

FFFFFFFFFFFFFF	DDDDDDDDDDDD		LLL
FFFFFFFFFFFFFF	DDDDDDDDDDDD		LLL
FFFFFFFFFFFFFF	DDDDDDDDDDDD		LLL
FFF	DDD	DDD	LLL
FFF	DDD	DDD	LLL
FFF	DDD	DDD	LLL
FFF	DDD	DDD	LLL
FFF	DDD	DDD	LLL
FFF	DDD	DDD	LLL
FFFFFFFFFFFFFF	DDD	DDD	LLL
FFFFFFFFFFFFFF	DDD	DDD	LLL
FFFFFFFFFFFFFF	DDD	DDD	LLL
FFF	DDD	DDD	LLL
FFF	DDD	DDD	LLL
FFF	DDD	DDD	LLL
FFF	DDD	DDD	LLL
FFF	DDD	DDD	LLL
FFF	DDD	DDD	LLL
FFF	DDDDDDDDDDDD		LLLLLLLLLLLLLLLL
FFF	DDDDDDDDDDDD		LLLLLLLLLLLLLLLL
FFF	DDDDDDDDDDDD		LLLLLLLLLLLLLLLL

```

FFFFFFFFF DDDDDDD LL PPPPPPP AAAAAA RRRRRRR DDDDDDD EEEEEEEEE FFFFFFFF
FFFFFFFFF DDDDDDD LL PPPPPPP AAAAAA RRRRRRR DDDDDDD EEEEEEEEE FFFFFFFF
FF DD DD LL PP PP AA AA RR RR DD DD EE FF
FF DD DD LL PP PP AA AA RR RR DD DD EE FF
FF DD DD LL PP PP AA AA RR RR DD DD EE FF
FF DD DD LL PP PP AA AA RR RR DD DD EE FF
FFFFFFFFF DD DD LL PPPPPPP AAAAAA RRRRRRR DD DD EEEEEEEEE FFFFFFFF
FFFFFFFFF DD DD LL PPPPPPP AAAAAA RRRRRRR DD DD EEEEEEEEE FFFFFFFF
FF DD DD LL PP PP AA AA AA AA AA RR RR DD DD EE FF
FF DD DD LL PP PP AA AA AA AA AA RR RR DD DD EE FF
FF DD DD LL PP PP AA AA AA AA AA RR RR DD DD EE FF
FF DD DD LL PP PP AA AA AA AA AA RR RR DD DD EE FF
FF DDDDDDD LLLLLLLLL PP PP AA AA AA AA RR RR DD DD EE FF
FF DDDDDDD LLLLLLLLL PP PP AA AA AA AA RR RR UDDDDDD EEEEEEEEE FF

```

```

....
....
....
....

```

```

LL IIIIII SSSSSSS
LL IIIIII SSSSSSS
LL II SS
LL II SS
LL II SS
LL II SS
LL II SSSSSS
LL II SSSSSS
LL II SS
LL II SS
LL II SS
LL IIIIII SSSSSSS
LLLLLLLLL IIIIII SSSSSSS
LLLLLLLLL IIIIII SSSSSSS

```



```

1 {
2 { Version: 'V04-000'
3 {
4 {*****
5 {*
6 {* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
7 {* DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
8 {* ALL RIGHTS RESERVED.
9 {*
10 {* THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
11 {* ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
12 {* INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
13 {* COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
14 {* OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
15 {* TRANSFERRED.
16 {*
17 {* THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
18 {* AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
19 {* CORPORATION.
20 {*
21 {* DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
22 {* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
23 {*
24 {*
25 {*****
26 {

```

```

27 module $FDLDEF3;
28
29 /**      These fields are found in FDL$AB_CTRL
30 /**
31
32 aggregate FDLDEF3 union prefix FDL$:
33   FDLDEF_BITSO structure;
34     STATUS bitfield mask length 3;          /* Status code for processing
35     WARNING bitfield mask;                  /* A warning message has been issued for this secondary
36     PRIMARY bitfield mask;                  /* Primary has been parsed
37     NEWPRI bitfield mask;                   /* A new primary has been parsed
38     SECONDARY bitfield mask;                /* Secondary has been parsed
39     INITIAL bitfield mask;                  /* Initial pass
40     COMMENT bitfield mask;                  /* Secondary comment has been detected
41     LINECMT bitfield mask;                  /* Line comment has been detected
42     PCALL bitfield mask;                    /* This is an EDF Parse call
43     DCL bitfield mask;                      /* Called by a DCL utility
44     STRING_SPEC bitfield mask;              /* An FDL STRING
45     USED_STRING bitfield mask;              /* FDL STRING has been set up
46     APOST_PRES bitfield mask;               /* An apostrophe was found by the pre_parse
47     QUOTE_PRES bitfield mask;               /* A quotation mark was found by the pre_parse
48     REPARSE bitfield mask;                  /* Doing a parse into a parse
49     DFLT_PRES bitfield mask;                /* The DFLT FDL SPEC argument was present
50     STVALID bitfield mask;                  /* FDL$GL_STNUMPTR is valid
51     GCALL bitfield mask;                    /* This is an EDF Generate call
52     FULLGEN bitfield mask;                  /* Generate the full FDL spec
53     DEALLOC bitfield mask;                  /* Make FDL$$CHECK_BLOCKS deallocate the
54                                           /* RMS control blocks after it checks them
55
56 end FDLDEF_BITSO;

```



```

117 /*      Access primary
118 /*
119 constant(
120     DUMMY SECONDARYS      /* Dummy_secondary$
121     . FACBIO              /* Block I/O only
122     . FACDEL              /* Deletes
123     . FACGET              /* Gets
124     . FACPUT              /* Puts
125     . FACBRO              /* Record and Block I/O
126     . FACTRN              /* Truncate
127     . FACUPD              /* Updates
128
129 /*      ACL
130 /*
131     . ACE                  /* Entry
132
133
134 /*      Codes for Analysis_of_area primary
135 /*
136     . RECL                 /* Reclaimed_space
137
138
139 /*      Analysis_of_key primary
140 /*
141     . DFIL                 /* Data_fill
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159 /*      Codes for Area primary
160 /*
161     . ALLOC                /* Allocation
162     . BTCONT              /* Best_try_contiguous
163     . BKT                  /* Bucket_size
164     . CONTG                /* Contiguous
165     . EXACT                /* Exact_position
166     . EXTND                /* Extend
167     . POSI                 /* Position
168     . VOLU                 /* Volume
169
170 /*      Codes for Connect primary
171 /*
172     . ASY                  /* Asynchronous
173     . BIO                  /* Block IO
174     . BUCODE               /* Bucket_code
175     . RCTX                 /* Context
176     . EOF                  /* End_of_file

```

15-SEP-1984 23:01:54.97

SDL V2.0

Page

4

15-SEP-1984 22:44:18

\_S255SDUA28:[FDL.SRC]FDLPADEF.SDL;1

```

177 . FLOA /* Fill_buckets
178 . FDEL /* Fast_delete
179 . KRF /* Key_of_reference
180 . KGE /* Key_greater_equal
181 . KGT /* Key_greater_than
182 . KLIM /* Key_limit
183 . LOCMODE /* Locate_mode
184 . REA /* Lock_on_read
185 . RLK /* Lock_on_write
186 . ULK /* Manual_unlocking
187 . MBC /* Multiblock_count
188 . MBF /* Multibuffer_count
189 . NLK /* Nolock
190 . NXR /* Nonexistent_record
191 . RAH /* Read_ahead
192 . RRL /* Read_regardless
193 . TMENB /* Timeout_enable
194 . TMO /* Timeout_period
195 . TPT /* Truncate_on_put
196 . TTCCO /* TT_cancel_control_o
197 . TTCVT /* TT_upcase_input
198 . TTPMT /* TT_prompt
199 . TTPTA /* TT_purge_type_ahead

200 . TTRNE
201 . TTRNF
202 . UIF
203 . WAT
204 . WBH
205 /*
206 /* Codes for Date primary
207 /*
208 . BACKUP /* Backup
209 . CREAT /* Creation
210 . EXPR /* Expiration
211 . REV /* Revision
212 /*
213 /* Codes for File primary
214 /*
215 . ALL /* Allocation
216 . BTC /* Best_try_contiguous
217 . BKTSIZ /* Bucket_size
218 . CLUSIZ /* Cluster_size
219 . FCTX /* Context
220 . CONT /* Contiguous
221 . CIF /* Create_if
222 . DFNAM /* Default_name
223 . DEFVRT /* Deferred_write
224 . DOC /* Delete_on_close
225 . DIR /* Directory_entry
226 . EODEL /* Erase_on_delete
227 . EXTEN /* Extension
228 . GBC /* Global_buffer_count
229 . MTBLSIZ /* MT_block_size
230 . MTCP /* MT_current_position
231 . MTNEF /* MT_not_eof
232 . MTPRO /* MT_protection
233 . MTRW /* MT_rewind / MT_open_rewind
234 . MTRWC /* MT_close_rewind
235 . MAXRECN /* Max_record_number
236 . MAXVER /* Maximize_version

```

15-SEP-1984 23:01:54.97

SDL V2.0

Page

5

15-SEP-1984 22:44:18

\_\$255\$DUA28:[FDL.SRC]FDLPARDEF.SDL;1

```

237 . NAME
238 . BKUP
239 . NFS
240 . OFP
241 . ORG
242 . OWNER
243 . POC
244 . PROT
245 . READC
246 . REVISN
247 . SQO
248 . SOC
249 . SUPER
250 . TEMPO
251 . TOC
252 . UFO
253 . WIN
254 . WRITEC
255
256 /* Codes for Journal primary
257 /*

```

```

1 4
/* Name
/* Nobackup
/* Non_file_structured
/* Output_file_parse
/* Organization
/* Owner
/* Print_on_close
/* Protection
/* Read_check
/* Revision
/* Sequential_only
/* Submit_on_close
/* Superscede
/* Temporary
/* Truncate_on_close
/* User_file_open
/* Window_size
/* Write_check

```

```

15-SEP-1984 23:01:54.97
15-SEP-1984 22:44:18

```

```

SDL V2.0 Page 6
_$255$DUA28:[FDL.SRC]FDLPARDEF.SDL;1

```

```

258 . AFTIM
259 . AFTNAM
260 . AUDIT
261 . AUDNAM
262 . BEFIM
263 . BEFNAM
264 . RU
265
266 /* Codes for Key primary
267 /*

```

```

/* After_image
/* After_name
/* Audit_trail
/* Audit_name
/* Before_image
/* Before_name
/* Recovery_unit

```

```

268 . CHANGE
269 . DAREA
270 . DFILL
271 . DATKC
272 . DATRC
273 . DUPS
274 . IAREA
275 . IDXC
276 . IFILL
277 . LAREA
278 . KYNAME
279 . NULL
280 . NULLVAL
281 . PROL
282 . SEGLEN
283 . SEGPOS
284 . SEGTP
285
286 /* Codes for Record primary
287 /*

```

```

/* Changes
/* Data_area
/* Data_fill
/* Data_key_compression
/* Data_record_compression
/* Duplicates
/* Index_area
/* Index_compression
/* Index_fill
/* LevelT_index_area
/* Name
/* Null_key
/* Null_value
/* Prologue_version
/* Segment_length
/* position
/* type

```

```

288 . BLKSPN
289 . CARCTRL
290 . VFCSIZ
291 . FMT
292 . SIZE
293
294 /* Sharing primary
295 /*
296 . SHRDEL

```

```

/* Block_span
/* Carriage_control
/* Control_field_size
/* Format
/* Record_size
/* Deletes

```

```

297      . SHRGET          J 4
298      . SHRMSE         /* Gets
299      . SHRNIL         /* Multi-stream connects
300      . SHRPOT         /* Dissallow sharing
301      . SHRUPD         /* Puts
302      . SHRUPI         /* Updates
303                        /* User provided interlocking
304 /*      Codes for System primary
305 /*
306      . DEVICE         /* Device
307      . SOURCE         /* Source
308      . TARGET         /* Target
309
310 /**      THE LAST SECONDARY FOLLOWS:
311 /*
312      , SECTAB_SIZE
313      ) equals 0 increment 1 prefix FDL tag $C;
314
315 /*      The following are markers which are useful to FDL$GENERATE

```

```

15-SEP-1984 23:01:54.97
15-SEP-1984 22:44:18

```

```

SDL V2.0      Page 7
_$255$DUA28:[FDL.SRC]FDLPARDEF.SDL;1

```

```

316 /*
317 constant ACCESS_BEG equals FDL$C_FACBIO prefix FDL$ tag C;
318 constant ACCESS_END equals FDL$C_FACUPD prefix FDL$ tag C;
319
320 constant ACL_BEG equals FDL$C_ACE prefix FDL$ tag C;
321 constant ACL_END equals FDL$C_ACE prefix FDL$ tag C;
322
323 constant ANALYSIS_OF_AREA_BEG equals FDL$C_RECL prefix FDL$ tag C;
324 constant ANALYSIS_OF_AREA_END equals FDL$C_RECL prefix FDL$ tag C;
325
326 constant ANALYSIS_OF_KEY_BEG equals FDL$C_DFIL prefix FDL$ tag C;
327 constant ANALYSIS_OF_KEY_END equals FDL$C_SEQACC prefix FDL$ tag C;
328
329 constant AREA_BEG equals FDL$C_ALLOC prefix FDL$ tag C;
330 constant AREA_END equals FDL$C_VOLU prefix FDL$ tag C;
331
332 constant CONNECT_BEG equals FDL$C_ASY prefix FDL$ tag C;
333 constant CONNECT_END equals FDL$C_WBH prefix FDL$ tag C;
334
335 constant DATE_BEG equals FDL$C_BACKUP prefix FDL$ tag C;
336 constant DATE_END equals FDL$C_REV prefix FDL$ tag C;
337
338 constant FILE_BEG equals FDL$C_ALL prefix FDL$ tag C;
339 constant FILE_END equals FDL$C_WRITEC prefix FDL$ tag C;
340
341 constant JOURNAL_BEG equals FDL$C_AFTIM prefix FDL$ tag C;
342 constant JOURNAL_END equals FDL$C_RU prefix FDL$ tag C;
343
344 constant KEY_BEG equals FDL$C_CHANGE prefix FDL$ tag C;
345 constant KEY_END equals FDL$C_SEGTyp prefix FDL$ tag C;
346
347 constant RECORD_BEG equals FDL$C_BLKSPN prefix FDL$ tag C;
348 constant RECORD_END equals FDL$C_SIZE prefix FDL$ tag C;
349
350 constant SHARING_BEG equals FDL$C_SHRDEL prefix FDL$ tag C;
351 constant SHARING_END equals FDL$C_SHRUP prefix FDL$ tag C;
352
353 constant SYSTEM_BEG equals FDL$C_DEVICE prefix FDL$ tag C;
354 constant SYSTEM_END equals FDL$C_TARGET prefix FDL$ tag C;
355
356 /*      Qualifiers

```



357 /\*  
358 /\* These codes are found in FDL\$GL\_QUALIFIER  
359 /\*

360 /\*  
361 /\* Qualifiers for the Area secondary  
362 /\*

```

363 constant(
364     . ANYPOS          /* Any_Cylinder
365     . CLUSPOS         /* Cluster
366     . CYLPOS          /* Cylinder
367     . FIDPOS          /* File_ID
368     . FNMPOS          /* File_name
369     . LOGPOS          /* Logical
370     . NOPOS           /* None
371     . VIRPOS          /* Virtual

```

372 /\*  
373 /\* Qualifiers for the Record secondary

15-SEP-1984 23:01:54.97  
15-SEP-1984 22:44:18

SDL V2.0 Page 8  
\_2555\$DUA28:[FDL.SRC]FDLPADEF.SDL;1

```

374 /*
375     . NONE            /* None
376     . CR              /* Carrage return
377     . FTN             /* Fortran
378     . PRINT           /* Print

```

```

379
380     . UDF             /* UNDEFINED
381     . FIX             /* FIXED
382     . VAR             /* VARIABLE
383     . VFC             /* VFC
384     . STM             /* STREAM
385     . STMLF           /* STREAM_LF
386     . STMCR           /* STREAM_CR

```

387 /\*  
388 /\* Qualifiers for the Journal secondary

```

389 /*
390     . IF_IN           /* If_in_recovery_unit
391     . NEC             /* Necessary_to_write
392     . NEVER           /* Never_RU_journal

```

393 /\*  
394 /\* Qualifiers for the System secondary

```

395 /*
396     . IAS             /* IAS
397     . PSTS            /* RSTS/E
398     . M               /* RSX-11M
399     . MPLUS           /* RSX-11M-PLUS
400     . RT              /* RT-11
401     . TRAX            /* TRAX-11
402     . VMS             /* VAX/VMS

```

403 /\*  
404 /\* Qualifiers for the File secondary

```

405 /*
406
407     . SEQ             /* SEQUENTIAL
408     . RE              /* RELATIVE
409     . IDX             /* INDEXED
410     . HSH             /* HASHED

```

411 /\*  
412 /\* Qualifiers for the Key secondary

```

413 /*
414
415     . STG             /* STRING
416     . IN2            /* INT2

```





```

537      constant PCALL      equals FDL$SL_CTRL + 1          N 4      prefix FDL tag $L;
538      constant PRIMARY    equals FDL$SL_PCALL + 1        prefix FDL tag $L;
539      constant PRINUM     equals FDL$SL_PRIMARY + 1      prefix FDL tag $L;
540      constant PRICTRL    equals FDL$SL_PRINUM + 1       prefix FDL tag $L;
541      constant SECONDARY  equals FDL$SL_PRICTRL + 1     prefix FDL tag $L;
542      constant SECNUM     equals FDL$SL_SECONDARY + 1    prefix FDL tag $L;
543
544      /** FDL$K_SCTRL_LONG is the number of longwords in FDL$AB_SECCTRL
545      /** FDL$K_SCTRL_VEC is the number of bits in FDL$AB_SECCTRL
546      /** Each longword has enough bits to map 32 unique secondary attributes
547

```

```

548      constant SCTRL_LONG equals 6                        15-SEP-1984 23:01:54.97 prefix FDL tag $K;
549      constant SCTRL_VEC equals FDL$K_SCTRL_LONG * 32    15-SEP-1984 22:44:18 prefix FDL tag $K;
550      constant SECCTRL   equals FDL$SL_SECNUM + 1       prefix FDL tag $A;
551      constant QUALIFIER equals
552      FDL$A_SECCTRL + FDL$K_SCTRL_LONG prefix FDL tag $L.
553
554      constant NUMBER     equals FDL$SL_QUALIFIER + 1    prefix FDL tag $L;
555      constant SWITCH    equals FDL$SL_NUMBER + 1      prefix FDL tag $L;
556      constant OWNER_UIC equals FDL$SL_SWITCH + 1     prefix FDL tag $L;
557      constant SPARET    equals FDL$SL_OWNER_UIC + 1   prefix FDL tag $L;
558      constant PROTECTION equals FDL$SL_SPARET + 1    prefix FDL tag $L;
559      constant FID1      equals FDL$SL_PROTECTION + 1  prefix FDL tag $L;
560      constant FID2      equals FDL$SL_FID1 + 1        prefix FDL tag $L;
561      constant FID3      equals FDL$SL_FID2 + 1        prefix FDL tag $L;
562      constant DATE_TIME equals FDL$SL_FID3 + 1        prefix FDL tag $Q;
563      constant STRING    equals FDL$Q_DATE_TIME + 2    prefix FDL tag $Q;
564      constant COMMENT   equals FDL$Q_STRING + 2      prefix FDL tag $Q;
565      constant LINE      equals FDL$Q_COMMENT + 2     prefix FDL tag $Q;
566      constant UPCASED   equals FDL$Q_LINE + 2        prefix FDL tag $Q;
567      constant STMNTNUM  equals FDL$Q_UPCASED + 2     prefix FDL tag $L;
568      constant ITEM      equals FDL$SL_STMNTNUM + 1   prefix FDL tag $Q;
569      constant GCALL     equals FDL$Q_ITEM + 2        prefix FDL tag $L;
570      constant BLOCK_END equals FDL$SL_GCALL          prefix FDL tag $K;
571
572      /*      Misc.
573      /*
574      /*      Max size of the fdl line
575      /*
576      constant MAXLINE    equals 1024                    prefix FDL tag $K;
577
578      ccnstant CLEAR      equals 0                       prefix FDL tag $C;
579
580      end FDLDEF3;
581
582      end_module $FDLDEF3;
583

```

0177 AH-BT13A-SE  
VAX/VMS V4.0

DIGITAL EQUIPMENT CORPORATION  
CONFIDENTIAL AND PROPRIETARY

FDL\_PARSE LIS

FDL\_PARSE LIS

FDL\_SD\_MSG LIS

FDL\_TABES LIS

FDL\_GENTAB LIS

FDL\_MSG LIS