



```

MM      MM      TTTTTTTTTT  HH      HH      JJ      MM      MM      AAAAAA  XX      XX      000000
MM      MM      TTTTTTTTTT  HH      HH      JJ      MM      MM      AAAAAA  XX      XX      000000
MMMM    MMMM      TT          HH      HH      JJ      MMMM  MMMM  AA      AA  XX      XX      00      00
MMMM    MMMM      TT          HH      HH      JJ      MMMM  MMMM  AA      AA  XX      XX      00      00
MM      MM      TT          HH      HH      JJ      MM      MM      AA      AA  XX      XX      00      0000
MM      MM      TT          HH      HH      JJ      MM      MM      AA      AA  XX      XX      00      0000
MM      MM      TT          HHHHHHHHHH  JJ      JJ      MM      MM      AA      AA  XX      XX      00      00
MM      MM      TT          HHHHHHHHHH  JJ      JJ      MM      MM      AA      AA  XX      XX      00      00
MM      MM      TT          HH      HH      JJ      MM      MM      AAAAAAAAAA  XX      XX      0000      00
MM      MM      TT          HH      HH      JJ      MM      MM      AAAAAAAAAA  XX      XX      0000      00
MM      MM      TT          HH      HH      JJ      MM      MM      AA      AA  XX      XX      00      00
MM      MM      TT          HH      HH      JJ      MM      MM      AA      AA  XX      XX      00      000000
MM      MM      TT          HH      HH      JJ      MM      MM      AA      AA  XX      XX      000000

```

```

LL      IIIIII  SSSSSSSS
LL      IIIIII  SSSSSSSS
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  SSSSSSSS
LLLLLLLLLLLL IIIIII  SSSSSSSS
LLLLLLLLLLLL IIIIII  SSSSSSSS

```

(2)	48	HISTORY ; Detailed Current Edit History
(3)	57	DECLARATIONS
(4)	83	MTH\$JMAX0, MTH\$AJMAX0

```
0000 1 .TITLE MTH$JMAX0 JMAX0 and AJMAX0 functions
0000 2 .IDENT /1-002/ ; File: MTHJMAX0.MAR
0000 3
0000 4
0000 5 *****
0000 6 *
0000 7 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY *
0000 8 * DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS. *
0000 9 * ALL RIGHTS RESERVED. *
0000 10 *
0000 11 * THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED *
0000 12 * ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE *
0000 13 * INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER *
0000 14 * COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY *
0000 15 * OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY *
0000 16 * TRANSFERRED. *
0000 17 *
0000 18 * THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE *
0000 19 * AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT *
0000 20 * CORPORATION. *
0000 21 *
0000 22 * DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS *
0000 23 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL. *
0000 24 *
0000 25 *
0000 26 *****
0000 27
0000 28
0000 29 FACILITY: MATH LIBRARY
0000 30 ++
0000 31 ABSTRACT:
0000 32
0000 33
0000 34 --
0000 35
0000 36 VERSION: 0
0000 37
0000 38 HISTORY:
0000 39
0000 40 AUTHOR:
0000 41 Jonathan M. Taylor, 12-JUL-77: Version 0
0000 42
0000 43 MODIFIED BY:
0000 44
0000 45
0000 46
```

MTHSJMAX0  
1-002

JMAX0 and AJMAX0 functions K 4 16-SEP-1984 01:45:39 VAX/VMS Macro V04-00  
HISTORY ; Detailed Current Edit History 6-SEP-1984 11:26:31 [MTHRTL.SRC]MTHJMAX0.MAR;1

Page 2  
(2)

```
0000 48 .SBTTL HISTORY ; Detailed Current Edit History
0000 49
0000 50
0000 51 : Edit History for Version 0 of MTHJMAX0
0000 52 :
0000 53 : 0-2 - Fix access violation. TNH 16-Aug-78
0000 54 : 1-001 - Update version number and copyright notice. JBS 16-NOV-78
0000 55 : 1-002 - Add "_" to the PSECT directive. JBS 22-DEC-78
```

```
0000 57      .SBTTL  DECLARATIONS
0000 58
0000 59  :
0000 60  : INCLUDE FILES:
0000 61  :
0000 62  :
0000 63  :
0000 64  : EXTERNAL SYMBOLS:
0000 65  :
0000 66  :
0000 67  :
0000 68  : MACROS:
0000 69  :
0000 70  :
0000 71  :
0000 72  : PSECT DECLARATIONS:
00000000 73  .PSECT  _MTH$CODE      PIC, SHR, LONG, EXE, NOWRT
0000 74  :
0000 75  :
0000 76  : EQUATE^ SYMBOLS:
0000 77  :
0000 78  :
0000 79  :
0000 80  : OWN STORAGE:
0000 81  :
```

```

0000 83      .SBTTL  MTHSJMAXO, MTHSAJMAXO
0000 84
0000 85      :++
0000 86      : FUNCTIONAL DESCRIPTION:
0000 87      :
0000 88      :
0000 89      : CALLING SEQUENCE:
0000 90      :     NONE
0000 91      :
0000 92      :
0000 93      : INPUT PARAMETERS:
0000 94      :     NONE
0000 95      :
0000 96      : IMPLICIT INPUTS:
0000 97      :     NONE
0000 98      :
0000 99      : OUTPUT PARAMETERS:
0000 100     :     NONE
0000 101     :
0000 102     : IMPLICIT OUTPUTS:
0000 103     :     NONE
0000 104     :
0000 105     : COMPLETION CODES:
0000 106     :     NONE
0000 107     :
0000 108     : SIDE EFFECTS:
0000 109     :     NONE
0000 110     :
0000 111     :--
0000 112
0000 113
0000 114
0000 115
0000 116     .ENTRY  MTHSJMAXO,      ^M<>
09  0000 10 0002 117     BSB      MAXL                ; R0 = max arg
   04 0004 118     RET
   0005 119
0000 120     .ENTRY  MTHSAJMAXO,    ^M<>
50  04 0000 10 0007 121     BSB      MAXL                ; R0 = max arg
   50 4E 0009 122     CVTLF   R0, R0                ; float it
   04 000C 123     RET
0000 124
0000 125     :+
0000 126     : MAXL returns the maximum of INTEGER*4 args.
0000 127     :--
0000 128
0000 129     MAXL:
51  6C 9A 0000 130     MOVZBL  (AP), R1                ; R1 = number of args
   8C D5 0010 131     TSTL    (AP)+                ; AP -> first arg adr
50  9C B0 0012 132 1$:  MOVL    @(AP)+, R0                ; get trial max
   08 11 0015 133     BRB     3$                ; check arg count
50  00 BC D1 0017 134 2$:  CMPL   @0(AP),R0                ; if this arg is greater then trial max
   F5 14 001B 135     BGTR   1$                ; then it becomes trial max
   8C D5 001D 136     TSTL   (AP)+                ; else ignore it
   F5 51 F5 001F 137 3$:  SOBGR  R1, 2$                ; check arg count
   05 0022 138     RSB
0023 139

```

MTHSJMAX0  
1-002

JMAX0 and AJMAX0 functions  
MTHSJMAX0, MTHSAJMAX0

N 4

16-SEP-1984 01:45:39 VAX/VMS Macro V04-00  
6-SEP-1984 11:26:31 [MTHRTL.SRC]MTHJMAX0.MAR;1

Page 5  
(4)

0023 140  
0023 141 .END



MTH\$JMAX0  
Symbol table

JMAX0 and AJMAX0 functions

B 5

16-SEP-1984 01:45:39  
6-SEP-1984 11:26:31

VAX/VMS Macro V04-00  
[MTHRTL.SRC]MTHJMAX0.MAR;1

Page 6  
(4)

MAXL	0000000D	R	01
MTH\$AJMAX0	00000005	RG	01
MTH\$JMAX0	00000000	RG	01

-----  
! Psect synopsis !  
-----

<u>PSECT name</u>	<u>Allocation</u>	<u>PSECT No.</u>	<u>Attributes</u>												
ABS	00000000 ( 0.)	00 ( 0.)	NOPIC	USR	CON	ABS	LCL	NOSHR	NOEXE	NORD	NOWRT	NOVEC	BYTE		
_MTH\$CODE	00000023 ( 35.)	01 ( 1.)	PIC	USR	CON	REL	LCL	SHR	EXE	RD	NOWRT	NOVEC	LONG		

-----  
! Performance indicators !  
-----

<u>Phase</u>	<u>Page faults</u>	<u>CPU Time</u>	<u>Elapsed Time</u>
Initialization	30	00:00:00.10	00:00:00.72
Command processing	122	00:00:00.48	00:00:02.55
Pass 1	71	00:00:00.45	00:00:01.64
Symbol table sort	0	00:00:00.01	00:00:00.01
Pass 2	39	00:00:00.32	00:00:01.70
Symbol table output	2	00:00:00.01	00:00:00.02
Psect synopsis output	2	00:00:00.02	00:00:00.02
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	268	00:00:01.39	00:00:06.66

The working set limit was 750 pages.  
 1511 bytes (3 pages) of virtual memory were used to buffer the intermediate code.  
 There were 10 pages of symbol table space allocated to hold 3 non-local and 3 local symbols.  
 141 source lines were read in Pass 1, producing 13 object records in Pass 2.  
 0 pages of virtual memory were used to define 0 macros.

-----  
! Macro library statistics !  
-----

<u>Macro library name</u>	<u>Macros defined</u>
_\$255\$DUA28:[SYSLIB]STARLET.MLB;2	0

0 GETS were required to define 0 macros.

There were no errors, warnings or information messages.

MACRO/ENABLE=SUPPRESSION/DISABLE=(GLOBAL,TRACEBACK)/LIS=LIS\$:MTHJMAX0/OBJ=OBJ\$:MTHJMAX0 MSRC\$:MTHJMAX0/UPDATE=(ENH\$:MTHJMAX0)

