


```

MM      MM      TTTTTTTTTT  HH      HH      HH      HH      MM      MM      IIIIII  NN      NN      11
MM      MM      TTTTTTTTTT  HH      HH      HH      HH      MM      MM      IIIIII  NN      NN      11
MMMM    MMMM    TT          HH      HH      HH      HH      MMMM  MMMM    II      NN      NN      1111
MMMM    MMMM    TT          HH      HH      HH      HH      MMMM  MMMM    II      NN      NN      1111
MM      MM      TT          HH      HH      HH      HH      MM      MM      II      NNNN   NN      11
MM      MM      TT          HH      HH      HH      HH      MM      MM      II      NNNN   NN      11
MM      MM      TT          HHHHHHHHHH  HHHHHHHHHH  MM      MM      II      NN  NN  NN      11
MM      MM      TT          HHHHHHHHHH  HHHHHHHHHH  MM      MM      II      NN  NN  NN      11
MM      MM      TT          HH      HH      HH      HH      MM      MM      II      NN      NNNN   11
MM      MM      TT          HH      HH      HH      HH      MM      MM      II      NN      NNNN   11
MM      MM      TT          HH      HH      HH      HH      MM      MM      II      NN      NN      11
MM      MM      TT          HH      HH      HH      HH      MM      MM      II      NN      NN      11
MM      MM      TT          HH      HH      HH      HH      MM      MM      IIIIII  NN      NN      111111
MM      MM      TT          HH      HH      HH      HH      MM      MM      IIIIII  NN      NN      111111

```

```

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
LLLLLLLLLL  IIIIII  SSSSSSSS
LLLLLLLLLL  IIIIII  SSSSSSSS

```

```

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

```

(2) 52
(3) 63
(4) 94

HISTORY ; Detailed Current Edit History
DECLARATIONS
MTH\$HMIN1

```

0000 1      .TITLE MTH$HMIN1      HMIN1 function
0000 2      .IDENT /1-002/      ; File: MTHHMIN1.MAR  EDIT: JCW1002
0000 3
0000 4
0000 5      :-----*
0000 6      : *
0000 7      : *  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
0000 8      : *  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
0000 9      : *  ALL RIGHTS RESERVED.
0000 10     : *
0000 11     : *  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
0000 12     : *  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
0000 13     : *  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
0000 14     : *  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
0000 15     : *  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
0000 16     : *  TRANSFERRED.
0000 17     : *
0000 18     : *  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
0000 19     : *  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
0000 20     : *  CORPORATION.
0000 21     : *
0000 22     : *  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
0000 23     : *  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
0000 24     : *
0000 25     : *
0000 26     :-----*
0000 27
0000 28
0000 29     FACILITY: MATH LIBRARY
0000 30     ++
0000 31     ABSTRACT:
0000 32     This module contains routine MTH$HMIN1:
0000 33     Return the smaller of n H floating-point
0000 34     numbers.
0000 35
0000 36
0000 37
0000 38     --
0000 39
0000 40     VERSION: 1
0000 41
0000 42     HISTORY:
0000 43
0000 44     AUTHOR:
0000 45     Steven B. Lionel, 18-Jan-79: Version 1
0000 46
0000 47     MODIFIED BY:
0000 48
0000 49     Jeffrey C. Wiener, 14-May-84: Version 1
0000 50

```

MTHSHMIN1
1-002

```
0000 52      .SBTTL HISTORY      ; Detailed Current Edit History
0000 53
0000 54
0000 55 : Edit History for Version 1 of MTHSHMIN1
0000 56 :
0000 57 : 1-001 - Original. SBL 18-Jan-79
0000 58 : 1-002 - The code as written did not work. Corrections were made to one AP
0000 59 : reference, all G_floating references were replaced by H_floating
0000 60 : references, BLSS was changed to BLEQ and some comments were fixed.
0000 61 : JCW 14-May-1984
```

MTH
Sym
DIV
DIV
DON
ERR
EXP
HIG
IG
MTH
MTH
MTH
MTH
NO
OVE
RET
SFS
SFS
STE
STE
STE
STE
SUB
TES
TWO
UND

PSE

SAB
_MT

Pha

Ini
Com
Pas
Sym
Pas
Sym
Pse
Crc
Ass

The
710
The
351
8 p

```
0000 63      .SBTTL DECLARATIONS
0000 64
0000 65 :
0000 66 : INCLUDE FILES:
0000 67 :     NONE
0000 68 :
0000 69 :
0000 70 :
0000 71 : EXTERNAL SYMBOLS:
0000 72 :     NONE
0000 73 :
0000 74 :
0000 75 :
0000 76 : MACROS:
0000 77 :     NONE
0000 78 :
0000 79 :
0000 80 :
0000 81 : PSECT DECLARATIONS:
0000 82 :     .PSECT _MTH$CODE          PIC, SHR, LONG, EXE, NOWRT
0000 83 :
0000 84 :
0000 85 : EQUATED SYMBOLS:
0000 86 :     NONE
0000 87 :
0000 88 :
0000 89 :
0000 90 : OWN STORAGE:
0000 91 :     NONE
0000 92 :
```

Mac
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```

0000 94      .SBTTL MTH$HMIN1
0000 95
0000 96      :++
0000 97      : FUNCTIONAL DESCRIPTION:
0000 98      : Return the minimum of n arguments, n is greater than or equal
0000 99      : to 1.
0000 100     :
0000 101     : Because the result can not be represented in 64 bits, the
0000 102     : minimum of arguments 2 through n are returned as argument 1.
0000 103     :
0000 104     : CALLING SEQUENCE:
0000 105     : CALL MTH$HMIN1 (minimum.wh.r, {arg.rh.r})
0000 106     :
0000 107     :
0000 108     :
0000 109     : INPUT PARAMETERS:
0000 110     : The n parameters are H floating point values
0000 111     : and are call-by-reference.
0000 112     :
0000 113     :
0000 114     : IMPLICIT INPUTS:
0000 115     : NONE
0000 116     :
0000 117     : OUTPUT PARAMETERS:
0000 118     : The H floating output parameter is returned by reference.
0000 119     :
0000 120     : IMPLICIT OUTPUTS:
0000 121     : NONE
0000 122     :
0000 123     : COMPLETION CODES:
0000 124     : NONE
0000 125     :
0000 126     : SIDE EFFECTS:
0000 127     : Reserved Operand exception can occur.
0000 128     :
0000 129     :
0000 130     :--
0000 131
51  6C  9A  0000 132     .ENTRY MTH$HMIN1,      ^M<>
51  51  07  0002 133     MOVZBL (AP), R1      : R1 = arg count
8C  D5  0007 134     DECL R1           : R1 = the actual number of parameters
50  6C  D0  0009 135     TSTL (AP)+        : bump AP by 4
8C  D5  000C 136     MOVL (AP), R0     : save result address
60  9C  70FD 000E 137     TSTL (AP)+        : AP -> first arg
09  11  0012 138 1$:  MOVH @ (AP)+, (R0) : (R0) = trial min
60  00  BC  71FD 0014 139     BRB 3$           : check arg count
F3  15  0019 140 2$:  CMPH @ (AP), (R0) : if this arg is less than trial min
8C  D5  001B 141     BLEQ 1$          : then it becomes new trial min
F4  51  F5  001D 142     TSTL (AP)+        : else ignore it
04  0020 143 3$:  SOBGTR R1, 2$ : return if arg count exhausted
0021 144     RET           : with min in first arg
0021 145
0021 146
0021 147     .END

```

MTHSHMIN1
Symbol table

HMIN1 function

K 4

16-SEP-1984 01:37:37 VAX/VMS Macro V04-00
6-SEP-1984 11:25:11 [MTHRTL.SRC]MTHHMIN1.MAR;1

Page 5
(4)

MTH
Tab

MTHSHMIN1 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
_MTHSCODE	00000021 (33.)	01 (1.)	PIC USR CON REL LCL SHR EXE RD NOWRT NOVEC LONG

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

Phase	Page faults	CPU Time	Elapsed Time
Initialization	32	00:00:00.11	00:00:00.77
Command processing	103	00:00:00.50	00:00:03.18
Pass 1	66	00:00:00.45	00:00:02.25
Symbol table sort	0	00:00:00.00	00:00:00.00
Pass 2	40	00:00:00.34	00:00:01.61
Symbol table output	1	00:00:00.01	00:00:00.01
Psect synopsis output	2	00:00:00.02	00:00:00.01
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	246	00:00:01.43	00:00:07.84

The working set limit was 750 pages.
1513 bytes (3 pages) of virtual memory were used to buffer the intermediate code.
There were 10 pages of symbol table space allocated to hold 1 non-local and 3 local symbols.
147 source lines were read in Pass 1, producing 10 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=LIS\$:MTHHMIN1/OBJ=OBJ\$:MTHHMIN1 MSRC\$:MTHHMIN1/UPDATE=(ENH\$:MTHHMIN1)

A grid of 100 small panels, each containing a different type of data visualization or report. The panels are arranged in a 10x10 grid. Each panel has a title in the top left corner, such as 'MTHHINT LIS', 'MTHHINT LIS', 'MTHHINT LIS', 'MTHHINT LIS', 'MTHHINT LIS', 'MTHHINT LIS', 'MTHHINT LIS', 'MTHHINT LIS', 'MTHHINT LIS', 'MTHHINT LIS'. The content of the panels varies, including text-based data, tables, and graphical representations like bar charts and histograms. The overall appearance is that of a technical manual or a collection of sample reports for a specific software package.