

0001 0
0002 0
0003 0
0004 0
0005 0
0006 0
0007 0
0008 0
0009 0
0010 0
0011 0
0012 0
0013 0
0014 0
0015 0
0016 0
0017 0
0018 0
0019 0
0020 0
0021 0
0022 0
0023 0
0024 0
0025 0
0026 0
0027 0
0028 0
0029 0
0030 0
0031 0
0032 0
0033 0
0034 0
0035 0
0036 0
0037 0
0038 0
0039 0
0040 0
0041 0
0042 0
0043 0
0044 0
0045 0
0046 0
0047 0
0048 0
0049 0
0050 0
0051 0
0052 0
0053 0
0054 0
0055 0
0056 0
0057 0

LIBRARY 'SYS\$LIBRARY:LIB.L32';
Version V04-001

```
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*****
```

! The following get translated by MDL into a bunch of MACROs and LITERALS
! in the REQUIRE file LIB\$:DBGMSG.REQ and in the MACRO library LIB\$:D.MLB
! These macros (which are actually field definitions in macro form) and
! literal constants are still used in a number of places in DEBUG.
! Eventually it might be nice to get all of these into the common require
! file DBGLIB.REQ and leave only error messages in DBGMSG.MDL.

!...\$DBGDEF

! DEBUG definitions that describe the context of the user's run frame.

```
MACRO          DBG$L_NEXT_LINK = 0,0,32,0%;  
MACRO          DBG$S_USER_REGS = 4,0,0,0%;  
LITERAL        DBG$S_USER_REGS = 68;  
MACRO          DBG$S_USER_R0   = 4,0,32,0%;  
MACRO          DBG$S_USER_R1   = 8,0,32,0%;  
MACRO          DBG$S_USER_R2   = 12,0,32,0%;  
MACRO          DBG$S_USER_R3   = 16,0,32,0%;  
MACRO          DBG$S_USER_R4   = 20,0,32,0%;  
MACRO          DBG$S_USER_R5   = 24,0,32,0%;  
MACRO          DBG$S_USER_R6   = 28,0,32,0%;  
MACRO          DBG$S_USER_R7   = 32,0,32,0%;  
MACRO          DBG$S_USER_R8   = 36,0,32,0%;  
MACRO          DBG$S_USER_R9   = 40,0,32,0%;  
MACRO          DBG$S_USER_R10  = 44,0,32,0%;  
MACRO          DBG$S_USER_R11  = 48,0,32,0%;  
MACRO          DBG$S_USER_AP   = 52,0,32,0%;  
MACRO          DBG$S_USER_FP   = 56,0,32,0%;  
MACRO          DBG$S_USER_SP   = 60,0,32,0%;  
MACRO          DBG$S_USER_PC   = 64,0,32,0%;  
MACRO          DBG$S_USER_OPCO = 64,0,8,0%;
```

```
0058 0 MACRO DBGSL_USER_PSL = 68.0,32.0%;
0059 0
0060 0
0061 0 MACRO DBGSV_TBIT = 68.4,1.0%;
0062 0 LITERAL DBGSM_TBIT = 1^5 - 1^4;
0063 0
0064 0 MACRO DBGSW_RUN_STAT = 72.0,16.0%;
0065 0
0066 0 MACRO DBGSV_AT_BREAK = 72.0,1.0%;
0067 0 LITERAL DBGSM_AT_BREAK = 1^1 - 1^0;
0068 0 MACRO DBGSV_STAR_PROG = 72.1,1.0%;
0069 0 LITERAL DBGSM_STAR_PROG = 1^2 - 1^1;
0070 0 MACRO DBGSV_TRACE_ALL = 72.2,1.0%;
0071 0 LITERAL DBGSM_TRACE_ALL = 1^3 - 1^2;
0072 0 MACRO DBGSV_STEPPING = 72.3,1.0%;
0073 0 LITERAL DBGSM_STEPPING = 1^4 - 1^3;
0074 0 MACRO DBGSV_AT_TRACE = 72.4,1.0%;
0075 0 LITERAL DBGSM_AT_TRACE = 1^5 - 1^4;
0076 0 MACRO DBGSV_ENAB_AST = 72.5,1.0%;
0077 0 LITERAL DBGSM_ENAB_AST = 1^6 - 1^5;
0078 0 MACRO DBGSV_IN_A_BPT = 72.6,1.0%;
0079 0 LITERAL DBGSM_IN_A_BPT = 1^7 - 1^6;
0080 0 MACRO DBGSV_TBIT_OK = 72.7,1.0%;
0081 0 LITERAL DBGSM_TBIT_OK = 1^8 - 1^7;
0082 0 MACRO DBGSV_IN_A_WPT = 72.8,1.0%;
0083 0 LITERAL DBGSM_IN_A_WPT = 1^9 - 1^8;
0084 0 MACRO DBGSV_REAL_WPT = 72.9,1.0%;
0085 0 LITERAL DBGSM_REAL_WPT = 1^10 - 1^9;
0086 0 MACRO DBGSV_STEP_OVER = 72.10,1.0%;
0087 0 LITERAL DBGSM_STEP_OVER = 1^11 - 1^10;
0088 0 MACRO DBGSV_ENAB_FEX = 72.11,1.0%;
0089 0 LITERAL DBGSM_ENAB_FEX = 1^12 - 1^11;
0090 0 MACRO DBGSV_AT_STEP_END = 72.12,1.0%;
0091 0 LITERAL DBGSM_AT_STEP_END = 1^13 - 1^12;
0092 0 MACRO DBGSV_AT_FAULT = 72.13,1.0%;
0093 0 LITERAL DBGSM_AT_FAULT = 1^14 - 1^13;
0094 0
0095 0 MACRO DBGSL_BPT_PC = 74.0,32.0%;
0096 0 MACRO DBGSL_FRAME_PTR = 78.0,32.0%;
0097 0 MACRO DBGSL_CALL_ADDR = 82.0,32.0%;
0098 0 MACRO DBGSL_WATCHPT = 86.0,32.0%;
0099 0 MACRO DBGSL_WATCHPTEN = 90.0,32.0%;
0100 0 MACRO DBGSB_PREV_PRO1 = 94.0,8.0%;
0101 0 MACRO DBGSB_PREV_PRO2 = 95.0,8.0%;
0102 0 MACRO DBGSB_BPT_INS = 96.0,8.0%;
0103 0 MACRO DBGSL_SAVE_FLD = 97.0,32.0%;
0104 0 LITERAL DBGSC_RUNFR_LEN = 101;
0105 0 LITERAL DBGSK_RUNFR_LEN = 101;
0106 0
0107 0 LITERAL
P 0108 0 SEQUST (DBGSK ,GBL ,0,1
P 0109 0 .(MODE ,)
P 0110 0 .(TRACE ,)
P 0111 0 .(BREAK ,)
P 0112 0 .(SET BREAK ,)
P 0113 0 .(LANGUAGE ,)
P 0114 0 .(CANCEL ,)
```

.....
P 0115 0
P 0116 0
P 0117 0
P 0118 0
P 0119 0
P 0120 0
P 0121 0
P 0122 0
P 0123 0
P 0124 0
P 0125 0
P 0126 0
P 0127 0
P 0128 0
P 0129 0
P 0130 0
P 0131 0
P 0132 0
P 0133 0
P 0134 0
P 0135 0
P 0136 0
P 0137 0
P 0138 0
P 0139 0
P 0140 0
P 0141 0
P 0142 0
P 0143 0
P 0144 0
P 0145 0
P 0146 0
P 0147 0
P 0148 0
P 0149 0
P 0150 0
P 0151 0
P 0152 0
P 0153 0
P 0154 0
P 0155 0
P 0156 0
P 0157 0
P 0158 0
P 0159 0
P 0160 0
P 0161 0
P 0162 0
P 0163 0
P 0164 0
P 0165 0
P 0166 0
P 0167 0
P 0168 0
P 0169 0
P 0170 0
P 0171 0

```
(EXAMINE,)  
(OVERRIDE,)  
(TRCE CALL,)  
(ALL,)  
(RESIGNAL,)  
(SCOPE,)  
(MODULE,)  
(TRACEBACK,)  
(WATCH,)  
(STEP,)  
(ALL_BREAK,)  
(ALL_WATCH,)  
(ALL_TRACE,)  
(TRCE BRCH,)  
(THREAD,)  
(OUTPUT,)  
(LOG,)  
(SOURCE,)  
(MAXFILES,)  
(MARGINS,)  
(SEARCH,)  
};
```

```
LITERAL      DBG$K_NO RESET = 1;           ! don't reset protection after write  
LITERAL      DBG$K_RESET_PRT = 2;         ! reset protection after write
```

```
! This is where the error message definitions begin.  
! Error messages are assigned numbers as follows:  
! (Facility code)*65536 +  
! (Facility specific)*32768 +  
! (message number)*8 +  
! (severity code)  
  
! Thus  
! 31           16           15           14           3 2           0  
! -----  
! | facility code | facility specific | message number | severity code |  
! -----
```

```
! DEBUG's facility code is 2. Its facility specific bit is 1.  
! The messages which follow are in numerical order and are allocated in  
! bunches of messages of the same severity.  
  
! DEBUG success message  
! Facility = 2, facility-specific bit set, error level = 1,  
! only error id assigned to this level is 0.  
! (i.e. number 28001 hex or 163841 decimal)
```

```
LITERAL  
SEQULST (DBG$, GBL, 163841, 8  
        (NORMAL,)  
        );
```

0172 0
0173 0
0174 0
0175 0
0176 0
0177 0
0178 0
0179 0
0180 0
P 0181 0
P 0182 0
P 0183 0
P 0184 0
P 0185 0
P 0186 0
P 0187 0
P 0188 0
P 0189 0
P 0190 0
P 0191 0
P 0192 0
P 0193 0
P 0194 0
P 0195 0
P 0196 0
P 0197 0
P 0198 0
P 0199 0
P 0200 0
P 0201 0
P 0202 0
P 0203 0
P 0204 0
P 0205 0
P 0206 0
0207 0
0208 0
0209 0
0210 0
0211 0
0212 0
0213 0
0214 0
0215 0
0216 0
0217 0
0218 0
P 0219 0
P 0220 0
P 0221 0
P 0222 0
P 0223 0
P 0224 0
P 0225 0
P 0226 0
P 0227 0
P 0228 0

! Informational messages

Facility = 2, facility-specific bit set, error severity code = 3
error id codes from 1 thru 25 assigned to this level.
(i.e. numbers 2800B thru 280CB hex, 163851 thru 164043 decimal)

LITERAL

SEQULST (DBG\$,GBL,163851,8

(INITIAL,) !MSG FAOCNT=2,<language is !AC, module set to '!AC'>
(NOBREAKS,) !MSG <no breakpoints are set>
(NOSUCHBPT,) !MSG <no such breakpoint>
(NOSUCHTPT,) !MSG <no such tracepoint>
(NOSUCHWPT,) !MSG <no such watchpoint>
(NOTRACES,) !MSG <no tracepoints are set, no opcode tracing>
(NOWATCHES,) !MSG <no watchpoints are set>
(NUMTRUNC,) !MSG <number truncated>
(STGTRUNC,) !MSG <string truncated>
(NOLOCALS,) !MSG <image does not contain local symbols>
(NOTALLSYM,) !MSG <cannot initialize symbols for default modules>
(STEPINTO,) !MSG FAOCNT=1,<cannot step over PC = !XL>
(EXITSTATUS,) !MSG FAOCNT=1,<is '!AC'>
(SIZETRUNC,) !MSG <size field truncated to 32 bits>
(STRUCTSIZE,) !MSG FAOCNT=2,<structure size declared as !SL units, !SL was given>
(OUTPUTLOST,) !MSG <output being lost, both NOTERMINAL and NOLOG are in effect>
(VERIFYICF,) !MSG FAOCNT=2,<!AC indirect command file '!AD'>
(INSVIRMEM,) !MSG <insufficient virtual memory for DEBUG memory pool>
(INUMTRUNC,) !MSG FAOCNT=1,<number truncated at or near '!AC'>
(NOGLOBALS,) !MSG <some or all global symbols not accessible>
(ERRINSDEC,) !MSG <error occurred while decoding instruction at current PC>
(DEFKEY,) !MSG FAOCNT=2,<!AS key !AS has been defined>
(DELKEY,) !MSG FAOCNT=2,<!AS key !AS has been deleted>
(SETKEY,) !MSG FAOCNT=1,<keypad state has been set to !AS>
(UNDKEY,) !MSG FAOCNT=2,<!AS key !AS is undefined>
);

! There are currently 0 free slots in the above table

! Warning messages

Facility = 2, facility-specific bit set, error severity code = 0
error id codes from 26 thru 49 assigned to this level.
(i.e. numbers 280D0 thru 28188 hex, 164048 thru 164232 decimal)

LITERAL

SEQULST (DBG\$,GBL,164048,8

(NEEDMORE,) !MSG <unexpected end of command line>
(SUBSTRING,) !MSG FAOCNT=3,<invalid substring (!SL:!SL), was declared CHARACTER*!S>
(PARSTKQVR,) !MSG <parse stack overflow, simplify expression>
(ABORTED,) !MSG <command aborted by Control-Y>
(ILLOFFSET,) !MSG FAOCNT=1,<bit or byte offset value larger than 64K not suppo>
(ILLSUBLEN,) !MSG <substring length larger than 64K not supported>
(MODUSCOPE,) !MSG FAOCNT=1,<a module name was expected! !AC not valid>
(BASVARNOTSET,) !MSG <base variable not set up yet>
(DEFKEYERR,) !MSG <error in processing DEFINE/KEY command:>

```

P 0229 0      ,(DELKEYERR,)      !MSG <error in processing DELETE/KEY command:>
P 0230 0      ,(SHOKEYERR,)     !MSG <error in processing SHOW KEY command:>
P 0231 0      ,(READERR,)      !MSG <DEBUG input read error, force to exit>
P 0232 0      ,(PATHNOTACP,)   !MSG FAOCNT=1,<pathname qualifiers (!AC) not allowed in SHOW SYM
P 0233 0      ,(INPREADERR,)   !MSG <error reading input line:>
P 0234 0      ,(ILLSIGEXT,)    !MSG FAOCNT=1,<illegal sign extension field value '!SL'>
P 0235 0      ,(AMBIGQUAL,)    !MSG FAOCNT=1,<qualifier !AC is ambiguous>
P 0236 0      ,(SETKEYERR,)    !MSG <error in processing SET KEY command:>
P 0237 0      ,(CONFLICT,)     !MSG <illegal combination of command elements - check documentation>
P 0238 0      ,(STRTOOLONG,)   !MSG <strings longer than 255 characters not supported>
P 0239 0      ,(NOVALTYP,)     !MSG FAOCNT=1,<!AC does not have a value because it is a a type na
P 0240 0      ,(UNALLOCATED,)  !MSG FAOCNT=1,<variable !AC was not allocated in memory>
0241 0      );
0242 0
0243 0      ! There are currently 4 free slots in the above table (codes 38-49)
0244 0
0245 0
0246 0      ! Error messages
0247 0
0248 0      ! Facility = 2, facility-specific bit set, error severity code = 2
0249 0      ! error codes from 50 thru 99 assigned to this level.
0250 0      ! (i.e. numbers 28190 thru 28318 hex, 164240 thru 164632 decimal)
0251 0
0252 0      LITERAL
P 0253 0      SEQUST (DBG$,GBL,164240,8
P 0254 0      ,(EXARANGE,)      !MSG <invalid range of addresses>
P 0255 0      ,(INVARRDSC,)     !MSG <invalid array descriptor>
P 0256 0      ,(INVCHAR,)       !MSG <invalid character>
P 0257 0      ,(NOTASTRUCT,)    !MSG FAOCNT=1,<!AC was not declared as a structure>
P 0258 0      ,(INVNUMBER,)    !MSG FAOCNT=1,<invalid numeric string '!AS'>
P 0259 0      ,(NOTLINBND,)    !MSG <program is not at a line boundary>
P 0260 0      ,(NOCALLS,)       !MSG <no active call frames>
P 0261 0      ,(NOINSTRAN,)    !MSG FAOCNT=1,<cannot translate opcode at location !XL>
P 0262 0      ,(NOEND,)        !MSG FAOCNT=2,<string beginning with '!AS' is missing end delimiter !AD>
P 0263 0      ,(BADSCOPE,)     !MSG FAOCNT=1,<invalid pathname !AC, SCOPE not changed >
P 0264 0      ,(BADSTARTPC,)   !MSG FAOCNT=1,<cannot access start PC = !XL>
P 0265 0      ,(NOSUCHMODU,)   !MSG FAOCNT=1,<module '!AC' is not in module chain>
P 0266 0      ,(NOUNIQUE,)     !MSG FAOCNT=1,<symbol '!AC' is not unique>
P 0267 0      ,(NOSYMBOL,)     !MSG FAOCNT=1,<symbol '!AC' is not in the symbol table>
P 0268 0      ,(PATHTLONG,)    !MSG <too many qualifiers on name>
P 0269 0      ,(BADOPCODE,)    !MSG FAOCNT=1,<opcode '!AD' is unknown>
P 0270 0      ,(OPSYNTAX,)     !MSG FAOCNT=1,<instruction operand syntax error for operand number !SL
P 0271 0      ,(NODELIMTR,)    !MSG <missing or invalid instruction operand delimiter>
P 0272 0      ,(NOACCESSW,)    !MSG FAOCNT=1,<no write access to virtual address !XL>
P 0273 0      ,(NOACCESSR,)    !MSG FAOCNT=1,<no read access to virtual address !XL>
P 0274 0      ,(BADWATCH,)     !MSG FAOCNT=1,<cannot watch protect address !XL>
P 0275 0      ,(SYNTAX,)       !MSG FAOCNT=1,<command syntax error at or near '!AS'>
P 0276 0      ,(DIVBYZERO,)    !MSG <attempted to divide by zero>
P 0277 0      ,(BITRANGE,)     !MSG <bit range out of limits>
P 0278 0      ,(NOTIMPLAN,)    !MSG FAOCNT=1,<!AC is not implemented at command level>
P 0279 0      ,(LASTCHANCE,)   !MSG <stack exception handlers lost, re-initializing stack>
P 0280 0      ,(PLICVTERR,)    !MSG FAOCNT=1,<PLI conversion error at or near '!AC'>
P 0281 0      ,(INCOMPOPR,)    !MSG FAOCNT=1,<operand number !SL incomplete>
P 0282 0      ,(PCNOTALL,)     !MSG FAOCNT=1,<PC not allowed in context for operand number !SL>
P 0283 0      ,(REGREQ,)       !MSG FAOCNT=1,<register required in context for operand number !SL>
P 0284 0      ,(INDBASEQL,)    !MSG FAOCNT=1,<index and base registers are equal for operand number
P 0285 0      ,(BWLGISMUS,)    !MSG FAOCNT=1,<B, W, L, G, I, or S must precede ^ for operand number

```

```

P 0286 0      ,(INVEXPR,)          !MSG FAOCNT=1,<invalid expression for operand number !SL>
P 0287 0      ,(INVNUMSTR,)      !MSG FAOCNT=1,<invalid numeric string at or near '!AC'>
P 0288 0      ,(DELTIMTOO,)      !MSG FAOCNT=1,<delta time too large>
P 0289 0      ,(NOTUNQOVR,)     !MSG FAOCNT=1,<symbol '!AC' is overloaded !/ use SHOW SYMBOL to find
0290 0      );
0291 0
0292 0      ! There are 15 free slots in the above table
0293 0
0294 0
0295 0      ! Error messages
0296 0
0297 0      Facility = 2, facility-specific bit set, error severity code = 2
0298 0      error id codes from 100 thru 149 assigned to this level.
0299 0      (i.e. numbers 28322 thru 284AA hex, 164642 thru 165034 decimal)
0300 0
0301 0      LITERAL
P 0302 0      SEQULST (DBG$,GBL,164642,8
P 0303 0          ,(DBGERR,)          !MSG <internal DEBUG coding error>
P 0304 0          ,(INVDSTREC,)      !MSG <invalid DST record>
P 0305 0          ,(NOFREE,)        !MSG <no free storage available>
P 0306 0          ,(RSTERR,)        !MSG <error in symbol table>
P 0307 0          ,(DBGNULL1,)     !MSG <this slot is available for use>
P 0308 0          ,(NORSTBLD,)     !MSG <cannot build symbol table>
P 0309 0          ,(SUPERDEBUG,)   !MSG <SUPERDEBUG not available>
P 0310 0          ,(INVGSTREC,)    !MSG <invalid GST record>
P 0311 0          ,(INTERR,)       !MSG FAOCNT=1,<internal DEBUG error in !AC>
P 0312 0          ,(NOSTEPGO,)     !MSG <no STEP, GO, or CALL commands allowed in screen displays>
P 0313 0          ,(DISPEXISTS,)   !MSG FAOCNT=1,<display !AC exists already! cannot be set unless canc
P 0314 0          ,(BADSTKMAC,)    !MSG <error in DST: invalid continuation pointer in stack machine
0315 0      );
0316 0
0317 0      ! There are currently 38 free slots in the above table (codes 113-149)
0318 0
0319 0
0320 0      ! Fatal messages
0321 0
0322 0      Facility = 2, facility-specific bit set, error severity code = 4
0323 0      error id codes from 150 to 199 assigned to this level.
0324 0      (i.e. numbers 284B4 to 2863C hex, 165044 to 165436 decimal)
0325 0
0326 0      LITERAL
P 0327 0      SEQULST (DBG$,GBL,165044,8
P 0328 0          ,(NOWBPT,)        !MSG <cannot insert breakpoint>
P 0329 0          ,(NOWOPCO,)     !MSG <cannot replace breakpoint with opcode>
P 0330 0          ,(NOWPROT,)     !MSG <cannot set protection>
0331 0      );
0332 0
0333 0      ! There are currently 47 free slots in the above table (codes 153-199)
0334 0
0335 0
0336 0      ! Informational messages
0337 0
0338 0      Facility = 2, facility-specific bit set, error severity code = 3
0339 0      error id codes from 200 thru 249 assigned to this level.
0340 0      (i.e. 165443 thru 165835 decimal)
0341 0
0342 0      LITERAL

```

```
.. P 0343 0   SEQUALST (DBGS,GBL,165443,8
P 0344 0   .(MISMODBEG,)
P 0345 0   .(MISMODEND,)
P 0346 0   .(TOOMANERR,)
P 0347 0   .(NONEWVAL,)
P 0348 0   .(NONEWCUR,)
P 0349 0   .(STRNGPAD,)
P 0350 0   .(NOTORIGSRC,)
P 0351 0   .(NONUMSCOPE,)
P 0352 0   .(UNAOPNINI,)
P 0353 0   .(SUBOUTBND,)
P 0354 0   .(BADFRAME,)
P 0355 0   .(IFLTUND,)
P 0356 0   .(IINTOVF,)
P 0357 0   .(ISTRTRU,)
P 0358 0   .(NOTDEFINE,)
P 0359 0   .(SYMNOTFND,)
P 0360 0   .(LOOPVAR,)
P 0361 0   .(ENUMRANGE,)
P 0362 0   .(RETURNED,)
P 0363 0   .(NOSPAWNI,)
P 0364 0   .(SETMODU,)
P 0365 0   .(INVDMTPTR,)
P 0366 0   .(SPAWNED,)
P 0367 0   .(ATTACHED,)
P 0368 0   .(LINEINFO,)
P 0369 0   .(SCALEADD,)
P 0370 0   .(SCALESUB,)
P 0371 0   .(BADTAGVAL,)
P 0372 0   .(CPREINCR,)
P 0373 0   .(CPOSTINCR,)
P 0374 0   .(CPREDECR,)
P 0375 0   .(CPOSTDECR,)
P 0376 0   .(NEEDPAREN,)
P 0377 0   .(IVALOUTBND,)
P 0378 0   .(ADDRESSMODE,)
P 0379 0   .(ZERLENDST,)
P 0380 0   .(NOKEYPAD,)
P 0381 0   .(IQUADOVF,)
P 0382 0   .(IOCTAOVF,)
P 0383 0   .(KEYPADV4,)
P 0384 0   .(CONFROMEXC,)
P 0385 0   .(IFIXUND,)
P 0386 0   .(SS INT,)
P 0387 0   .(ERRSHRNAM,)
P 0388 0   .(NOTATMAIN,)
P 0389 0   .(SUBSCRNG,)
P 0390 0   .(ZEROINCR,)
P 0391 0   );
P 0392 0
P 0393 0   ! There are currently 2 free slots in the above table
P 0394 0
P 0395 0
P 0396 0   ! Warning messages
P 0397 0
P 0398 0   ! Facility = 2, facility-specific bit set, error severity code = 0
P 0399 0   ! error id codes from 250 thru 299 assigned to this level.

!MSG <missing Module-Begin record in DST (compiler error)>
!MSG FAOCNT=1,<missing Module-End in DST for !AC (compiler error)>
!MSG <too many errors, some errors not reported>
!MSG FAOCNT=0,<cannot retain new value, '\' lost>
!MSG FAOCNT=0,<cannot retain new address, '.' lost>
!MSG FAOCNT=0,<string operand lengths don't match, shorter padded with
!MSG FAOCNT=1,<original version of source file not found!!/ file use
!MSG FAOCNT=1,<scope does not exist or is not in set module: !UL
!MSG FAOCNT=1,<unable to open initialization file !AS>
!MSG FAOCNT=4,<subscript !SL is out of bounds! value is !SL, bounds a
!MSG FAOCNT=0,<bad frame pointer or bad frame in call stack>
!MSG FAOCNT=1,<floating underflow at or near '!AC'>
!MSG FAOCNT=1,<integer overflow at or near '!AC'>
!MSG FAOCNT=1,<string truncated at or near '!AC'>
!MSG FAOCNT=1,<!AC was not defined>
!MSG FAOCNT=1,<no symbols matching !AC are defined>
!MSG FAOCNT=1,<loop var !AC has been redefined! exiting for loop>
!MSG <enumeration value out of range>
!MSG FAOCNT=1,<control returned to process !AD>
!MSG <spawn command failed>
!MSG <set module command has completed>
!MSG <invalid DMT pointer! internal linker or DEBUG error>
!MSG <subprocess spawned>
!MSG FAOCNT=1,<terminal now attached to process !AC>
!MSG FAOCNT=1,<!AC>
!MSG FAOCNT=2,<pointer addition: scale factor of !UL applied to !A
!MSG FAOCNT=2,<pointer subtraction: scale factor of !UL applied to
!MSG FAOCNT=2,<incorrect value of !UL in tag field '!AC'.>
!MSG <side effect on pre-increment operation not performed>
!MSG <side effect on post-increment operation not performed>
!MSG <side effect on pre-decrement operation not performed>
!MSG <side effect on post-decrement operation not performed>
!MSG <parenthesis required in THEN, ELSE, and DO clauses>
!MSG FAOCNT=1,<value assigned is out of bounds at or near '!AC'>
!MSG <instruction uses illegal or undefined addressing modes>
!MSG <zero length DST record has been ignored (compiler error)>
!MSG <unable to set up keypad definitions>
!MSG FAOCNT=1,<quadword overflow at or near '!AC'>
!MSG FAOCNT=1,<octaword overflow at or near '!AC'>
!MSG <version V04-000 of VMS required for keypad input>
!MSG <warning: you are continuing from a severe error>
!MSG <precision lost during fixed point operation>
!MSG FAOCNT=1,<internal error during initialization, SHARE$xxx sy
!MSG <type GO to get to start of main program>
!MSG FAOCNT=3,<subscript out of range, !AC bound for dimension !UL is
!MSG <increment for ranged examine is zero! exit-ing loop>
```

```
0400 0      ! (i.e. 165840 thru 166232 decimal)
0401 0
0402 0
P 0403 0      LITERAL
P 0404 0      $EQLST (DBG$, GBL, 165840, 8
P 0405 0      ,(UNMATCHPARN,)      !MSG FAOCNT=0, <unmatched left parenthesis found>
P 0406 0      ,(ILLTYPE,)          !MSG FAOCNT=0, <illegal type of operand(s)>
P 0407 0      ,(NOLASTVAL,)        !MSG FAOCNT=0, <last value is not defined>
P 0408 0      ,(NOTARRAY,)       !MSG FAOCNT=0, <type of variable is not array>
P 0409 0      ,(NOTPTR,)         !MSG FAOCNT=0, <variable must be of pointer or file type>
P 0410 0      ,(NOVALUE,)        !MSG FAOCNT=0, <reference does not have a value>
P 0411 0      ,(UNIMPLENT,)      !MSG FAOCNT=0, <attempt to evaluate unimplemented type>
P 0412 0      ,(NOCURLOC,)       !MSG FAOCNT=0, <current location not defined>
P 0413 0      ,(NOPRED,)         !MSG FAOCNT=0, <logical predecessor not defined>
P 0414 0      ,(NOSUCC,)         !MSG FAOCNT=0, <logical successor not defined>
P 0415 0      ,(BADTARGET,)      !MSG FAOCNT=0, <target location protected, cannot perform deposit>
P 0416 0      ,(ILLPACSIZE,)     !MSG FAOCNT=1, <illegal packed size !SL! must be 0..31>
P 0417 0      ,(PACSIZEREQ,)     !MSG FAOCNT=0, <packed size required>
P 0418 0      ,(INVARGLIST,)     !MSG FAOCNT=1, <invalid argument list for '!AC'>
P 0419 0      ,(ILLENUMVAL,)     !MSG FAOCNT=0, <enumeration value out of legal range>
P 0420 0      ,(CMPNOTFND,)      !MSG FAOCNT=0, <specified component not found in this type>
P 0421 0      ,(INVARRDIM,)      !MSG FAOCNT=0, <array dimension is out of range>
0422 0      );
```

! There are 35 free slots in the above table

! Error messages

Facility = 2, facility-specific bit set, error severity code = 2
error id codes from 300 thru 349 assigned to this level.
(i.e. 166242 thru 166634 decimal)

```
0430 0
0431 0
0432 0      LITERAL
P 0433 0      $EQLST (DBG$, GBL, 166242, 8
P 0434 0      ,(DSTNESDEP,)      !MSG FAOCNT=1, <DST nesting depth too deep in module !AC>
P 0435 0      ,(INCDSTNES,)      !MSG FAOCNT=1, <incorrect DST nesting in module !AC, compiler error>
P 0436 0      ,(NOSCOPE,)        !MSG FAOCNT=1, <no scope exists to look up line !SL>
P 0437 0      ,(INVDIRNAM,)      !MSG FAOCNT=1, <invalid directory name: !AC>
P 0438 0      ,(IDENTLONG,)     !MSG <identifier too long, please shorten>
P 0439 0      ,(ILLPATHELEM,)    !MSG FAOCNT=1, <illegal pathname element at '!AC'>
P 0440 0      ,(INVCHRCON,)      !MSG <invalid character constant in expression>
P 0441 0      ,(INVOPADDR,)     !MSG FAOCNT=1, <invalid operator '!AC' in address expression>
P 0442 0      ,(INVOPSYM,)      !MSG FAOCNT=1, <invalid operator symbol '!AC' in expression>
P 0443 0      ,(MISINVOPER,)     !MSG FAOCNT=1, <missing or invalid operator at '!AC'>
P 0444 0      ,(MISOPEMIS,)     !MSG FAOCNT=1, <misplaced operator or missing operand at '!AC'>
P 0445 0      ,(NAMSTRMIS,)     !MSG <name string missing or invalid in %NAME construct>
P 0446 0      ,(NUMCONLONG,)    !MSG <numeric constant too long, please shorten>
P 0447 0      ,(OPNOTALLOW,)    !MSG FAOCNT=1, <operator '!AC' not allowed on given data types>
P 0448 0      ,(PATHTOOLONG,)   !MSG FAOCNT=1, <pathname too long at '!AC'>
P 0449 0      ,(QUOSTRLONG,)    !MSG <quoted string too long, please shorten>
P 0450 0      ,(SYNERREXPR,)    !MSG FAOCNT=1, <syntax error in expression at or near '!AC'>
P 0451 0      ,(SYNERRLABEL,)   !MSG <syntax error in %LABEL construct, see HELP %LABEL>
P 0452 0      ,(SYNERRLINE,)    !MSG <syntax error in %LINE construct, see HELP %LINE>
P 0453 0      ,(UNBPAREN,)      !MSG <unbalanced parentheses in expression>
P 0454 0      ,(FLTOVF,)        !MSG FAOCNT=1, <floating overflow at or near '!AC'>
P 0455 0      ,(ROPRANDF,)      !MSG FAOCNT=1, <reserved operand fault at or near '!AC'>
P 0456 0      ,(TOOMANINV,)     !MSG <too many invocation numbers in symbol pathname>
```

```

P 0457 0      ,(NOSPAWN,)      !MSG <spawn command failed>
P 0458 0      ,(NOATTACH,)    !MSG <attach command failed>
P 0459 0      ,(GETJPI,)      !MSG <GETJPI system service failed, unable to attach>
P 0460 0      ,(VARNESDEP,)    !MSG <variant nesting depth exceeds 20, cannot access record componen
P 0461 0      ,(DECOVF,)      !MSG FAOCNT=1,<decimal overflow at or near '!AC'>
P 0462 0      ,(DECROPRAND,)  !MSG <illegal packed or decimal string value (Reserved Operand fault
P 0463 0      ,(NOWATAGGR,)    !MSG <watchpoints on entire records or arrays are not supported>
P 0464 0      ,(WATCHSIZE,)    !MSG <cannot WATCH variables longer than 512 bytes>
P 0465 0      ,(INTOVF,)      !MSG FAOCNT=1,<integer overflow at or near '!AC'>
P 0466 0      ,(NOSUCHDISP,)  !MSG FAOCNT=1,<no such display defined: !AC>
P 0467 0      ,(NOSUCHWIND,)  !MSG FAOCNT=1,<no such window defined: !AC>
P 0468 0      ,(INVDSPSIZ,)    !MSG FAOCNT=1,<invalid display size: !SL>
P 0469 0      ,(NOSROLL,)     !MSG <no scrolling display selected or missing display name>
P 0470 0      ,(NAMTOOLONG,)  !MSG FAOCNT=1,<name is too long: !AC>
P 0471 0      ,(SETSCOMOD,)    !MSG FAOCNT=1,<syntax error at !AC, SET SCOPE/MODULE expected>
P 0472 0      ,(DISNOTSEL,)    !MSG <display not selected because removed from screen>
P 0473 0      ,(INVSELDIS,)    !MSG FAOCNT=1,<invalid selection of display !AC! wrong display kind>
P 0474 0      ,(INWINPAR,)    !MSG FAOCNT=1,<invalid window parameter: !SL>
P 0475 0      ,(INVDIGDEC,)    !MSG FAOCNT=1,<invalid digit in decimal number: !AD>
P 0476 0      ,(INVDIGBIN,)    !MSG FAOCNT=1,<invalid digit in binary number: !AD>
P 0477 0      ,(INVDIGHEX,)    !MSG FAOCNT=1,<invalid digit in hexadecimal number: !AD>
P 0478 0      ,(INVDIGOCT,)    !MSG FAOCNT=1,<invalid digit in octal number: !AD>
P 0479 0      );
0480 0
0481 0      ! There are currently 6 free slots in the above table (codes 341-348)
0482 0
0483 0
0484 0      ! Fatal messages
0485 0
0486 0      Facility = 2, facility-specific bit set, error severity code = 4
0487 0      error id codes from 350 to 399 are assigned to this level.
0488 0      (i.e. 166644 to 167036 decimal)
0489 0
0490 0      LITERAL
P 0491 0      $EQUAST (DBG$,GBL,166644,8
P 0492 0      ,(INTMEMERR,)    !MSG FAOCNT=1,<internal memory-pool error at location !XL>
0493 0      );
0494 0
0495 0      ! There are currently 49 free slots in the above table (codes 353-399)
0496 0
0497 0
0498 0      ! Warning messages
0499 0
0500 0      Facility = 2, facility-specific bit set, error severity code = 0
0501 0      error id codes from 400 to 449 are assigned this level.
0502 0      (i.e. 167040 to 167432 decimal)
0503 0
0504 0      LITERAL
P 0505 0      $EQUAST (DBG$,GBL,167040,8
P 0506 0      ,(NOFIELD,)      !MSG FAOCNT=1,<'!AC' is not a field in this record>
P 0507 0      ,(SYMNOTACT,)    !MSG FAOCNT=1,<symbol !AC not active or not in active scope>
P 0508 0      ,(MISINVNUM,)    !MSG FAOCNT=1,<misplaced invocation number in !AC>
P 0509 0      ,(ACCADDCOM,)    !MSG FAOCNT=1,<access violation in address computation for !AC>
P 0510 0      ,(VALNOTADDR,)  !MSG FAOCNT=1,<value of variable '!AC' not usable as address>
P 0511 0      ,(NOWATTAR,)    !MSG FAOCNT=0,<cannot watch-protect target>
P 0512 0      ,(PROFRANOT,)    !MSG FAOCNT=1,<proper frame not found on call stack for !AC>
P 0513 0      ,(SRCLINNOT,)    !MSG FAOCNT=1,<source lines not available for module '!AC'>

```

```
.. P 0514 0      ,(INVSRC LIN,)      !MSG FAOCNT=0,<invalid source line range>
.. P 0515 0      ,(INVNUMSRC,)      !MSG FAOCNT=0,<invalid number of source files>
.. P 0516 0      ,(NOSRC LIN,)      !MSG FAOCNT=1,<no source line for address !XL>
.. P 0517 0      ,(ADDRANCOV,)      !MSG FAOCNT=4,<address range covers more than one module!/> !XL is in
.. P 0518 0      ,(NONXT LIN,)      !MSG FAOCNT=0,<next line for source display not defined>
.. P 0519 0      ,(NODIRLISM,)      !MSG FAOCNT=1,<no source directory list in effect for !AC>
.. P 0520 0      ,(NODIRLIST,)      !MSG FAOCNT=0,<no source directory list in effect>
.. P 0521 0      ,(UNADPNSRC,)      !MSG FAOCNT=1,<unable to open source file !AD>
.. P 0522 0      ,(UNAREASRC,)      !MSG FAOCNT=1,<unable to read source file !AD>
.. P 0523 0      ,(UNALIGNED,)      !MSG <data is not aligned on a byte boundary>
.. P 0524 0      ,(FILEUNAL,)      !MSG <file not available>
.. P 0525 0      ,(NOKEYDEF,)      !MSG <cannot do keypad input, mode is set to NOKEYPAD>
.. P 0526 0      ,(ILLQUALIF,)      !MSG <illegal or unsupported qualifier on SPAWN command>
.. P 0527 0      ,(NOSUCHELP,)      !MSG <no such help topic or invalid HELP command>
.. P 0528 0      ,(UNKATTRIB,)      !MSG <unknown attribute: !AC>
.. P 0529 0      ,(NOSYMBOLR,)      !MSG FAOCNT=2,<no symbol !AC was declared in routine !AC>
.. P 0530 0      );
.. 0531 0      ! There are currently 27 free slots in the above table
.. 0532 0
.. 0533 0
.. 0534 0      ! Warning messages
.. 0535 0
.. 0536 0      Facility = 2 , facility-specific bit set , error severity code = 0.
.. 0537 0      error id codes 450 through 499 are assigned to this level
.. 0538 0      (i.e., numbers 167440 through 167832 decimal)
.. 0539 0
.. 0540 0
.. 0541 0
.. P 0542 0      LITERAL
.. P 0543 0      SEQULST (DBG$ ,GBL,167440,8
.. P 0544 0      ,(INVMAR,)      !MSG FAOCNT=0,<right margin must be greater than left>
.. P 0545 0      ,(NOLINXXX,)      !MSG FAOCNT=1,<!AC>
.. P 0546 0      ,(NOMATCH,)      !MSG FAOCNT=0,<no matches>
.. P 0547 0      ,(NOSRCHSTR,)      !MSG FAOCNT=0,<search string not set>
.. P 0548 0      ,(MATQUOMIS,)      !MSG FAOCNT=0,<matching quote is missing>
.. P 0549 0      ,(STEFROEXC,)      !MSG FAOCNT=0,<step or call from exception break is not allowed>
.. P 0550 0      ,(NOTINLOOP,)      !MSG FAOCNT=0,<exitloop encountered when not in a loop>
.. P 0551 0      ,(EXITARG,)      !MSG FAOCNT=1,<exitloop argument !SL is too large>
.. P 0552 0      ,(ILLDEFNAM,)      !MSG FAOCNT=1,<illegal name for DEFINE: !AC>
.. P 0553 0      ,(NOSUCHSCOPE,)      !MSG FAOCNT=1,<scope does not exist or is not in set module: !AC>
.. P 0554 0      ,(DECLARERR,)      !MSG FAOCNT=1,<too many declarations, !AC ignored>
.. P 0555 0      ,(UNASAVVAL,)      !MSG FAOCNT=1,<unable to save value for !AC, definition ignored>
.. P 0556 0      ,(PROVRFLOW,)      !MSG FAOCNT=0,<too many levels of @ procedure nesting>
.. P 0557 0      ,(UNACVT,)      !MSG FAOCNT=2,<unable to convert !AC!AD to !AC>
.. P 0558 0      ,(UNAEXPMEM,)      !MSG FAOCNT=1,<unable to expand memory by !SL bytes>
.. P 0559 0      ,(ALLOBNDS,)      !MSG FAOCNT=0,<must allocate at least 1000 bytes>
.. P 0560 0      ,(MISCLOSUB,)      !MSG FAOCNT=0,<missing closing subscript parenthesis>
.. P 0561 0      ,(NOTRECORD,)      !MSG FAOCNT=1,<variable is not record! cannot select component !AC>
.. P 0562 0      ,(TOOFEWSUB,)      !MSG FAOCNT=1,<too few subscripts, array has !SL dimensions>
.. P 0563 0      ,(TOOMANDIM,)      !MSG FAOCNT=0,<too many dimensions in array>
.. P 0564 0      ,(TOOMANSUB,)      !MSG FAOCNT=1,<too many subscripts, array has !SL dimensions>
.. P 0565 0      ,(CMDSYNERR,)      !MSG FAOCNT=1,<command syntax error at or near '!AC'>
.. P 0566 0      ,(SFCNTNEG,)      !MSG FAOCNT=0,<shift count is negative>
.. P 0567 0      ,(ILLPOSFLD,)      !MSG FAOCNT=1,<position field value !SL is too large>
.. P 0568 0      ,(ILLSIZFLD,)      !MSG FAOCNT=1,<illegal size field !SL! must be 0..32>
.. P 0569 0      ,(UNDEXPN,)      !MSG FAOCNT=1,<undefined exponentiation at or near '!AC'>
.. P 0570 0      ,(OPCDEC,)      !MSG FAOCNT=1,<no support for G/H instructions at or near '!AC'>
.. P 0570 0      ,(ILLLENGTH,)      !MSG FAOCNT=1,<illegal length field !SL in structure reference>
```

```

P 0571 0      ,(CVTNEGUNS,)      !MSG FAOCNT=1,<cannot convert negative value to unsigned value at or
P 0572 0      ,(ILLADDCON,)     !MSG FAOCNT=1,<illegal constant !AD in address expression>
P 0573 0      ,(INVFLDREF,)     !MSG <invalid field reference! too many or few parameters>
P 0574 0      ,(INVRANSPEC,)    !MSG <invalid range specification in array subscript>
P 0575 0      ,(INCOMQUAL,)    !MSG <qualifier /DEFINED is not compatible with /TYPE /ADDRESS or
P 0576 0      ,(LOOPINCR,)     !MSG <loop increment cannot be zero>
P 0577 0      ,(ILLSETCON,)    !MSG <illegal set constant in expression>
P 0578 0      ,(BADSTACK,)     !MSG <stack corrupted - no further data available>
P 0579 0      ,(INCOMPTR,)    !MSG <pointers of different size, cannot perform subtraction>
P 0580 0      ,(AMPERSAND,)    !MSG <operand of ampersand must be lvalue>
P 0581 0      ,(ILLFILPTR,)    !MSG <file variable points to invalid file descriptor>
P 0582 0      ,(ADDRREG,)      !MSG FAOCNT=1,<& not allowed on register variables: operand bound
P 0583 0      ,(DESCNOTSET,)   !MSG <descriptor not set up yet>
P 0584 0      ,(AMBFIELD,)     !MSG FAOCNT=1,<!AC is an ambiguous field name>
P 0585 0      ,(ILLRANGE,)     !MSG <subscript range not permitted here (must be at lowest level
P 0586 0      ,(ILLASTER,)    !MSG <subscript range ('*') not permitted here (must be at lowest
P 0587 0      ,(ILLSUBSTR,)   !MSG <can only apply substring operation to string data types>
P 0588 0      ,(SIDEFFECT,)   !MSG <operators with side effects not supported (++ , --)>
P 0589 0      ,(BADDESCR,)    !MSG FAOCNT=1,<descriptor for !AC is bad or is not set up yet>
P 0590 0      ,(ABS DATSYN,)   !MSG FAOCNT=0,<absolute date-time syntax error>
0591 0
0592 0

```

! There are currently 1 free slots in the above table

! Informational messages

! Facility = 2 , facility-specific bit set , error severity code = 3.
 ! error id codes 500 through 549 are assigned to this level
 ! (i.e., numbers 167843 through 168235 decimal)

LITERAL

SEQULST (DBG\$, GBL, 167843, 8

```

P 0604 0      ,(ENTRYMASK,)    !MSG <entry mask has non-zero value in bits 12:13>
P 0605 0      ,(NOUNIVERSALS,) !MSG <shareable image contains no universal symbols>
P 0606 0      ,(INVGSTTYP,)    !MSG <invalid GST record! GST is partially built>
P 0607 0      ,(WATNOTACT,)    !MSG FAOCNT=1,<watched variable !AC not active>
P 0608 0      ,(UNAOPEOCR,)    !MSG <unable to open DBG$OUTPUT for screen output>
P 0609 0      ,(IRFAOVF,)      !MSG FAOCNT=1,<record file address overflow at or near '!AC'>
P 0610 0      ,(NOMARKCHNG,)   !MSG FAOCNT=1,<[NO]MARK CHANGE qualifier not applicable to display !
P 0611 0      ,(UNAOPEDBGI,)   !MSG <unable to open DBG$INPUT, SYSS$INPUT used>
P 0612 0      ,(UNACREDBGO,)   !MSG <unable to create DBG$OUTPUT, SYSS$OUTPUT used>
P 0613 0      ,(EDITFILE,)     !MSG FAOCNT=1,<editing file !AD>
P 0614 0      ,(EDITREVVÉR,)   !MSG <editing a revised version of the displayed source file>
P 0615 0      ,(EDITDISVER,)   !MSG FAOCNT=1,<the displayed version is !AD>
P 0616 0      ,(EDITERROR,)    !MSG FAOCNT=1,<error while trying to edit !AD>
P 0617 0      ,(EDITNOFILE,)   !MSG <no source file to use for editing>
P 0618 0
0619 0
0620 0

```

! There are currently 37 free slots in the above table (codes 513 - 549)

0621 0
 0622 0
 0623 0

Library Statistics

File	Symbols		Pages Mapped	Processing Time
	----- Total	----- Loaded Percent		
:_\$255\$DUA28:[SYSLIB]LIB.L32;1	18619	3 0	1000	00:01.9

COMMAND QUALIFIERS

: BLISS/LIBRARY=LIB\$:DBGMSG.L32/LIST=LIS\$:DBGMSG.LIS LIB\$:DBGMSG.REQ

: Run Time: 00:20.3
: Elapsed Time: 01:10.2
: Lines/CPU Min: 1838
: Lexemes/CPU-Min: 63742
: Memory Used: 115 pages
: Library Precompilation Complete

0086 AH-BT13A-SE
VAX/VMS V4.0

DIGITAL EQUIPMENT CORPORATION
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The image displays a grid of 100 small terminal windows, each showing a different screen from the VAX/VMS operating system. The screens are arranged in a 10x10 grid. Many of the screens show system utilities, error messages, and data listings. Some prominent screens include:

- DBGMSG LIS
- DBGNCANL LIS
- DBGNCNTR LIS
- DBGMOD LIS

The overall appearance is that of a multi-processor system's control console.