRESS	1		SPACPARM NOT APPLICABLE FOR PATH
225	(E1)	ADDRESS	1		PASSWALL FPL ADDRESS OFFSET
226	(E2)	ADDRESS	1		NO FPL FOR LOKEYV
227	(E3)	ADDRESS	1		NO FPL FOR HIKEYV
228	(E4)	ADDRESS	1		NO FPL FOR VOLSER
229	(E5)	ADDRESS	1		AMDSBCAT NOT APPLICABLE FOR PATH
230	(E6)	ADDRESS	1		EXCPEXIT NOT APPLICABLE FOR PATH
231	(E7)	ADDRESS	1		RGATTR FPL ADDRESS OFFSET

DATA COMPONENT CONVERSION TABLE

Offsets					
232	(E8)	SIGNED	4	CVTDTA (0)	DATA COMPONENT CONVERSION TABLE
232	(E8)	ADDRESS	1		NO FPL FOR ENTYPE
233	(E9)	ADDRESS	1		NO FPL FOR ENTNAME
234	(EA)	ADDRESS	1		DSATTR FPL ADDRESS OFFSET
235	(EB)	ADDRESS	1		OWNERID FPL ADDRESS OFFSET
236	(EC)	ADDRESS	1		DSETCRDT FPL ADDRESS OFFSET
237	(ED)	ADDRESS	1		DSETEXDT FPL ADDRESS OFFSET
238	(EE)	ADDRESS	1		BUFSIZE FPL ADDRESS OFFSET
239	(EF)	ADDRESS	1		LRECL FPL ADDRESS OFFSET
240	(F0)	ADDRESS	1		SPACPARM FPL ADDRESS OFFSET
241	(F1)	ADDRESS	1		PASSWALL FPL ADDRESS OFFSET
242	(F2)	ADDRESS	1		NO FPL FOR LOKEYV
243	(F3)	ADDRESS	1		NO FPL FOR HIKEYV
244	(F4)	ADDRESS	1		NO FPL FOR VOLSER
245	(F5)	ADDRESS	1		AMDSBCAT FPL ADDRESS OFFSET
246	(F6)	ADDRESS	1		EXCPEXIT FPL ADDRESS OFFSET

Dec	Hex	Type	Len	Name (Dim)	Description
247	(F7)	ADDRESS	1		RGATTR NOT APPLICABLE DATA COMPONENT
		INDEX COMPONENT CONVERSION TABLE			
248	(F8)	SIGNED	4	CVTIX (0)	CLUSTER CONVERSION TABLE
248	(F8)	ADDRESS	1		NO FPL FOR ENTYPE
249	(F9)	ADDRESS	1		NO FPL FOR ENTNAME
250	(FA)	ADDRESS	1		DSATTR FPL ADDRESS OFFSET
251	(FB)	ADDRESS	1		OWNERID FPL ADDRESS OFFSET
252	(FC)	ADDRESS	1		DSETCRDT FPL ADDRESS OFFSET
253	(FD)	ADDRESS	1		DSETEXDT FPL ADDRESS OFFSET
254	(FE)	ADDRESS	1		BUFSIZE NOT APPLICABLE FOR INDEX
255	(FF)	ADDRESS	1		LRECL NOT APPLICABLE FOR INDEX
256	(100)	ADDRESS	1		SPACPARM FPL ADDRESS OFFSET
257	(101)	ADDRESS	1		PASSWALL FPL ADDRESS OFFSET
258	(102)	ADDRESS	1		NO FPL FOR LOKEYV
259	(103)	ADDRESS	1		NO FPL FOR HIKEYV
260	(104)	ADDRESS	1		NO FPL FOR VOLSER
261	(105)	ADDRESS	1		AMDSBCAT FPL ADDRESS OFFSET
262	(106)	ADDRESS	1		EXCPEXIT FPL ADDRESS OFFSET
263	(107)	ADDRESS	1		RGATTR NOT APPLICABLE FOR INDEX
		DEFINE CATALOG PARAMETER LIST			
		VSE/VSAM BACKUP/RESTORE -IDCDFB34			
264	(108)	SIGNED	4	DEFPL (0)	CATALOG PARAMETER LIST (CPL)
264	(108)	BITSTRING	1		CTGENT CONTAINS DSNAME
265	(109)	BITSTRING	1		SECOND OPTION INDICATOR
266	(10A)	BITSTRING	1		CATALOG MANAGEMENT SERVICE FUNCTION
267	(10B)	BITSTRING	1		RESERVED FOR OS
268	(10C)	ADDRESS	4		ADDRESS OF CALLER'S FVT
272	(110)	ADDRESS	4		ADDRESS OF CATALOG DSNAME
276	(114)	ADDRESS	4		ADDRESS OF CALLER'S WORK AREA
280	(118)	BITSTRING	1		DEFINE FUNCTION
281	(119)	BITSTRING	1		CRA OPEN FLAGS
282	(11A)	BITSTRING	1		TYPE OF CATALOG RECORD
283	(11B)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFIELD
284	(11C)	BITSTRING	2		MODULE NAME FEEDBACK
286	(11E)	BITSTRING	2		REASON CODE FEEDBACK
288	(120)	ADDRESS	4		ADDRESS OF CALLER'S PASSWORD
292	(124)	ADDRESS	4		ADDRESS OF UCAT FILENAME
296	(128)	ADDRESS	4		ADDRESS OF CRA FILENAME
300	(12C)	ADDRESS	4		FIELD POINTERS
		WORK AREA FOR DEFINE CATALOG PARAMETER LIST			
300	(12C)	CHAR-ACTER	24	DEFWKA (0)	DEFINE CPL WORK AREA
300	(12C)	ADDRESS	2		LENGTH OF DEFINE CPL WORK AREA
302	(12E)	SIGNED	2		FIELD FOR RETURNED LENGTH
304	(130)	BITSTRING	20		ACTUAL WORK AREA
		FIELD VECTOR TABLES			
324	(144)	SIGNED	4	FVTNBR	NUMBER OF COMPONENT FVTS
328	(148)	ADDRESS	4	FVTLST	ADDRESS OF INDEX FVT
332	(14C)	ADDRESS	4		ADDRESS OF DATA FVT
336	(150)	ADDRESS	4		ADDRESS OF CLUSTER FVT
		CLUSTER/AIX/PATH FIELD VECTOR TABLE			
340	(154)	SIGNED	4	FVTCL (0)	CLUSTER FIELD VECTOR TABLE
		EXPRESSION		FVTAIX	"*" AIX FIELD VECTOR TABLE
		EXPRESSION		FVTPTH	"*" PATH FIELD VECTOR TABLE
		VSE/VSAM BACKUP/RESTORE -IDCDFB35			
340	(154)	SIGNED	4		FULLWORD ALIGNMENT
340	(154)	BITSTRING	92		FIELD VECTOR TABLE (FVT)

Dec	Hex	Type	Len	Name (Dim)	Description
		DATA COMPONENT FIELD VECTOR TABLE			
		VSE/VSAM BACKUP/RESTORE -IDCDFB35			
432	(1B0)	SIGNED	4	FVTDTA (0)	FULLWORD ALIGNMENT
432	(1B0)	BITSTRING	92		FIELD VECTOR TABLE (FVT)
		INDEX COMPONENT FIELD VECTOR TABLE			
		VSE/VSAM BACKUP/RESTORE -IDCDFB35			
524	(20C)	SIGNED	4	FVTIX (0)	FULLWORD ALIGNMENT
524	(20C)	BITSTRING	92		FIELD VECTOR TABLE (FVT)
		VOLUME FIELD VECTOR TABLE			
		VSE/VSAM BACKUP/RESTORE -IDCDFB35			
616	(268)	SIGNED	4	VCHFV (0)	FULLWORD ALIGNMENT
616	(268)	BITSTRING	92		FIELD VECTOR TABLE (FVT)
		CATALOG RECOVERY VOLUME WORK AREA			
		POINTED TO BY FIELD VECTOR TABLE			
708	(2C4)	CHAR-ACTER	10	RCVWKA (0)	CATALOG RECOVERY VOLUME WORK AREA
708	(2C4)	ADDRESS	2	RCVLN	LENGTH OF RECOVERY VOLUME WORK AREA
710	(2C6)	SIGNED	2	RCVRLN	RETURNED LENGTH
712	(2C8)	BITSTRING	6	RCVVSR	RECOVERY VOLUME VOLSER
		FIELD PARAMETER LIST FIELD NAMES			
718	(2CE)	CHAR-ACTER	8	FENTYPE	ENTYPE FPL FIELD NAME
726	(2D6)	CHAR-ACTER	8	FENTNAME	ENTNAME FPL FIELD NAME
734	(2DE)	CHAR-ACTER	8	FDSATTR	DSATTR FPL FIELD NAME
742	(2E6)	CHAR-ACTER	8	FOWNERID	OWNERID FPL FIELD NAME
750	(2EE)	CHAR-ACTER	8	FDSETCRD	DSETCRDT FPL FIELD NAME
758	(2F6)	CHAR-ACTER	8	FDSETEXD	DSETEXDT FPL FIELD NAME
766	(2FE)	CHAR-ACTER	8	FBUFSIZE	BUFSIZE FPL FIELD NAME
774	(306)	CHAR-ACTER	8	FLRECL	LRECL FPL FIELD NAME
782	(30E)	CHAR-ACTER	8	FSPACPAR	SPACPARM FPL FIELD NAME
790	(316)	CHAR-ACTER	8	FPASWALL	PASSWALL FPL FIELD NAME
798	(31E)	CHAR-ACTER	8	FLOKEYV	LOKEYV FPL FIELD NAME
806	(326)	CHAR-ACTER	8	FHIKEYV	HIKEYV FPL FIELD NAME
814	(32E)	CHAR-ACTER	8	FVOLSER	VOLSER FPL FIELD NAME
822	(336)	CHAR-ACTER	8	FAMDSB	AMDSBCAT FPL FIELD NAME
830	(33E)	CHAR-ACTER	8	FEXCPXIT	EXCPEXIT FPL FIELD NAME
838	(346)	CHAR-ACTER	8	FRGATTR	RGATTR FPL FIELD NAME
		FIELD PARAMETER LISTS (FPL) FOR DEFINE			
		FIELD PARAMETER LISTS FOR CLUSTER/AIX/PATH FVT			
848	(350)	SIGNED	4	FPLCL (0)	CLUSTER FVT FIELD PARAMETER LISTS
		EXPRESSION		FPLAIX	"*" AIX FVT FIELD PARAMETER LISTS
		EXPRESSION		FPLPTH	"*" PATH FVT FIELD PARAMETER LISTS
		VSE/VSAM BACKUP/RESTORE -IDCDFB36			

Dec	Hex	Type	Len	Name (Dim)	Description
848	(350)	CHAR-ACTER	24	PENTYPE (0)	CATALOG FIELD PARAMETER LIST
848	(350)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
849	(351)	BITSTRING	1		TEST CONDITION
850	(352)	BITSTRING	1		GROUP CODE NUMBER
851	(353)	BITSTRING	1		TEST FIELD RESULTS
852	(354)	ADDRESS	4		WORK AREA
856	(358)	ADDRESS	4		ADDRESS OF FIELD NAME
860	(35C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
864	(360)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
864	(360)	SIGNED	4		DATA LENGTH
868	(364)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
872	(368)	CHAR-ACTER	24	PENTNAME (0)	CATALOG FIELD PARAMETER LIST
872	(368)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
873	(369)	BITSTRING	1		TEST CONDITION
874	(36A)	BITSTRING	1		GROUP CODE NUMBER
875	(36B)	BITSTRING	1		TEST FIELD RESULTS
876	(36C)	ADDRESS	4		WORK AREA
880	(370)	ADDRESS	4		ADDRESS OF FIELD NAME
884	(374)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
888	(378)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
888	(378)	SIGNED	4		DATA LENGTH
892	(37C)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
896	(380)	CHAR-ACTER	24	PDSATTR (0)	CATALOG FIELD PARAMETER LIST
896	(380)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
897	(381)	BITSTRING	1		TEST CONDITION
898	(382)	BITSTRING	1		GROUP CODE NUMBER
899	(383)	BITSTRING	1		TEST FIELD RESULTS
900	(384)	ADDRESS	4		WORK AREA
904	(388)	ADDRESS	4		ADDRESS OF FIELD NAME
908	(38C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
912	(390)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
912	(390)	SIGNED	4		DATA LENGTH
916	(394)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
920	(398)	CHAR-ACTER	24	POWNERID (0)	CATALOG FIELD PARAMETER LIST
920	(398)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
921	(399)	BITSTRING	1		TEST CONDITION
922	(39A)	BITSTRING	1		GROUP CODE NUMBER
923	(39B)	BITSTRING	1		TEST FIELD RESULTS
924	(39C)	ADDRESS	4		WORK AREA
928	(3A0)	ADDRESS	4		ADDRESS OF FIELD NAME
932	(3A4)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
936	(3A8)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
936	(3A8)	SIGNED	4		DATA LENGTH
940	(3AC)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
944	(3B0)	CHAR-ACTER	24	PDSETCRD (0)	CATALOG FIELD PARAMETER LIST
944	(3B0)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
945	(3B1)	BITSTRING	1		TEST CONDITION
946	(3B2)	BITSTRING	1		GROUP CODE NUMBER

Dec	Hex	Type	Len	Name (Dim)	Description
947	(3B3)	BITSTRING	1		TEST FIELD RESULTS
948	(3B4)	ADDRESS	4		WORK AREA
952	(3B8)	ADDRESS	4		ADDRESS OF FIELD NAME
956	(3BC)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
960	(3C0)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
960	(3C0)	SIGNED	4		DATA LENGTH
964	(3C4)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
968	(3C8)	CHAR-ACTER	24	PDSETEXD (0)	CATALOG FIELD PARAMETER LIST
968	(3C8)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
969	(3C9)	BITSTRING	1		TEST CONDITION
970	(3CA)	BITSTRING	1		GROUP CODE NUMBER
971	(3CB)	BITSTRING	1		TEST FIELD RESULTS
972	(3CC)	ADDRESS	4		WORK AREA
976	(3D0)	ADDRESS	4		ADDRESS OF FIELD NAME
980	(3D4)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
984	(3D8)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
984	(3D8)	SIGNED	4		DATA LENGTH
988	(3DC)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
992	(3E0)	CHAR-ACTER	24	PBUFSIZE (0)	CATALOG FIELD PARAMETER LIST
992	(3E0)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
993	(3E1)	BITSTRING	1		TEST CONDITION
994	(3E2)	BITSTRING	1		GROUP CODE NUMBER
995	(3E3)	BITSTRING	1		TEST FIELD RESULTS
996	(3E4)	ADDRESS	4		WORK AREA
1000	(3E8)	ADDRESS	4		ADDRESS OF FIELD NAME
1004	(3EC)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1008	(3F0)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1008	(3F0)	SIGNED	4		DATA LENGTH
1012	(3F4)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
1016	(3F8)	CHAR-ACTER	24	PLRECL (0)	CATALOG FIELD PARAMETER LIST
1016	(3F8)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1017	(3F9)	BITSTRING	1		TEST CONDITION
1018	(3FA)	BITSTRING	1		GROUP CODE NUMBER
1019	(3FB)	BITSTRING	1		TEST FIELD RESULTS
1020	(3FC)	ADDRESS	4		WORK AREA
1024	(400)	ADDRESS	4		ADDRESS OF FIELD NAME
1028	(404)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1032	(408)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1032	(408)	SIGNED	4		DATA LENGTH
1036	(40C)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
1040	(410)	CHAR-ACTER	24	PSPACPAR (0)	CATALOG FIELD PARAMETER LIST
1040	(410)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1041	(411)	BITSTRING	1		TEST CONDITION
1042	(412)	BITSTRING	1		GROUP CODE NUMBER
1043	(413)	BITSTRING	1		TEST FIELD RESULTS
1044	(414)	ADDRESS	4		WORK AREA
1048	(418)	ADDRESS	4		ADDRESS OF FIELD NAME
1052	(41C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO

Dec	Hex	Type	Len	Name (Dim)	Description
1056	(420)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1056	(420)	SIGNED	4		DATA LENGTH
1060	(424)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
1064	(428)	CHAR-ACTER	24	PPASWALL (0)	CATALOG FIELD PARAMETER LIST
1064	(428)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1065	(429)	BITSTRING	1		TEST CONDITION
1066	(42A)	BITSTRING	1		GROUP CODE NUMBER
1067	(42B)	BITSTRING	1		TEST FIELD RESULTS
1068	(42C)	ADDRESS	4		WORK AREA
1072	(430)	ADDRESS	4		ADDRESS OF FIELD NAME
1076	(434)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1080	(438)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1080	(438)	SIGNED	4		DATA LENGTH
1084	(43C)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
1088	(440)	CHAR-ACTER	24	PLOKEYV (0)	CATALOG FIELD PARAMETER LIST
1088	(440)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1089	(441)	BITSTRING	1		TEST CONDITION
1090	(442)	BITSTRING	1		GROUP CODE NUMBER
1091	(443)	BITSTRING	1		TEST FIELD RESULTS
1092	(444)	ADDRESS	4		WORK AREA
1096	(448)	ADDRESS	4		ADDRESS OF FIELD NAME
1100	(44C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1104	(450)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1104	(450)	SIGNED	4		DATA LENGTH
1108	(454)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
1112	(458)	CHAR-ACTER	24	PHIKEYV (0)	CATALOG FIELD PARAMETER LIST
1112	(458)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1113	(459)	BITSTRING	1		TEST CONDITION
1114	(45A)	BITSTRING	1		GROUP CODE NUMBER
1115	(45B)	BITSTRING	1		TEST FIELD RESULTS
1116	(45C)	ADDRESS	4		WORK AREA
1120	(460)	ADDRESS	4		ADDRESS OF FIELD NAME
1124	(464)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1128	(468)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1128	(468)	SIGNED	4		DATA LENGTH
1132	(46C)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
1136	(470)	CHAR-ACTER	24	PVOLSER (0)	CATALOG FIELD PARAMETER LIST
1136	(470)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1137	(471)	BITSTRING	1		TEST CONDITION
1138	(472)	BITSTRING	1		GROUP CODE NUMBER
1139	(473)	BITSTRING	1		TEST FIELD RESULTS
1140	(474)	ADDRESS	4		WORK AREA
1144	(478)	ADDRESS	4		ADDRESS OF FIELD NAME
1148	(47C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1152	(480)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1152	(480)	SIGNED	4		DATA LENGTH
1156	(484)	ADDRESS	4		FIELD POINTER

Dec	Hex	Type	Len	Name (Dim)	Description
		VSE/VSAM BACKUP/RESTORE -IDCDFB36			
1160	(488)	CHAR-ACTER	24	PAMDSB (0)	CATALOG FIELD PARAMETER LIST
1160	(488)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1161	(489)	BITSTRING	1		TEST CONDITION
1162	(48A)	BITSTRING	1		GROUP CODE NUMBER
1163	(48B)	BITSTRING	1		TEST FIELD RESULTS
1164	(48C)	ADDRESS	4		WORK AREA
1168	(490)	ADDRESS	4		ADDRESS OF FIELD NAME
1172	(494)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1176	(498)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1176	(498)	SIGNED	4		DATA LENGTH
1180	(49C)	ADDRESS	4		FIELD POINTER
		VSE/VSAM BACKUP/RESTORE -IDCDFB36			
1184	(4A0)	CHAR-ACTER	24	PEXCPXIT (0)	CATALOG FIELD PARAMETER LIST
1184	(4A0)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1185	(4A1)	BITSTRING	1		TEST CONDITION
1186	(4A2)	BITSTRING	1		GROUP CODE NUMBER
1187	(4A3)	BITSTRING	1		TEST FIELD RESULTS
1188	(4A4)	ADDRESS	4		WORK AREA
1192	(4A8)	ADDRESS	4		ADDRESS OF FIELD NAME
1196	(4AC)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1200	(4B0)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1200	(4B0)	SIGNED	4		DATA LENGTH
1204	(4B4)	ADDRESS	4		FIELD POINTER
		VSE/VSAM BACKUP/RESTORE -IDCDFB36			
1208	(4B8)	CHAR-ACTER	24	PRGATTR (0)	CATALOG FIELD PARAMETER LIST
1208	(4B8)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1209	(4B9)	BITSTRING	1		TEST CONDITION
1210	(4BA)	BITSTRING	1		GROUP CODE NUMBER
1211	(4BB)	BITSTRING	1		TEST FIELD RESULTS
1212	(4BC)	ADDRESS	4		WORK AREA
1216	(4C0)	ADDRESS	4		ADDRESS OF FIELD NAME
1220	(4C4)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1224	(4C8)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1224	(4C8)	SIGNED	4		DATA LENGTH
1228	(4CC)	ADDRESS	4		FIELD POINTER
		FIELD PARAMETER LISTS FOR DATA COMPONENT FVT			
1232	(4D0)	SIGNED	4	FPLDTA (0)	FIELD PAREAMETER LISTS FOR DATA COMP
		VSE/VSAM BACKUP/RESTORE -IDCDFB36			
1232	(4D0)	CHAR-ACTER	24	DENTYPE (0)	CATALOG FIELD PARAMETER LIST
1232	(4D0)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1233	(4D1)	BITSTRING	1		TEST CONDITION
1234	(4D2)	BITSTRING	1		GROUP CODE NUMBER
1235	(4D3)	BITSTRING	1		TEST FIELD RESULTS
1236	(4D4)	ADDRESS	4		WORK AREA
1240	(4D8)	ADDRESS	4		ADDRESS OF FIELD NAME
1244	(4DC)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1248	(4E0)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1248	(4E0)	SIGNED	4		DATA LENGTH
1252	(4E4)	ADDRESS	4		FIELD POINTER
		VSE/VSAM BACKUP/RESTORE -IDCDFB36			

Dec	Hex	Type	Len	Name (Dim)	Description
1256	(4E8)	CHAR-ACTER	24	DENTNAME (0)	CATALOG FIELD PARAMETER LIST
1256	(4E8)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1257	(4E9)	BITSTRING	1		TEST CONDITION
1258	(4EA)	BITSTRING	1		GROUP CODE NUMBER
1259	(4EB)	BITSTRING	1		TEST FIELD RESULTS
1260	(4EC)	ADDRESS	4		WORK AREA
1264	(4F0)	ADDRESS	4		ADDRESS OF FIELD NAME
1268	(4F4)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1272	(4F8)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1272	(4F8)	SIGNED	4		DATA LENGTH
1276	(4FC)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
1280	(500)	CHAR-ACTER	24	DDSATTR (0)	CATALOG FIELD PARAMETER LIST
1280	(500)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1281	(501)	BITSTRING	1		TEST CONDITION
1282	(502)	BITSTRING	1		GROUP CODE NUMBER
1283	(503)	BITSTRING	1		TEST FIELD RESULTS
1284	(504)	ADDRESS	4		WORK AREA
1288	(508)	ADDRESS	4		ADDRESS OF FIELD NAME
1292	(50C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1296	(510)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1296	(510)	SIGNED	4		DATA LENGTH
1300	(514)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
1304	(518)	CHAR-ACTER	24	DOWNERID (0)	CATALOG FIELD PARAMETER LIST
1304	(518)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1305	(519)	BITSTRING	1		TEST CONDITION
1306	(51A)	BITSTRING	1		GROUP CODE NUMBER
1307	(51B)	BITSTRING	1		TEST FIELD RESULTS
1308	(51C)	ADDRESS	4		WORK AREA
1312	(520)	ADDRESS	4		ADDRESS OF FIELD NAME
1316	(524)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1320	(528)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1320	(528)	SIGNED	4		DATA LENGTH
1324	(52C)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
1328	(530)	CHAR-ACTER	24	DDSETCRD (0)	CATALOG FIELD PARAMETER LIST
1328	(530)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1329	(531)	BITSTRING	1		TEST CONDITION
1330	(532)	BITSTRING	1		GROUP CODE NUMBER
1331	(533)	BITSTRING	1		TEST FIELD RESULTS
1332	(534)	ADDRESS	4		WORK AREA
1336	(538)	ADDRESS	4		ADDRESS OF FIELD NAME
1340	(53C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1344	(540)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1344	(540)	SIGNED	4		DATA LENGTH
1348	(544)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
1352	(548)	CHAR-ACTER	24	DDSETEXD (0)	CATALOG FIELD PARAMETER LIST
1352	(548)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1353	(549)	BITSTRING	1		TEST CONDITION
1354	(54A)	BITSTRING	1		GROUP CODE NUMBER

Offsets					
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
1355	(54B)	BITSTRING	1		TEST FIELD RESULTS
1356	(54C)	ADDRESS	4		WORK AREA
1360	(550)	ADDRESS	4		ADDRESS OF FIELD NAME
1364	(554)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1368	(558)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1368	(558)	SIGNED	4		DATA LENGTH
1372	(55C)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

1376	(560)	CHAR-ACTER	24	DBUFSIZE (0)	CATALOG FIELD PARAMETER LIST
1376	(560)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1377	(561)	BITSTRING	1		TEST CONDITION
1378	(562)	BITSTRING	1		GROUP CODE NUMBER
1379	(563)	BITSTRING	1		TEST FIELD RESULTS
1380	(564)	ADDRESS	4		WORK AREA
1384	(568)	ADDRESS	4		ADDRESS OF FIELD NAME
1388	(56C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1392	(570)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1392	(570)	SIGNED	4		DATA LENGTH
1396	(574)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

1400	(578)	CHAR-ACTER	24	DLRECL (0)	CATALOG FIELD PARAMETER LIST
1400	(578)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1401	(579)	BITSTRING	1		TEST CONDITION
1402	(57A)	BITSTRING	1		GROUP CODE NUMBER
1403	(57B)	BITSTRING	1		TEST FIELD RESULTS
1404	(57C)	ADDRESS	4		WORK AREA
1408	(580)	ADDRESS	4		ADDRESS OF FIELD NAME
1412	(584)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1416	(588)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1416	(588)	SIGNED	4		DATA LENGTH
1420	(58C)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

1424	(590)	CHAR-ACTER	24	DSPACPAR (0)	CATALOG FIELD PARAMETER LIST
1424	(590)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1425	(591)	BITSTRING	1		TEST CONDITION
1426	(592)	BITSTRING	1		GROUP CODE NUMBER
1427	(593)	BITSTRING	1		TEST FIELD RESULTS
1428	(594)	ADDRESS	4		WORK AREA
1432	(598)	ADDRESS	4		ADDRESS OF FIELD NAME
1436	(59C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1440	(5A0)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1440	(5A0)	SIGNED	4		DATA LENGTH
1444	(5A4)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

1448	(5A8)	CHAR-ACTER	24	DPASWALL (0)	CATALOG FIELD PARAMETER LIST
1448	(5A8)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1449	(5A9)	BITSTRING	1		TEST CONDITION
1450	(5AA)	BITSTRING	1		GROUP CODE NUMBER
1451	(5AB)	BITSTRING	1		TEST FIELD RESULTS
1452	(5AC)	ADDRESS	4		WORK AREA
1456	(5B0)	ADDRESS	4		ADDRESS OF FIELD NAME
1460	(5B4)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO

Dec	Hex	Type	Len	Name (Dim)	Description
1464	(5B8)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1464	(5B8)	SIGNED	4		DATA LENGTH
1468	(5BC)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
1472	(5C0)	CHAR-ACTER	24	DLOKEYV (0)	CATALOG FIELD PARAMETER LIST
1472	(5C0)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1473	(5C1)	BITSTRING	1		TEST CONDITION
1474	(5C2)	BITSTRING	1		GROUP CODE NUMBER
1475	(5C3)	BITSTRING	1		TEST FIELD RESULTS
1476	(5C4)	ADDRESS	4		WORK AREA
1480	(5C8)	ADDRESS	4		ADDRESS OF FIELD NAME
1484	(5CC)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1488	(5D0)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1488	(5D0)	SIGNED	4		DATA LENGTH
1492	(5D4)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
1496	(5D8)	CHAR-ACTER	24	DHIKEYV (0)	CATALOG FIELD PARAMETER LIST
1496	(5D8)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1497	(5D9)	BITSTRING	1		TEST CONDITION
1498	(5DA)	BITSTRING	1		GROUP CODE NUMBER
1499	(5DB)	BITSTRING	1		TEST FIELD RESULTS
1500	(5DC)	ADDRESS	4		WORK AREA
1504	(5E0)	ADDRESS	4		ADDRESS OF FIELD NAME
1508	(5E4)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1512	(5E8)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1512	(5E8)	SIGNED	4		DATA LENGTH
1516	(5EC)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
1520	(5F0)	CHAR-ACTER	24	DVOLSER (0)	CATALOG FIELD PARAMETER LIST
1520	(5F0)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1521	(5F1)	BITSTRING	1		TEST CONDITION
1522	(5F2)	BITSTRING	1		GROUP CODE NUMBER
1523	(5F3)	BITSTRING	1		TEST FIELD RESULTS
1524	(5F4)	ADDRESS	4		WORK AREA
1528	(5F8)	ADDRESS	4		ADDRESS OF FIELD NAME
1532	(5FC)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1536	(600)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1536	(600)	SIGNED	4		DATA LENGTH
1540	(604)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
1544	(608)	CHAR-ACTER	24	DAMDSB (0)	CATALOG FIELD PARAMETER LIST
1544	(608)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1545	(609)	BITSTRING	1		TEST CONDITION
1546	(60A)	BITSTRING	1		GROUP CODE NUMBER
1547	(60B)	BITSTRING	1		TEST FIELD RESULTS
1548	(60C)	ADDRESS	4		WORK AREA
1552	(610)	ADDRESS	4		ADDRESS OF FIELD NAME
1556	(614)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1560	(618)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1560	(618)	SIGNED	4		DATA LENGTH
1564	(61C)	ADDRESS	4		FIELD POINTER

Dec	Hex	Type	Len	Name (Dim)	Description
		VSE/VSAM BACKUP/RESTORE -IDCDFB36			
1568	(620)	CHAR-ACTER	24	DEXCPXIT (0)	CATALOG FIELD PARAMETER LIST
1568	(620)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1569	(621)	BITSTRING	1		TEST CONDITION
1570	(622)	BITSTRING	1		GROUP CODE NUMBER
1571	(623)	BITSTRING	1		TEST FIELD RESULTS
1572	(624)	ADDRESS	4		WORK AREA
1576	(628)	ADDRESS	4		ADDRESS OF FIELD NAME
1580	(62C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1584	(630)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1584	(630)	SIGNED	4		DATA LENGTH
1588	(634)	ADDRESS	4		FIELD POINTER
		VSE/VSAM BACKUP/RESTORE -IDCDFB36			
1592	(638)	CHAR-ACTER	24	DRGATTR (0)	CATALOG FIELD PARAMETER LIST
1592	(638)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1593	(639)	BITSTRING	1		TEST CONDITION
1594	(63A)	BITSTRING	1		GROUP CODE NUMBER
1595	(63B)	BITSTRING	1		TEST FIELD RESULTS
1596	(63C)	ADDRESS	4		WORK AREA
1600	(640)	ADDRESS	4		ADDRESS OF FIELD NAME
1604	(644)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1608	(648)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1608	(648)	SIGNED	4		DATA LENGTH
1612	(64C)	ADDRESS	4		FIELD POINTER
		FIELD PARAMETER LISTS FOR INDEX COMPONENT FVT			
1616	(650)	SIGNED	4	FPLIX (0)	FIELD PARAMETER LISTS FOR INDEX COMP
		VSE/VSAM BACKUP/RESTORE -IDCDFB36			
1616	(650)	CHAR-ACTER	24	XENTYPE (0)	CATALOG FIELD PARAMETER LIST
1616	(650)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1617	(651)	BITSTRING	1		TEST CONDITION
1618	(652)	BITSTRING	1		GROUP CODE NUMBER
1619	(653)	BITSTRING	1		TEST FIELD RESULTS
1620	(654)	ADDRESS	4		WORK AREA
1624	(658)	ADDRESS	4		ADDRESS OF FIELD NAME
1628	(65C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1632	(660)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1632	(660)	SIGNED	4		DATA LENGTH
1636	(664)	ADDRESS	4		FIELD POINTER
		VSE/VSAM BACKUP/RESTORE -IDCDFB36			
1640	(668)	CHAR-ACTER	24	XENTNAME (0)	CATALOG FIELD PARAMETER LIST
1640	(668)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1641	(669)	BITSTRING	1		TEST CONDITION
1642	(66A)	BITSTRING	1		GROUP CODE NUMBER
1643	(66B)	BITSTRING	1		TEST FIELD RESULTS
1644	(66C)	ADDRESS	4		WORK AREA
1648	(670)	ADDRESS	4		ADDRESS OF FIELD NAME
1652	(674)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1656	(678)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1656	(678)	SIGNED	4		DATA LENGTH
1660	(67C)	ADDRESS	4		FIELD POINTER
		VSE/VSAM BACKUP/RESTORE -IDCDFB36			

Dec	Hex	Type	Len	Name (Dim)	Description
1664	(680)	CHAR- ACTER	24	XDSATTR (0)	CATALOG FIELD PARAMETER LIST
1664	(680)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1665	(681)	BITSTRING	1		TEST CONDITION
1666	(682)	BITSTRING	1		GROUP CODE NUMBER
1667	(683)	BITSTRING	1		TEST FIELD RESULTS
1668	(684)	ADDRESS	4		WORK AREA
1672	(688)	ADDRESS	4		ADDRESS OF FIELD NAME
1676	(68C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1680	(690)	CHAR- ACTER	8		FIELD LENGTH AND DATA ADDRESS
1680	(690)	SIGNED	4		DATA LENGTH
1684	(694)	ADDRESS	4		FIELD POINTER
1688	(698)	CHAR- ACTER	24	XOWNERID (0)	CATALOG FIELD PARAMETER LIST
1688	(698)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1689	(699)	BITSTRING	1		TEST CONDITION
1690	(69A)	BITSTRING	1		GROUP CODE NUMBER
1691	(69B)	BITSTRING	1		TEST FIELD RESULTS
1692	(69C)	ADDRESS	4		WORK AREA
1696	(6A0)	ADDRESS	4		ADDRESS OF FIELD NAME
1700	(6A4)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1704	(6A8)	CHAR- ACTER	8		FIELD LENGTH AND DATA ADDRESS
1704	(6A8)	SIGNED	4		DATA LENGTH
1708	(6AC)	ADDRESS	4		FIELD POINTER
1712	(6B0)	CHAR- ACTER	24	XDSETCRD (0)	CATALOG FIELD PARAMETER LIST
1712	(6B0)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1713	(6B1)	BITSTRING	1		TEST CONDITION
1714	(6B2)	BITSTRING	1		GROUP CODE NUMBER
1715	(6B3)	BITSTRING	1		TEST FIELD RESULTS
1716	(6B4)	ADDRESS	4		WORK AREA
1720	(6B8)	ADDRESS	4		ADDRESS OF FIELD NAME
1724	(6BC)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1728	(6C0)	CHAR- ACTER	8		FIELD LENGTH AND DATA ADDRESS
1728	(6C0)	SIGNED	4		DATA LENGTH
1732	(6C4)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
1736	(6C8)	CHAR- ACTER	24	XDSETEXD (0)	CATALOG FIELD PARAMETER LIST
1736	(6C8)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1737	(6C9)	BITSTRING	1		TEST CONDITION
1738	(6CA)	BITSTRING	1		GROUP CODE NUMBER
1739	(6CB)	BITSTRING	1		TEST FIELD RESULTS
1740	(6CC)	ADDRESS	4		WORK AREA
1744	(6D0)	ADDRESS	4		ADDRESS OF FIELD NAME
1748	(6D4)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1752	(6D8)	CHAR- ACTER	8		FIELD LENGTH AND DATA ADDRESS
1752	(6D8)	SIGNED	4		DATA LENGTH
1756	(6DC)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
1760	(6E0)	CHAR- ACTER	24	XBUFSIZE (0)	CATALOG FIELD PARAMETER LIST
1760	(6E0)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1761	(6E1)	BITSTRING	1		TEST CONDITION
1762	(6E2)	BITSTRING	1		GROUP CODE NUMBER

Dec	Hex	Type	Len	Name (Dim)	Description
1763	(6E3)	BITSTRING	1		TEST FIELD RESULTS
1764	(6E4)	ADDRESS	4		WORK AREA
1768	(6E8)	ADDRESS	4		ADDRESS OF FIELD NAME
1772	(6EC)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1776	(6F0)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1776	(6F0)	SIGNED	4		DATA LENGTH
1780	(6F4)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
1784	(6F8)	CHAR-ACTER	24	XLRECL (0)	CATALOG FIELD PARAMETER LIST
1784	(6F8)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1785	(6F9)	BITSTRING	1		TEST CONDITION
1786	(6FA)	BITSTRING	1		GROUP CODE NUMBER
1787	(6FB)	BITSTRING	1		TEST FIELD RESULTS
1788	(6FC)	ADDRESS	4		WORK AREA
1792	(700)	ADDRESS	4		ADDRESS OF FIELD NAME
1796	(704)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1800	(708)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1800	(708)	SIGNED	4		DATA LENGTH
1804	(70C)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
1808	(710)	CHAR-ACTER	24	XSPACPAR (0)	CATALOG FIELD PARAMETER LIST
1808	(710)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1809	(711)	BITSTRING	1		TEST CONDITION
1810	(712)	BITSTRING	1		GROUP CODE NUMBER
1811	(713)	BITSTRING	1		TEST FIELD RESULTS
1812	(714)	ADDRESS	4		WORK AREA
1816	(718)	ADDRESS	4		ADDRESS OF FIELD NAME
1820	(71C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1824	(720)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1824	(720)	SIGNED	4		DATA LENGTH
1828	(724)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
1832	(728)	CHAR-ACTER	24	XPASWALL (0)	CATALOG FIELD PARAMETER LIST
1832	(728)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1833	(729)	BITSTRING	1		TEST CONDITION
1834	(72A)	BITSTRING	1		GROUP CODE NUMBER
1835	(72B)	BITSTRING	1		TEST FIELD RESULTS
1836	(72C)	ADDRESS	4		WORK AREA
1840	(730)	ADDRESS	4		ADDRESS OF FIELD NAME
1844	(734)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1848	(738)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1848	(738)	SIGNED	4		DATA LENGTH
1852	(73C)	ADDRESS	4		FIELD POINTER

VSE/VSAM BACKUP/RESTORE -IDCDFB36

Dec	Hex	Type	Len	Name (Dim)	Description
1856	(740)	CHAR-ACTER	24	XLOKEYV (0)	CATALOG FIELD PARAMETER LIST
1856	(740)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1857	(741)	BITSTRING	1		TEST CONDITION
1858	(742)	BITSTRING	1		GROUP CODE NUMBER
1859	(743)	BITSTRING	1		TEST FIELD RESULTS
1860	(744)	ADDRESS	4		WORK AREA
1864	(748)	ADDRESS	4		ADDRESS OF FIELD NAME
1868	(74C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO

Dec	Hex	Type	Len	Name (Dim)	Description
1872	(750)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1872	(750)	SIGNED	4		DATA LENGTH
1876	(754)	ADDRESS	4		FIELD POINTER
		VSE/VSAM BACKUP/RESTORE -IDCDFB36			
1880	(758)	CHAR-ACTER	24	XHIKEYV (0)	CATALOG FIELD PARAMETER LIST
1880	(758)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1881	(759)	BITSTRING	1		TEST CONDITION
1882	(75A)	BITSTRING	1		GROUP CODE NUMBER
1883	(75B)	BITSTRING	1		TEST FIELD RESULTS
1884	(75C)	ADDRESS	4		WORK AREA
1888	(760)	ADDRESS	4		ADDRESS OF FIELD NAME
1892	(764)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1896	(768)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1896	(768)	SIGNED	4		DATA LENGTH
1900	(76C)	ADDRESS	4		FIELD POINTER
		VSE/VSAM BACKUP/RESTORE -IDCDFB36			
1904	(770)	CHAR-ACTER	24	XVOLSER (0)	CATALOG FIELD PARAMETER LIST
1904	(770)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1905	(771)	BITSTRING	1		TEST CONDITION
1906	(772)	BITSTRING	1		GROUP CODE NUMBER
1907	(773)	BITSTRING	1		TEST FIELD RESULTS
1908	(774)	ADDRESS	4		WORK AREA
1912	(778)	ADDRESS	4		ADDRESS OF FIELD NAME
1916	(77C)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1920	(780)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1920	(780)	SIGNED	4		DATA LENGTH
1924	(784)	ADDRESS	4		FIELD POINTER
		VSE/VSAM BACKUP/RESTORE -IDCDFB36			
1928	(788)	CHAR-ACTER	24	XAMDSB (0)	CATALOG FIELD PARAMETER LIST
1928	(788)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1929	(789)	BITSTRING	1		TEST CONDITION
1930	(78A)	BITSTRING	1		GROUP CODE NUMBER
1931	(78B)	BITSTRING	1		TEST FIELD RESULTS
1932	(78C)	ADDRESS	4		WORK AREA
1936	(790)	ADDRESS	4		ADDRESS OF FIELD NAME
1940	(794)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1944	(798)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1944	(798)	SIGNED	4		DATA LENGTH
1948	(79C)	ADDRESS	4		FIELD POINTER
		VSE/VSAM BACKUP/RESTORE -IDCDFB36			
1952	(7A0)	CHAR-ACTER	24	XEXCPXIT (0)	CATALOG FIELD PARAMETER LIST
1952	(7A0)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1953	(7A1)	BITSTRING	1		TEST CONDITION
1954	(7A2)	BITSTRING	1		GROUP CODE NUMBER
1955	(7A3)	BITSTRING	1		TEST FIELD RESULTS
1956	(7A4)	ADDRESS	4		WORK AREA
1960	(7A8)	ADDRESS	4		ADDRESS OF FIELD NAME
1964	(7AC)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1968	(7B0)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1968	(7B0)	SIGNED	4		DATA LENGTH
1972	(7B4)	ADDRESS	4		FIELD POINTER

| Offsets | | | | | |
Dec	Hex	Type	Len	Name (Dim)	Description
					VSE/VSAM BACKUP/RESTORE -IDCDFB36
1976	(7B8)	CHAR-ACTER	24	XRGATTR (0)	CATALOG FIELD PARAMETER LIST
1976	(7B8)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFLDAT
1977	(7B9)	BITSTRING	1		TEST CONDITION
1978	(7BA)	BITSTRING	1		GROUP CODE NUMBER
1979	(7BB)	BITSTRING	1		TEST FIELD RESULTS
1980	(7BC)	ADDRESS	4		WORK AREA
1984	(7C0)	ADDRESS	4		ADDRESS OF FIELD NAME
1988	(7C4)	ADDRESS	4		ADDRESS OF NEXT FPL OR ZERO
1992	(7C8)	CHAR-ACTER	8		FIELD LENGTH AND DATA ADDRESS
1992	(7C8)	SIGNED	4		DATA LENGTH
1996	(7CC)	ADDRESS	4		FIELD POINTER
	DELETE TABLES				
2000	(7D0)	SIGNED	4	RCADEL (0)	DELETE TABLES
	LAST-DELETED-PARENT TABLE IN ORDER TO AVOID UNNECESSARY DELETES FOR ASSOCIATIONS				
2000	(7D0)	ADDRESS	4	DELPAR (0)	LAST-DELETED-PARENT TABLE
2000	(7D0)	ADDRESS	4		PARENT FOR LEVEL 1 (MUST BE ZERO)
2004	(7D4)	ADDRESS	4		LAST DELETED OBJECT ON LEVEL 1
2008	(7D8)	ADDRESS	4		LAST DELETED OBJECT ON LEVEL 2
2012	(7DC)	ADDRESS	4		LAST DELETED OBJECT ON LEVEL 3
	CATALOG PARAMETER LIST FOR DELETE VSE/VSAM BACKUP/RESTORE -IDCDFB34				
2016	(7E0)	SIGNED	4	DELPL (0)	CATALOG PARAMETER LIST (CPL)
2016	(7E0)	BITSTRING	1		CTGENT CONTAINS DSNAME
2017	(7E1)	BITSTRING	1		PURGE OPTION
2018	(7E2)	BITSTRING	1		CATALOG MANAGEMENT SERVICE FUNCTION
2019	(7E3)	BITSTRING	1		RESERVED FOR OS
2020	(7E4)	ADDRESS	4		USER ENTRY ADDRESS
2024	(7E8)	ADDRESS	4		ADDRESS OF CATALOG DSNAME
2028	(7EC)	ADDRESS	4		ADDRESS OF CALLER'S WORK AREA
2032	(7F0)	BITSTRING	1		DELETE FUNCTION
2033	(7F1)	BITSTRING	1		CRA OPEN FLAGS
2034	(7F2)	BITSTRING	1		TYPE OF CATALOG RECORD
2035	(7F3)	ADDRESS	1		NUMBER OF ENTRIES IN CTGFIELD
2036	(7F4)	BITSTRING	2		MODULE NAME FEEDBACK
2038	(7F6)	BITSTRING	2		REASON CODE FEEDBACK
2040	(7F8)	ADDRESS	4		ADDRESS OF CALLER'S PASSWORD
2044	(7FC)	ADDRESS	4		ADDRESS OF UCAT FILENAME
2048	(800)	ADDRESS	4		ADDRESS OF CRA FILENAME
2052	(804)	ADDRESS	4		FIELD POINTERS
	COMBINATION FIELD CONTAINING THE DATA SET NAME OF THE OBJECT TO BE DELETED AND THE DATA SET NAME OF THE CATALOG CONTAINING THE OBJECT TO BE DELETED				
2052	(804)	CHAR-ACTER	88	DELENT (0)	DELETED OBJECT NAME/CATALOG NAME
2052	(804)	CHAR-ACTER	44	DELDSN	DATA SET NAME OF DELETED OBJECT
2096	(830)	CHAR-ACTER	44	DELCTN	CATALOG NAME FOR DELETE OPERATION
	STATIC WORK AREA FOR RETURNING THE NAMES OF THE OBJECTS THAT WERE DELETED				
2140	(85C)	CHAR-ACTER	544	DELWKA (0)	STATIC DELETE WORK AREA
2140	(85C)	ADDRESS	2	DELWLN	LENGTH OF STATIC DELETE WORK AREA
2142	(85E)	SIGNED	2	DELWRLN	LENGTH RETURNED BY CATALOG MGMT
2144	(860)	BITSTRING	45		AREA FOR RETURNED NAMES

Dec	Hex	Type	Len	Name (Dim)	Description
				RCA EQUATES	
	..11	11..		ODSATTR	"60" OFFSET OF DSATTR FPL ADDRESS IN FVT
	...1	11..		OOWNERID	"28" OFFSET OF OWNERID FPL ADDRESS IN FVT
	..1.	.1..		ODSETCRD	"36" OFFSET OF DSETCRDT FPL ADDR IN FVT
	..1.	....		ODSETEXD	"32" OFFSET OF DSETEXDT FPL ADDR IN FVT
	.1..	....		OBUFSIZE	"64" OFFSET OF BUFSIZE FPL ADDRESS IN FVT
	.1..	.1..		OLRECL	"68" OFFSET OF LRECL FPL ADDRESS IN FVT
	..11	.1..		OSPACPAR	"52" OFFSET OF SPACPARM FPL ADDR IN FVT
	...1	1...		OPASWALL	"24" OFFSET OF PASSWALL FPL ADDR IN FVT
	..11	1...		OAMDSB	"56" OFFSET OF AMDSBCAT FPL ADDR IN FVT
	.1..	1...		OEXCPXIT	"72" OFFSET OF EXCPEXIT FPL ADDR IN FVT
	.1.1	....		ORGATTR	"80" OFFSET OF RGATTR FPL ADDRESS IN FVT

Index Information Block (XIB):

VSE/VSAM BACKUP/RESTORE - IDCDFB43: For each index level of a KSDS, an Index Information
Block is provided which describes positional and status information for the last index record of the index
level corresponding to the Index Information Block. The information includes the RBA of the last index
control interval of the appropriate index level, the remaining free space in the index record, the number of
index entries in the index record, the number of entries per index section, the address of the last section
entry, and front-compression accumulators.

Offsets Dec	Hex	Type	Len	Name (Dim)	Description
RBA OF LAST INDEX CONTROL INTERVAL ON INDEX LEVEL					
0	(0)	SIGNED	4	XIBRBA	RBA OF LAST INDEX CNV
REMAINING FREE SPACE IN INDEX RECORD					
4	(4)	SIGNED	2	XIBXFS	REMAINING FREE SPACE IN RECORD
NUMBER OF INDEX ENTRIES IN LAST INDEX RECORD OF INDEX LEVEL					
6	(6)	SIGNED	2	XIBXC	NUMBER OF INDEX ENTRIES IN RECORD
INDEX SECTION CONTROL INFORMATION					
8	(8)	CHAR-ACTER	8	XIBSCI (0)	INDEX SECTION CONTROL INFORMATION
NUMBER OF INDEX ENTRIES PER SECTION FOR THIS INDEX LEVEL					
8	(8)	SIGNED	2	XIBNS	NUMBER OF ENTRIES PER SECTION
NUMBER OF INDEX ENTRIES IN LAST SECTION FOR THIS INDEX LEVEL					
10	(A)	SIGNED	2	XIBSC	NUMBER OF ENTRIES IN LAST SECTION
ADDRESS OF PREVIOUS SECTION ENTRY FOR LAST INDEX RECORD OF THIS LEVEL					
12	(C)	ADDRESS	4	XIBSE	ADDR(PREVIOUS SECTION ENTRY)
FRONT-COMPRESSION ACCUMULATORS ACCUMULATORS ARE USED TO CALCULATE THE FRONT-COMPRESS-ION COUNTS FOR THE CURRENT INDEX ENTRY AND THE CURRENT SECTION ENTRY FOR THE LAST CONTROL INTERVAL ON THIS INDEX LEVEL					
16	(10)	CHAR-ACTER	4	XIBFCA (0)	FRONT-COMPRESSION ACCUMULATORS
CURRENT INDEX ENTRY FRONT-COMPRESSION ACCUMULATOR					
16	(10)	SIGNED	2	XIBF	INDEX ENTRY F ACCUMULATOR
CURRENT SECTION ENTRY FRONT-COMPRESSION ACCUMULATOR					
18	(12)	SIGNED	2	XIBS	SECTION ENTRY F ACCUMULATOR
XIB EQUATES					
		...1 .1..		XIBLEN	"*-XIB" LENGTH OF XIB

Function Data Table (FDT):

VSE VSAM BACKUP/RESTORE - IDCDFB50:

Function Data Table and related objects: This macro contains a set of dummy sections which describe the layout of the Function Data Table and the user-supplied parameters of the commands BACKUP, RESTORE and VSAMCOPY which are pointed to by the Function Data Table.

Dec	Hex	Type	Len	Name (Dim)	Description
Offsets					
FUNCTION VERB NAME					
0	(0)	CHAR-ACTER	8	FDTVERB	FUNCTION VERB NAME
SCALAR DATA POINTERS					
8	(8)	CHAR-ACTER	32	FDTBPTR (0)	SCALAR DATA PTRS FOR BACKUP
8	(8)	CHAR-ACTER	124	FDTRPTR (0)	SCALAR DATA PTRS FOR RESTORE
8	(8)	CHAR-ACTER	124	FDTVPTR (0)	SCALAR DATA POINTERS FOR VSAMCOPY
8	(8)	ADDRESS	4	FDTDSID	ADDRESS OF BACKUP OBJECTS LIST
8	(8)	SIGNED	4	FDTRLST	NUMBER OF OBJECTS FOR RESTORE OR VSAMCOPY
SCALAR DATA POINTERS COMMON TO BACKUP, RESTORE AND VSAMCOPY					
12	(C)	ADDRESS	4	FDTEXCL	ADDRESS OF EXCLUSION LIST
16	(10)	ADDRESS	4	FDTBFRS	ADDRESS OF BUFFERS PARAMETER
SCALAR DATA POINTERS COMMON TO BACKUP AND RESTORE					
20	(14)	ADDRESS	4	FDTSLBL	ADDRESS OF STDLABEL PARAMETER
PARAMETERS UNIQUE TO BACKUP					
24	(18)	ADDRESS	4	FDTBLKSZ	ADDRESS OF BLOCKSIZE PARAMETER
28	(1C)	ADDRESS	4	FDTUNLBP	UNLOAD REQUIRED?
32	(20)	ADDRESS	4	FDTREWBP	REWIND REQUIRED?
36	(24)	ADDRESS	4	FDTCOMPR	COMPACTION REQUIRED
40	(28)	ADDRESS	4	FDTNOCMP	NOCOMPACTION
PARAMETERS UNIQUE TO RESTORE AND VSAMCOPY					
24	(18)	ADDRESS	4	FDTCAT	ADDRESS OF CATALOG PARAMETER
28	(1C)	ADDRESS	4	FDTVOL	ADDRESS OF GLOBAL VOLUME LIST
32	(20)	ADDRESS	4	FDTUSCL	ADDRESS OF GLOBAL USECLASS PARAMETER
36	(24)	ADDRESS	4	FDTPRMY	ADDRESS OF GLOBAL PRIMARY USECLASS
40	(28)	ADDRESS	4	FDTSCDY	ADDRESS OF GLOBAL SECONDARY USECLASS
44	(2C)	ADDRESS	4	FDTEVOL	ADDRESS OF LOCAL VOLUME LIST
48	(30)	ADDRESS	4	FDTRSID	ADDRESS OF OBJECT LIST FOR RESTORE OR VSAMCOPY
52	(34)	ADDRESS	4	FDTDVOL	ADDRESS OF LOCAL DATA VOLUME LIST
56	(38)	ADDRESS	4	FDTIVOL	ADDRESS OF LOCAL INDEX VOLUME LIST
60	(3C)	ADDRESS	4	FDTEUSC	ADDRESS OF LOCAL USECLASS PARAMETER
64	(40)	ADDRESS	4	FDTEPRI	ADDRESS OF LOCAL PRIMARY USECLASS
68	(44)	ADDRESS	4	FDTESEC	ADDRESS OF LOCAL SECONDARY USECLASS
72	(48)	ADDRESS	4	FDTDCLS	ADDRESS OF LOCAL DATUSECLASS PARM
76	(4C)	ADDRESS	4	FDTDPRI	ADDRESS OF LOCAL PRIMARY DATAUSCL
80	(50)	ADDRESS	4	FDTDSEC	ADDRESS OF LOCAL SECONDARY DATAUSCL
84	(54)	ADDRESS	4	FDTICLS	ADDRESS OF LOCAL INDEXUSECLASS PARM
88	(58)	ADDRESS	4	FDTIPRI	ADDRESS OF LOCAL PRIMARY INDEXUSCL
92	(5C)	ADDRESS	4	FDTISEC	ADDRESS OF LOCAL SECONDARY INDEXUSCL
96	(60)	ADDRESS	4	FDTFILE	ADDRESS OF LOCAL FILE PARAMETER
100	(64)	ADDRESS	4	FDTDFIL	ADDRESS OF LOCAL DATAFILE PARAMETER
104	(68)	ADDRESS	4	FDTIFIL	ADDRESS OF LOCAL INDEXFILE PARAMETER
108	(6C)	ADDRESS	4	FDTDREC	ADDR OF LOCAL DATA REC PARM
112	(70)	ADDRESS	4	FDTDRPRQ	ADDR OF LOCAL PRIMARY DREC
116	(74)	ADDRESS	4	FDTDRSEQ	ADDR OF LOCAL SECONDRY DREC

Offsets					
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
120	(78)	ADDRESS	4	FDTIXSZ	ADDR OF LOCAL INDEX CISIZE

PARAMETERS UNIQUE TO RESTORE

124	(7C)	ADDRESS	4	FDTUNLRT	UNLOAD REQUIRED?
128	(80)	ADDRESS	4	FDTREWRT	REWIND REQUIRED?

PARAMETERS UNIQUE TO VSAMCOPY

124	(7C)	ADDRESS	4	FDTREPL	REPLACE REQUIRED
128	(80)	ADDRESS	4	FDTNORP	NOREPLACE REQUIRED

DESCRIPTION OF USER-SUPPLIED PARAMETERS
ENTRY NAME FOR BACKUP AND RESTORE AND VSAMCOPY

Offsets					
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
0	(0)	BITSTRING	1	DSIDPLN	PASSWORD LENGTH
1	(1)	CHAR-ACTER	8	DSIDPAS	PASSWORD VALUE
9	(9)	BITSTRING	1	DSIDPOS	ASTERISK POSITION
10	(A)	BITSTRING	1	DSIDFLG	DATA SET FLAGS
		1...		DSIDFUQ	"B'10000000'" UNQUALIFIED FLAG
11	(B)	BITSTRING	1	DSIDMLN	MEMBER NAME LENGTH
12	(C)	CHAR-ACTER	8	DSIDMEM	MEMBER NAME
20	(14)	BITSTRING	1	DSIDLEN	CATALOGUED NAME LENGTH
21	(15)	CHAR-ACTER	44	DSIDVAL	CATALOGUED NAME
66	(42)	SIGNED	2	DSIDEND (0)	END OF ENTRYNAME

VSAM OBJECT LIST FOR BACKUP

Offsets					
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
0	(0)	SIGNED	2	DSIDCNT	NUMBER OF OBJECTS
2	(2)	CHAR-ACTER	1	DSIDLST (255)	OBJECT LIST

EXCLUSION LIST ENTRY

Offsets					
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
0	(0)	BITSTRING	1	EXCLPLN	PASSWORD LENGTH
1	(1)	CHAR-ACTER	8	EXCLPAS	PASSWORD VALUE
9	(9)	BITSTRING	1	EXCLPOS	ASTERISK POSITION
10	(A)	BITSTRING	1	EXCLFLG	DATA SET FLAGS
		1...		EXCLFUQ	"B'10000000'" UNQUALIFIED FLAG
11	(B)	BITSTRING	1	EXCLMLN	MEMBER NAME LENGTH
12	(C)	CHAR-ACTER	8	EXCLMEM	MEMBER NAME
20	(14)	BITSTRING	1	EXCLLEN	CATALOGUED NAME LENGTH
21	(15)	CHAR-ACTER	44	EXCLVAL	CATALOGUED NAME
66	(42)	SIGNED	2	EXCLEND (0)	END OF EXCLUSION LIST ENTRY

EXCLUSION LIST

Offsets					
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
0	(0)	SIGNED	2	EXCLCNT	NUMBER OF EXCLUDED OBJECTS

Dec	Hex	Type	Len	Name (Dim)	Description
2	(2)	CHAR-ACTER	1	EXCLLST (255)	EXCLUSION LIST

NUMBER OF BUFFERS

Offsets

Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	SIGNED	4	BFRSVAL	NUMBER OF BUFFERS

TLBL STATEMENT FOR LABELED BACKUP FILES

Offsets

Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	BITSTRING	1	SLBLLEN	LENGTH OF DNAME
1	(1)	CHAR-ACTER	7	SLBLVAL	DNAME FOR TLBL STATEMENT

TAPE BLOCK SIZE

Offsets

Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	SIGNED	4	BLKSZVAL	TAPE BLOCK SIZE (BUFFER SIZE)

CATALOG FOR RESTORE AND VSAMCOPY

Offsets

Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	BITSTRING	1	CATPLN	PASSWORD LENGTH
1	(1)	CHAR-ACTER	8	CATPAS	CATALOG PASSWORD
9	(9)	BITSTRING	1	CATPOS	ASTERISK POSITION
10	(A)	BITSTRING	1	CATFLG	DATA SET FLAGS
		1...		CATFUQ	"B'10000000'" UNQUALIFIED FLAG
11	(B)	BITSTRING	1	CATMLN	MEMBER NAME LENGTH
12	(C)	CHAR-ACTER	8	CATMEM	MEMBER NAME
20	(14)	BITSTRING	1	CATLEN	CATALOGUED NAME LENGTH
21	(15)	CHAR-ACTER	44	CATVAL	CATALOGUED NAME

GLOBAL VOLUME LIST ENTRY

Offsets

Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	BITSTRING	1	VOLLEN	GLOBAL VOLUME ENTRY LENGTH
1	(1)	CHAR-ACTER	6	VOLVAL	GLOBAL VOLUME ENTRY VALUE
8	(8)	SIGNED	2	VOLEND (0)	END OF GLOBAL VOLUME ENTRY

GLOBAL VOLUME LIST FOR RESTORE AND VSAMCOPY

Offsets

Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	SIGNED	2	VOLCNT	NUMBER OF GLOBAL VOLUMES
2	(2)	CHAR-ACTER	1	VOLLST (255)	VOLUME LIST

GLOBAL PRIMARY USECLASS

Offsets					
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
0	(0)	SIGNED	4	PRMYVAL	GLOBAL PRIMARY USECLASS

GLOBAL SECONDARY USECLASS

Offsets					
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
0	(0)	BITSTRING	1	SCDYLEN	GLOBAL PRIMARY USECLASS LENGTH
1	(1)	CHAR-ACTER	1	SCDYVAL	GLOBAL PRIMARY USECLASS VALUE

POINTER VECTOR TABLE FOR LOCAL VOLUME LIST

Offsets					
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
0	(0)	ADDRESS	4	EVOLPTR (255)	POINTER VECTOR TABLE FOR EVOL

LOCAL VOLUME LIST ENTRY

Offsets					
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
0	(0)	BITSTRING	1	EVOLLEN	LOCAL VOLUME LIST ENTRY LENGTH
1	(1)	CHAR-ACTER	6	EVOLVAL	LOCAL VOLUME LIST ENTRY VALUE
8	(8)	SIGNED	2	EVOLEND (0)	END OF LOCAL VOLUME LIST ENTRY

LOCAL VOLUME LIST

Offsets					
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
0	(0)	SIGNED	2	EVOLCNT	NUMBER OF LOCAL VOLUMES
2	(2)	CHAR-ACTER	1	EVOLLST (255)	LOCAL VOLUME LIST

POINTER VECTOR TABLE FOR RESTORE OBJECT LIST

Offsets					
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
0	(0)	ADDRESS	4	RSIDPTR (255)	POINTER VECTOR TABLE FOR OBJECT LIST

POINTER VECTOR TABLE FOR LOCAL DATA VOLUME LIST

Offsets					
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
0	(0)	ADDRESS	4	DVOLPTR (255)	POINTER VECTOR TABLE FOR DVOL

LOCAL DATA VOLUME ENTRY

Offsets					
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
0	(0)	BITSTRING	1	DVOLLEN	LOCAL DVOL ENTRY LENGTH
1	(1)	CHAR-ACTER	6	DVOLVAL	LOCAL DVOL ENTRY VALUE
8	(8)	SIGNED	2	DVOLEND (0)	END OF LOCAL DVOL ENTRY

Dec	Hex	Type	Len	Name (Dim)	Description

LOCAL DATA VOLUME LIST

Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	SIGNED	2	DVOLCNT	NUMBER OF LOCAL DATA VOLUMES
2	(2)	CHAR- ACTER	1	DVOLLST (255)	LOCAL DATA VOLUME LIST

POINTER VECTOR TABLE FOR LOCAL INDEX VOLUME LIST

Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	ADDRESS	4	IVOLPTR (255)	POINTER VECTOR TABLE FOR IVOL

LOCAL INDEX VOLUME ENTRY

Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	BITSTRING	1	IVOLLEN	LOCAL IVOL ENTRY LENGTH
1	(1)	CHAR- ACTER	6	IVOLVAL	LOCAL IVOL ENTRY VALUE
8	(8)	SIGNED	2	IVOLEND (0)	END OF LOCAL IVOL ENTRY

LOCAL INDEX VOLUME LIST

Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	SIGNED	2	IVOLCNT	NUMBER OF LOCAL INDEX VOLUMES
2	(2)	CHAR- ACTER	1	IVOLLST (255)	LOCAL INDEX VOLUME LIST

POINTER VECTOR TABLE FOR LOCAL PRIMARY USECLASS

Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	ADDRESS	4	EPRIPTR (255)	POINTER VECTOR TABLE FOR EPRI

LOCAL PRIMARY USECLASS

Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	SIGNED	4	EPRIVAL	LOCAL PRIMARY USECLASS VALUE

POINTER VECTOR TABLE FOR LOCAL SECONDARY USECLASS

Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	ADDRESS	4	ESECPTR (255)	POINTER VECTOR TABLE FOR ESEC

LOCAL SECONDARY USECLASS

Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	BITSTRING	1	ESECLEN	LOCAL SECONDARY USECLASS LENGTH
1	(1)	CHAR-ACTER	1	ESECVAL	LOCAL SECONDARY USECLASS VALUE

POINTER VECTOR TABLE FOR LOCAL PRIMARY DATA USECLASS

Offsets

Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	ADDRESS	4	DPRIPTR (255)	POINTER VECTOR TABLE FOR DPRI

LOCAL PRIMARY DATA USECLASS

Offsets

Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	SIGNED	4	DPRIVAL	LOCAL PRIMARY DATA USECLASS VALUE

POINTER VECTOR TABLE FOR LOCAL SECONDARY DATA USECLASS

Offsets

Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	ADDRESS	4	DSECPTR (255)	POINTER VECTOR TABLE FOR DSEC

LOCAL SECONDARY DATA USECLASS

Offsets

Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	BITSTRING	1	DSECLEN	LOCAL SECONDARY DATA USECLASS LENGTH
1	(1)	CHAR-ACTER	1	DSECVAL	LOCAL SECONDARY DATA USECLASS VALUE

POINTER VECTOR TABLE FOR LOCAL PRIMARY INDEX USECLASS

Offsets

Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	ADDRESS	4	IPRIPTR (255)	POINTER VECTOR TABLE FOR IPRI

LOCAL PRIMARY INDEX USECLASS

Offsets

Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	SIGNED	4	IPRIVAL	LOCAL PRIMARY INDEX USECLASS VALUE

POINTER VECTOR TABLE FOR LOCAL SECONDARY DATA USECLASS

Offsets

Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	ADDRESS	4	ISECPTR (255)	POINTER VECTOR TABLE FOR DSEC

LOCAL SECONDARY INDEX USECLASS

Offsets

Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	BITSTRING	1	ISECLEN	LOCAL SECONDARY IX USECLASS LENGTH

Offsets					
Dec	Hex	Type	Len	Name (Dim)	Description
1	(1)	CHAR-ACTER	1	ISECVAL	LOCAL SECONDARY INDEX USECLASS VALUE

POINTER VECTOR TABLE FOR FILE PARAMETER

Offsets					
Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	ADDRESS	4	FILEPTR (255)	POINTER VECTOR TABLE FOR FILE

DNAME FOR UNIQUE

Offsets					
Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	BITSTRING	1	FILELEN	FILE DNAME LENGTH
1	(1)	CHAR-ACTER	7	FILEVAL	FILE DNAME VALUE

POINTER VECTOR TABLE FOR DFILE PARAMETER

Offsets					
Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	ADDRESS	4	DFILPTR (255)	POINTER VECTOR TABLE FOR DFILE

DATA DNAME FOR UNIQUE

Offsets					
Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	BITSTRING	1	DFILLEN	DFILE DNAME LENGTH
1	(1)	CHAR-ACTER	7	DFILVAL	DFILE DNAME VALUE

POINTER VECTOR TABLE FOR IXFILE PARAMETER

Offsets					
Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	ADDRESS	4	IFILPTR (255)	POINTER VECTOR TABLE FOR IXFILE

INDEX DNAME FOR UNIQUE

Offsets					
Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	BITSTRING	1	IFILLEN	IXFILE DNAME LENGTH
1	(1)	CHAR-ACTER	7	IFILVAL	IXFILE DNAME VALUE

POINTER VECTOR TABLE FOR DREC PRIMARY VALUE

Offsets					
Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	ADDRESS	4	DRPRQPTR (255)	PTR VECTOR TABLE

LOCAL DATA RECORDS PRIMARY VALUE

Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	SIGNED	4	DRPRQVAL	LOCAL DATA RECORDS PRI VAL

POINTER VECTOR TABLE FOR DREC SECONDARY VALUE

Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	ADDRESS	4	DRSEQPTR (255)	PTR VECTOR TABLE

LOCAL DATA RECORDS SECONDARY VALUE

Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	SIGNED	4	DRSEQVAL	LOCAL DATA RECORDS SEC VAL

POINTER VECTOR TABLE FOR INDEX CISIZE VALUE

Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	ADDRESS	4	IXSZPTR (255)	PTR VECTOR TABLE

LOCAL INDEX RECORDS PRIMARY VALUE

Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	SIGNED	4	IXSZVAL	LOCAL INDEX CISIZE VALUE

Chapter 8. Diagnostic Aids

VSE/VSAM Backup/Restore invokes Access Method Services functions. Accordingly, the diagnostic aids for Access Method Services apply as far as VSE/VSAM Backup/Restore supports the diagnostic capability. For corresponding detail, use *VSE/VSAM Access Method Services Logic.*

Trace Tables

VSE/VSAM Backup/Restore supports inter-module trace points. At the beginning of each module (except where critical to performance) the trace ID of the module is stored in the Inter-Module Trace Table. Upon exit from a module, the caller's trace ID is restored so that the Inter-Module Trace Table correctly reflects the flow of control through the VSE/VSAM Backup/Restore modules.

Intra-module trace points are not supported by the VSE/VSAM Backup/Restore modules because the individual modules are small.

Trace Point to Module Cross-Reference

The following list contains the trace points set by VSE/VSAM Backup/Restore modules. The trace points are set at the beginning of these modules. In general, the trace ID corresponds to the last three letters of the module name, padded with one blank.

The trace IDs for the modules IDCBPFSR and IDCRTFSR are an exception. They are equal to the last 4 characters of the phase names for the BACKUP FSR (IDCBP01) and the RESTORE FSR (IDCRT01) and are BP01 and RT01 respectively.

Trace Point	Module Name	Function
ACA	IDCRTACA	Add Control Area
ADE	IDCBPADE	Add Directory Entry
ALE	IDCBPALE	Add Locate Entry
BBF	IDCBPBBF	Build Backup Buffers
BBR	IDCRTBBR	Build Restore Buffer
BDR	IDCBPBDR	Build RPSTAB
BDS	IDCBPBDS	Backup Data Set
BDX	IDCRTBDX	Build XIB
BFV	IDCRTBFV	Build CTGFV
BLE	IDCBPBLE	Build Locate Entry
BPC	IDCBPBPC	Backup Close
BPO	IDCBPBPO	Backup Open
BPV	IDCBPBPV	Backup EOV
BP01	IDCBPFSR	BACKUP FSR
BRL	IDCRTBRL	Build Restore List
CAU	IDCBPCAU	Convert Allocation Units
CLX	IDCRTCLX	Close Index
CMA	IDCBPCMA	Command Analyzer
CRB	IDCBPCRB	Convert RBA
DFO	IDCRTDFO	Define Object
DKC	IDCBPDKC	Close Backup File on Disk (Backup)
	IDCRTDKC	Close Backup File on Disk (Restore)
DKO	IDCBPDKO	Open Backup File on Disk (Backup)
	IDCRTDKO	Open Backup File on Disk (Restore)
DVO	IDCRTDVO	Delete VSAM Object
DYB	IDCBPDYB	Directory Build
DYS	IDCBPDYS	Directory Sort

Trace Point	Module Name	Function
GEX	IDCRTGEX	Get Extent
GNX	IDCRTGNX	Get Next Index Record
LVO	IDCBPLVO	Locate VSAM Object
MDE	IDCBPMDE	Move Directory Entry
MDS	IDCRTMDS	Remap Data Set
MSH	IDCBPMSH	Message Handler
MSS	IDCRTMSS	Remap Sequence Set
MTL	IDCRTMTL	Mount Later
MTN	IDCRTMTN	Mount Next
MTS	IDCRTMTS	Mount Specific
NBV	IDCBPNBV	Next Backup Volume
OON	IDCBPOON	Obtain Object Name
OPI	IDCRTOPI	Operator Interface
OVC	IDCBPOVC	Open VSAM Catalog
PFO	IDCRTPFO	Preformat Function
PXD	IDCBPPXD	Print XREF after Backup to Disk
PXL	IDCBPPXL	Print XREF after Backup to Tape
RDS	IDCRTRDS	Restore Data Set
RDX	IDCRTRDX	Read Index
REV	IDCRTREV	Restore EOV
RHD	IDCRTRHD	Read Object Header from Disk
ROH	IDCRTROH	Read Object Header
RSL	IDCBPRSL	Reset Locate Area
RSQ	IDCRTRSQ	Read Sequential from Backup File
RTC	IDCRTRTC	Restore Close
RTO	IDCRTRTO	Restore Open
RT01	IDCRTFSR	RESTORE FSR
RVB	IDCBPRVB	Remove Buffers
RVD	IDCBPRVD	Remove Directory
RVL	IDCBPRVL	Remove Locate Area
RVX	IDCRTRVX	Remove XIB
SLE	IDCBPSLE	Secure Locate Entry
SRD	IDCBPSRD	Search Directory
SXL	IDCBPSXL	Scan Exclusion List
VCL	IDCBPVCL	VSAM Close
VOP	IDCBPVOP	VSAM Open
WDI	IDCBPWDI	Write Directory to Disk
WHD	IDCBPWHD	Write Object Header to Disk
WOH	IDCBPWOH	Write Object Header
WRS	IDCRTWRS	Write SEOF
WRX	IDCRTWRX	Write Index
WSQ	IDCBPWSQ	Write Sequential to Backup File
WSR	IDCBPWSR	Write Special Record to Disk
none *	IDCBPDDR	Data Disk Read
none *	IDCBPDDW	Data Disk Wait
none *	IDCRTDWR	Data Disk Write
none *	IDCRTDWW	Data Write Wait

* No trace point provided because module's performance is critical.

Dump Points

VSE/VSAM Backup/Restore does not support dump points.

Abort Codes

The following list identifies the ABORT codes set by modules of VSE/VSAM Backup/Restore.

Module Name	Code	Cause
IDCBPFSR	28	No virtual storage available to load the Backup/Restore Block.
	80	The Backup/Restore Block was not found in the system libraries.
IDCRTFSR	28	No virtual storage available to load the Backup/Restore Block.
	80	The Backup/Restore Block was not found in the system libraries.

How to Find the Backup/Restore Block

For all modules of VSE/VSAM Backup/Restore, register 13 points to the Backup/Restore Block. Offset 72-75 should contain the characters 'BRB', the identifier for the Backup/Restore Block.

If register 13 does not point to the BRB because a service invoked by VSE/VSAM Backup/Restore has control, you can find the BRB by scanning down the right side of a dump for the identifier 'BRB' at offset 72 of the Backup/Restore Block.

How to Find the GDT and FDT from the BRB

The Backup/Restore Block points to the Global Data Table and the Function Data Table for the executed command.

The field labeled BRBGDT points to the Global Data Table. The field labeled BRBFDT points to the Function Data Table. The field BRBREQ identifies the command being executed:

    4 - BACKUP command being executed.
    8 - RESTORE command being executed.

How to Find the Inter-Module Trace Table

After you have found the Global Data Table from the Backup/Restore Block, you can find the Inter-Module Trace Table address at offset 8 of the Global Data Table.

How to Determine the Active Module

If register 13 points to the Backup/Restore Block, you can determine which module of VSE/VSAM Backup/Restore is active: In general, register 12 is used as base register. If you subtract X'16' from the value in register 12, the result points to the name of the module that is in control.

Exceptions are the modules IDCBPDDR and IDCBPDDW for BACKUP and IDCRTDWR and IDCRTDWW for RESTORE. For them, after subtracting X'12' from register 12, the result points to the module name of the caller, IDCBPBDS or IDCRTRDS, respectively.

How to Determine the Position in the Function Tree

Many modules of VSE/VSAM Backup/Restore are called from different locations. If you want to determine where you are in the function tree (see Chapter 4), do as follows:

The Backup/Restore Block contains a save area pool used to store the registers of the calling functions. The inter-module trace ID of the caller is saved in front of the registers. The BRB save area pool starts at the label BRBSAP. The field BRBNSA of the Backup/Restore Block points to the next available position.

After you find which module is active (by subtracting X'12' from register 12, as described before), determine how many registers it stores (macro IDCDFB70). By subtracting the size of a trace ID and the size of the registers stored from the address contained in the field BRBNSA, you come to the trace ID of the calling module. By looking up how many registers it, in turn, stores, you can come to the trace ID of its caller. Continue until you reach the beginning of the save area pool. This process is illustrated in Figure 24.

How to Determine the Last Message

The field BRBERC of the Backup/Restore Block contains the internal message code of the last message printed or being printed by VSE/VSAM Backup/Restore. See macro IDCDFB60 for message codes. The field BRBMID contains the trace ID of the module that caused the message to be issued.

How to Determine the Last and the Maximum Condition Codes

The fields BRBLCC and BRBMCC contain the last condition code and the maximum condition code set by any VSE/VSAM Backup/Restore module. The field BRBERCNT indicates the number of errors encountered thus far by VSE/VSAM Backup/Restore.
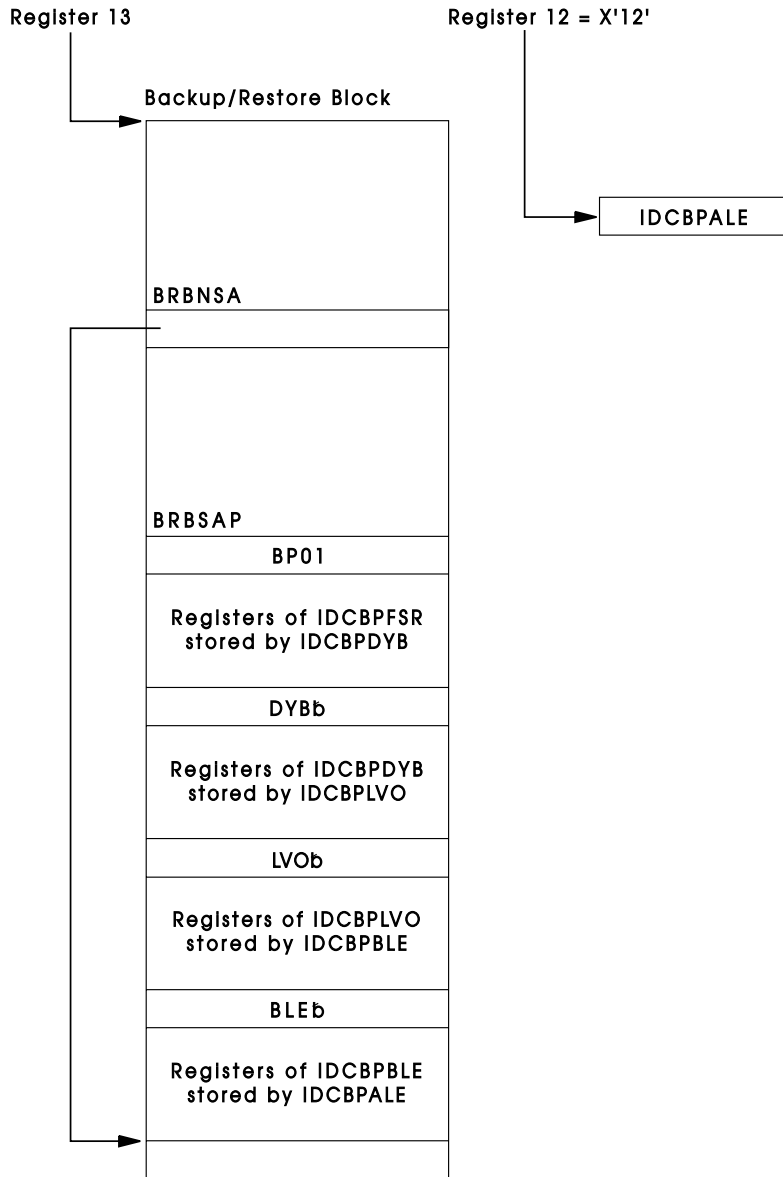
Figure 24. Determining the VSE/VSAM Backup/Restore Flow of Control

Note: The chain of modules derived by this method is different from the flow of control represented by the Inter-Module Trace Table. The chain derived by the method just described represents the last module invoked at each level of the function tree described in Chapter 4.

Message-to-Module Cross-Reference

Message	Text	Module
IDC400A	MOUNT VOLUME xxx OF BACKUP FILE ON SYS004=cuu	IDCRTMTN
		IDCRTMTS
IDC401I	BACKUP VOLUME REQUIRED FOR file-id	IDCRTMTL
IDC402A	MOUNT VOLUME xxx OR HIGHER ON SYS004=cuu	IDCRTMTL
IDC403I	TIME STAMP MISMATCH. BACKUP FILE CREATED ON date AT hh:mm:ss	IDCRTMTL
		IDCRTMTN
		IDCRTMTS
IDC0001I	FUNCTION COMPLETED, HIGHEST CONDITION CODE WAS xxx	IDCBPFSR
		IDCRTFSR
IDC3003I	FUNCTION TERMINATED. CONDITION CODE IS nnn	IDCBPFSR
		IDCRTFSR
IDC3004I	FUNCTION TERMINATED. INSUFFICIENT MAIN STORAGE.	IDCBPADE
		IDCBPALE
		IDCBPBBF
		IDCBPBDS
		IDCBPBPO
		IDCBPBPV
		IDCBPDKO
		IDCBPLVO
		IDCBPOON
		IDCBPVOP
		IDCBPWHD
		IDCBPWOH
		IDCBPWSQ
		IDCRTBBR
		IDCRTBDX
		IDCRTBFV
		IDCRTBRL
		IDCRTDFO
		IDCRTDKO
		IDCRTGEX
		IDCRTMDS
		IDCRTPFO
		IDCRTRDS
		IDCRTRDX
		IDCRTRHD
		IDCRTROH
		IDCRTRTO
		IDCRTWRS
		IDCRTWRX
IDC01300I	BACKUP FILE CREATED ON date AT hh:mm:ss	IDCBPPXD
		IDCBPPXL
IDC01301I	RESTORE'S BACKUP FILE CREATED ON date AT hh:mm:ss	IDCRTDKO
		IDCRTRTO
IDC01302I	SUCCESSFUL RESTORATION OF file-id	IDCRTFSR
IDC01303I	SUCCESSFUL DELETION OF file-id — ENTRY TYPE=x	IDCRTDVO
IDC01304I	SUCCESSFUL DEFINITION OF file-id	IDCRTDFO
IDC01305I	PASSWORDS SUPPRESSED FOR file-id	IDCBPWHD
		IDCBPWOH
IDC11306I	NO OBJECT FOR entryname	IDCBPBPC
		IDCBPDKC
		IDCBPDYB
		IDCRTBRL

Message	Text	Module
IDC11307I	SKIPPING RESTORATION OF file-id	IDCRTFSR
IDC11310I	filename MIGHT BE INCONSISTENT IN BACKUP FILE	IDCBPVOP
IDC11345I	CANNOT CONVERT ALLOCATION UNITS FOR file-id	IDCBPCAU
IDC11358I	SPECIFIED BUFSIZE NOT APPLICABLE	IDCBPBBF
IDC11359I	EXTENT WITH SEQUENCE NUMBER n IS TOO SMALL FOR BACKUP	IDCBPWSQ
IDC21308I	CANNOT CLOSE file-id	IDCBPVCL
IDC21309I	**VSAM CLOSE ERROR IS nnn	IDCBPVCL
IDC21359I	BACKUP DEVICE NOT SUITABLE FOR BACKING UP OBJECT file-id	IDCBPBBF
IDC21369I	file-id NOT CONTAINED IN BACKUP FILE	IDCRTRHD
IDC31310I	INVALID GENERIC NAME file-id	IDCBPCMA
IDC31311I	ERROR EXPANDING GENERIC NAME entryname	IDCBPDYB
IDC31312I	**VSAM PHYSICAL ERROR RETURN CODE IS nnn	IDCBPDYB
IDC31313I	PASSWORD CONFLICT FOR file-id	IDCBPDYB
IDC31314I	**CONFLICTING OBJECT IS file-id	IDCBPDYB
IDC31315I	CANNOT LOCATE CATALOG	IDCBPOVC
		IDCRTDFO
IDC31316I	**VSAM CATALOG RETURN CODE IS nnn	IDCBPLVO
	REASON CODE IS IGG0CLxx-mmm	IDCBPOVC
		IDCRTDFO
		IDCRTDVO
IDC31317I	CANNOT OPEN VSAM CATALOG	IDCBPOVC
IDC31318I	CATALOG VOLUME ERROR	IDCBPOON
IDC31319I	CATALOG EXTENT ERROR	IDCBPOON
IDC31320I	CATALOG I/O ERROR	IDCBPOON
IDC31321I	CANNOT RETRIEVE CATALOG INFORMATION FOR file-id	IDCBPLVO
IDC31322I	CANNOT LOCATE ASSOCIATION OF file-id	IDCBPLVO
IDC31323I	CANNOT LOCATE BASE CLUSTER OF file-id	IDCBPLVO
IDC31324I	CANNOT OPEN file-id	IDCBPVOP
IDC31325I	**VSAM OPEN ERROR IS nnn	IDCBPOVC
		IDCBPVOP
IDC31326I	NO BACKUP OF file-id — CANNOT BE RESTORED	IDCBPVOP
IDC31327I	EXTENT ERROR FOR file-id	IDCBPBDS
		IDCRTMDS
		IDCRTPFO
		IDCRTRDS
		IDCRTRDX
		IDCRTWRS
		IDCRTWRX
IDC31328I	VOLUME ERROR FOR file-id	IDCBPBDS
		IDCRTMDS
		IDCRTPFO
		IDCRTRDS
		IDCRTRDX
		IDCRTWRS
		IDCRTWRX
IDC31329I	DISK I/O ERROR FOR file-id	IDCBPBDS
		IDCRTACA
		IDCRTCLX
		IDCRTMDS
		IDCRTPFO
		IDCRTRDS
		IDCRTWRS

Message	Text	Module
IDC31330I	BACKUP FILE I/O ERROR	IDCBPBDS
		IDCBPBPC
		IDCBPBPO
		IDCBPBPV
		IDCBPNBV
		IDCBPWOH
		IDCBPWSQ
		IDCRTMTN
		IDCRTMDS
		IDCRTRDS
		IDCRTREV
		IDCRTROH
		IDCRTRSQ
		IDCRTRTO
IDC31331I	USECLASS ERROR FOR file-id	IDCRTDFO
IDC31332I	NO DNAME FOR UNIQUE COMPONENT OF file-id	IDCRTDFO
IDC31333I	CANNOT FIND OBJECT file-id	IDCRTFSR
IDC31334I	CANNOT DELETE OLD VERSION OR ASSOCIATION OF file-id	IDCRTDVO
IDC31335I	CANNOT DEFINE file-id	IDCRTDFO
IDC31336I	CANNOT RESTORE SAM ESDS file-id	IDCRTDFO
IDC31337I	CANNOT RESTORE file-id ON SPECIFIED VOLUME	IDCBPVOP
IDC31338I	CANNOT EXTEND file-id	IDCRTGEX
IDC31339I	MORE THAN 255 INDEX LEVELS FOR file-id	IDCRTACA
IDC31340I	BACKUP FILE IN ERROR	IDCRTDKO
		IDCRTMDS
		IDCRTRDS
		IDCRTREV
		IDCRTROH
		IDCRTRSQ
		IDCRTRTO
IDC31341I	INCOMPLETE BACKUP COPY OF file-id	IDCRTREV
IDC31342I	RESTORE TERMINATED. FAILURE TO MOUNT BACKUP VOLUME.	IDCRTOPI
IDC31343I	FUNCTION TERMINATED. MAXIMUM NUMBER OF ERRORS EXCEEDED.	IDCBPDYB
		IDCBPFSR
		IDCBPLVO
		IDCRTFSR
IDC31344I	CANNOT DEFINE file-id ON SPECIFIED VOLUME	IDCRTDFO
IDC31356I	ERROR DURING DECOMPACTION	IDCRTRSQ
IDC31360I	GETVCE NOT SUCCESSFUL - RETURN CODE IS rc	IDCBPDKO
		IDCBPFSR
		IDCRTDKO
		IDCRTFSR
IDC31361	INVALID DEVICE TYPE FOR BACKUP DEVICE	IDCBPFSR
		IDCRTFSR
IDC31362I	I/O ERROR DURING WRITE TO BACKUP DEVICE cuu	IDCBPBDS
		IDCBPWDI
		IDCBPWSQ
		IDCBPWSR
IDC31363I	DIRECTORY IS TOO LARGE FOR THE FIRST EXTENT ON VOLUME volser	IDCBPDKO
		IDCBPWDI
IDC31364I	NO MORE EXTENTS AVAILABLE FOR BACKUP FILE	IDCBPWSQ
IDC31365I	INCORRECT DEVICE TYPE FOR VOLUME volser	IDCBPWSQ
IDC31366I	EXTENTS WITH LIMITS low,high ON VOLUME volser IS NO VALID BACKUP FILE EXTENT	IDCRTDKO
		IDCRTRSQ

Message	Text	Module
IDC31367I	I/O ERROR DURING RESTORE FROM BACKUP DEVICE cuu	IDCRTDKO
		IDCRTMDS
		IDCRTRDS
		IDCRTRSQ
IDC31368	REQUIRED BACKUP FILE EXTENT ON VOLUME volser IS NOT AVAIL-	IDCRTRHD
	ABLE	IDCRTRSQ

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