



```

MM      MM      TTTTTTTTTT  HH      HH      IIIIII
MM      MM      TTTTTTTTTT  HH      HH      IIIIII
MMMM    MMMM    TT          HH      HH      II
MMMM    MMMM    TT          HH      HH      II
MM      MM      TT          HH      HH      II
MM      MM      TT          HH      HH      II
MM      MM      TT          HHHHHHHHHH  II
MM      MM      TT          HHHHHHHHHH  II
MM      MM      TT          HH      HH      II
MM      MM      TT          HH      HH      II
MM      MM      TT          HH      HH      II
MM      MM      TT          HH      HH      II
MM      MM      TT          HH      HH      IIIIII
MM      MM      TT          HH      HH      IIIIII

MM      MM      AAAAAA      XX      XX      000000
MM      MM      AAAAAA      XX      XX      000000
MMMM    MMMM    AA          AA      XX      XX      00      00
MMMM    MMMM    AA          AA      XX      XX      00      00
MM      MM      AA          AA      XX      XX      00      0000
MM      MM      AA          AA      XX      XX      00      0000
MM      MM      AA          AA      XX      XX      00      00
MM      MM      AA          AA      XX      XX      00      00
MM      MM      AA          AA      XX      XX      00      00
MM      MM      AAAAAAAAAA      XX      XX      0000      00
MM      MM      AAAAAAAAAA      XX      XX      0000      00
MM      MM      AA          AA      XX      XX      00      00
MM      MM      AA          AA      XX      XX      00      00
MM      MM      AA          AA      XX      XX      000000
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      II          SS
LLLLLLLLLLLL IIIIII SSSSSSSS
LLLLLLLLLLLL IIIIII SSSSSSSS

```

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

```
0000 1 .TITLE MTH$IMAXO IMAXO and AIMAXO functions
0000 2 .IDENT /1-002/ ; File: MTHIMAXO.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
```

MTHSIMAXO  
1-002

IMAXO and AIMAXO functions L 16  
HISTORY ; Detailed Current Edit History 16-SEP-1984 01:43:15 VAX/VMS Macro V04-00  
6-SEP-1984 11:26:08 [MTHRTL.SRC]MTHIMAXO.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 MTHIMAXO
0000 52 :
0000 53 : 0-2 - Fix access violation and step by 2 bug.  TNH 21-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:
0000 73 : .PSECT  _MTH$CODE      PIC, SHR, LONG, EXE, NOWRT
0000 74 :
0000 75 :
0000 76 : EQUATED SYMBOLS:
0000 77 :
0000 78 :
0000 79 :
0000 80 : OWN STORAGE:
0000 81 :
```

```

0000 83      .SBTTL MTHSIMAXO, MTHSAIMAXO
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 MTHSIMAXO,      ^M<>
09  0000 117     BSB      MAXW      ; R0 = max arg
0000 118     RET
0000 119
0000 120     .ENTRY MTHSAIMAXO    ^M<>
50  04 0000 121     BSB      MAXW      ; R0 = max arg
50  50 4D 0009 122     CVTWF   R0, R0   ; REAL*4 max arg
0000 123     RET
0000 124
0000 125     :+
0000 126     : MAXW returns the maximum of the INTEGER*2 args.
0000 127     :-
0000 128
0000 129     MAXW:
51  6C 9A 000D 130     MOVZBL  (AP), R1      ; R1 = number of args
5C  04 C0 0010 131     ADDL   #4, AP      ; AP -> first arg adr
50  9C BC 0013 132 1$:  MOVW   @0(AP)+, R0    ; get trial max
0000 133     BRB    3$      ; check arg count
50  00 BC B1 0018 134 2$:  CMPW   @0(AP), R0    ; if this arg is greater then trial max
0000 135     BGTR  1$      ; then it becomes trial max
0000 136     TSTL  (AP)+    ; else ignore it
0000 137 3$:  SOBGTR R1, 2$  ; check arg count
0000 138     RSB
0000 139

```

MTHSIMAXO  
1-002

IMAXO and AIMAXO functions  
MTHSIMAXO, MTHSAIMAXO

C 1

16-SEP-1984 01:43:15 VAX/VMS Macro V04-00  
6-SEP-1984 11:26:08 [MTHRTL.SRC]MTHIMAXO.MAR;1

Page 5  
(4)

MT  
2-

0024 140  
0024 141 .END

MTH\$IMAXC  
Symbol table

IMAX0 and AIMAX0 functions

D 1

16-SEP-1984 01:43:15  
6-SEP-1984 11:26:08

VAX/VMS Macro V04-00  
[MTHRTL.SRC]MTHIMAX0.MAR;1

Page 6  
(4)

MTI  
2-

MAXW	0000000D	R	01
MTH\$AIMAX0	00000005	RG	01
MTH\$IMAX0	00000000	RG	01

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

PSECT name	Allocation	PSECT No.	Attributes												
ABS	00000000 ( 0.)	00 ( 0.)	NOPIC USR	CON	ABS	LCL	NOSHR	NOEXE	NORD	NOWRT	NOVEC	BYTE			
_MTH\$CODE	00000024 ( 36.)	01 ( 1.)	PIC USR	CON	REL	LCL	SHR	EXE	RD	NOWRT	NOVEC	LONG			

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

Phase	Page faults	CPU Time	Elapsed Time
Initialization	35	00:00:00.11	00:00:01.01
Command processing	145	00:00:00.47	00:00:04.27
Pass 1	68	00:00:00.44	00:00:02.24
Symbol table sort	0	00:00:00.00	00:00:00.00
Pass 2	40	00:00:00.31	00:00:01.07
Symbol table output	2	00:00:00.02	00:00:00.11
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	294	00:00:01.37	00:00:08.72

The working set limit was 900 pages.  
 1523 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 !  
-----

Macro library name	Macros defined
----- _S255\$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\$:MTHIMAX0/OBJ=OBJ\$:MTHIMAX0 MSRCS:MTHIMAX0/UPDATE=(ENHS:MTHIMAX0)



