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MM      MM      TTTTTTTTTT  HH      HH      IIIIII      MM      MM      IIIIII      NN      NN      000000
MM      MM      TTTTTTTTTT  HH      HH      IIIIII      MM      MM      IIIIII      NN      NN      000000
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MMMM    MMMM      TT          HH      HH      II          MMMM  MMMM      II          NN      NN      00      00
MM      MM      TT          HH      HH      II          MM      MM      II          NNNN   NN      00      0000
MM      MM      TT          HH      HH      II          MM      MM      II          NNNN   NN      00      0000
MM      MM      TT          HHHHHHHHHH  II          MM      MM      II          NN      NN      00      00
MM      MM      TT          HHHHHHHHHH  II          MM      MM      II          NN      NN      00      00
MM      MM      TT          HH      HH      II          MM      MM      II          NN      NNNN  0000   00
MM      MM      TT          HH      HH      II          MM      MM      II          NN      NNNN  0000   00
MM      MM      TT          HH      HH      II          MM      MM      II          NN      NN      00      00
MM      MM      TT          HH      HH      IIIIII      MM      MM      IIIIII      NN      NN      000000
MM      MM      TT          HH      HH      IIIIII      MM      MM      IIIIII      NN      NN      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
LLLLLLLLLLLL IIIIII  SSSSSSSS
LLLLLLLLLLLL IIIIII  SSSSSSSS

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(2)	48	HISTORY	: Detailed Current Edit History
(3)	57	DECLARATIONS	
(4)	83	MTH\$IMINO, MTH\$AIMINO	

```
0000 1 .TITLE MTH$IMINO IMINO and AIMINO functions
0000 2 .IDENT /1-002/ ; File: MTHIMINO.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.
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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 :
```

MTHSIMINO
1-002

IMINO and AIMINO functions H 1 16-SEP-1984 01:43:35 VAX/VMS Macro V04-00 Page (2)
HISTORY ; Detailed Current Edit History 8-SEP-1984 11:26:14 [MTHRTL.SRC]MTHIMINO.MAR;1

0000 48 .SBTTL HISTORY ; Detailed Current Edit History
0000 49
0000 50
0000 51 ; Edit History for Version 0 of MTHIMINO
0000 52 :
0000 53 : 0-2 - Fix access viol. and increment 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:
00000000 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 MTH$IMINO, MTH$AIMINO
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 MTH$IMINO,      ^M<>
09 0000 10 0002 117     BSB     MINW          ; R0 = min arg
0000 118     RET
0000 119
0000 120     .ENTRY MTH$AIMINO,    ^M<>
50 04 10 0007 121     BSB     MINW          ; R0 = min arg
50 50 4D 0009 122     CVTWF   R0, R0      ; REAL*4 min arg
0000 123     RET
0000 124
0000 125     MINW:
51 6C 9A 000D 126     MOVZBL  (AP), R1          ; R1 = number of args
50 8C D5 0010 127     TSTL    (AP)+        ; AP -> first arg adr
50 9C B0 0012 128 1$:   MOVW    @(AP)+, R0      ; get trial min
50 08 11 0015 129     BRB     3$          ; check arg count
50 00 BC B1 0017 130 2$:   CMPW    @0(AP),R0      ; if this arg is less then trial min
50 F5 19 001B 131     BLSS   1$          ; then it becomes trial min
50 8C D5 001D 132     TSTL    (AP)+        ; else ignore it
50 F5 51 F5 001F 133 3$:   SOBGTR  R1, 2$          ; check arg count
0000 134     RSB
0000 135
0000 136
0000 137     .END

```

MTH\$IMINO
Symbol table

IMINO and AIMINO functions

K 1

16-SEP-1984 01:43:35
6-SEP-1984 11:26:14

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

Page 5
(4)

MINW	0000000D	R	01
MTH\$AIMINO	00000005	RG	01
MTH\$IMINO	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	00000023 (35.)	01 (1.)	PIC USR	CON	REL	LCL	SHR	EXE	RD	NOWRT	NOVEC	LONG		

! Performance indicators !

Phase	Page faults	CPU Time	Elapsed Time
Initialization	29	00:00:00.10	00:00:00.84
Command processing	119	00:00:00.48	00:00:02.66
Pass 1	67	00:00:00.39	00:00:01.80
Symbol table sort	0	00:00:00.00	00:00:00.00
Pass 2	37	00:00:00.32	00:00:01.04
Symbol table output	2	00:00:00.01	00:00:00.01
Psect synopsis output	2	00:00:00.02	00:00:00.11
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	258	00:00:01.32	00:00:06.46

The working set limit was 750 pages.
1479 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.
137 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
-----	-----
_\$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=LISS:MTHIMINO/OBJ=OBJ\$:MTHIMINO MSRCS:MTHIMINO/UPDATE=(ENHS:MTHIMINO)

MTHMIN0 LIS													
			MTHMIN0 LIS			MTHMSG LIS							
MTHMIN0 LIS					MTHMAX1 LIS								
	MTHJDMNT LIS					MTHMSGDEF LIS							
		MTHJHMNT LIS					MTHSGN LIS						
			MTHJMAX0 LIS			MTHMOD LIS							
								MTHSIGNAL LIS					MTHSORTR2 LIS
			MTHJINT LIS						MTHSINCO LIS			MTHSORT LIS	
MTHJINT LIS							MTHRANDOM LIS						
	MTHJIGNT LIS					MTHMINI LIS							
		MTHJISGN LIS						MTHSIGN LIS				MTHSINH LIS	