



```

MM      MM      TTTTTTTTTT  HH      HH      HH      HH      SSSSSSSS  IIIIII  GGGGGGGG  NN      NN
MM      MM      TTTTTTTTTT  HH      HH      HH      HH      SSSSSSSS  IIIIII  GGGGGGGG  NN      NN
MMMM    MMMM      TT          HH      HH      HH      HH      SS          II      GG          NN      NN
MMMM    MMMM      TT          HH      HH      HH      HH      SS          II      GG          NN      NN
MM      MM      MM      TT      HH      HH      HH      HH      SS          II      GG          NNNN    NN
MM      MM      MM      TT      HH      HH      HH      HH      SS          II      GG          NNNN    NN
MM      MM      MM      TT      HHHHHHHHHH  HHHHHHHHHH  SSSSSS    II      GG          NN      NN
MM      MM      MM      TT      HHHHHHHHHH  HHHHHHHHHH  SSSSSS    II      GG          NN      NN
MM      MM      MM      TT      HH      HH      HH      HH      SS          II      GG      GGGGGG  NN      NNNN
MM      MM      MM      TT      HH      HH      HH      HH      SS          II      GG      GGGGGG  NN      NNNN
MM      MM      MM      TT      HH      HH      HH      HH      SS          II      GG          NN      NN      ....
MM      MM      MM      TT      HH      HH      HH      HH      SSSSSSSS  IIIIII  GGGGGG    NN      NN      ....
MM      MM      MM      TT      HH      HH      HH      HH      SSSSSSSS  IIIIII  GGGGGG    NN      NN      ....

```

```

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

```

MT  
2-  
6C1  
90E  
81A  
81A  
01E  
00  
00  
01E  
00  
00  
41A  
80  
00  
01E  
80  
40

(2) 50  
(3) 61  
(4) 92

HISTORY ; Detailed Current Edit History  
DECLARATIONS  
MTH\$HSIGN - H Transfer of Sign

4D  
3A  
8E  
72  
36  
70  
C9  
3F  
AC  
68  
55  
00  
00

CB  
E5  
BB  
7F  
36  
59  
F3  
B5  
A0  
DA  
6A  
55  
37  
3C

D4  
22  
84  
9E  
FB  
80  
FC  
87  
12  
FC  
9E  
11  
55

```

0000 1 .TITLE MTH$HSIGN ; H Floating Transfer of Sign
0000 2 .IDENT /1-002/ ; File: MTH$HSIGN.MAR EDIT: RNH1002
0000 3
0000 4
0000 5 :*****
0000 6 :*
0000 7 :* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY *
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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$HSIGN:
0000 33 Return arg1 with sign of arg2.
0000 34
0000 35
0000 36 --
0000 37
0000 38 VERSION: 1
0000 39
0000 40 HISTORY:
0000 41
0000 42 AUTHOR:
0000 43 Steven B. Lionel, 26-Jan-79: Version 1
0000 44
0000 45 MODIFIED BY:
0000 46
0000 47
0000 48

```

MT  
2-  
00

69  
E3  
07  
EC  
A5  
C5  
AD  
EC  
A7  
13  
AE  
01  
00

R

4A  
E4  
A4  
B2  
BA  
BF  
8B  
12  
AE  
08  
3C

50  
F5  
F4  
CF  
08  
63  
CE  
1E  
1F  
1D  
64  
07

```
0000 50 .SBTTL HISTORY ; Detailed Current Edit History
0000 51
0000 52
0000 53 ; Edit History for Version 1 of MTH$HSIGN
0000 54 :
0000 55 : 1-001 - Adapted from MTH$DSIGN version 1-001. SBL 26-Jan-79
0000 56 : 1-002 - Eliminated reserved operand fault by including a special
0000 57 : logic branch for input arguments with value 0.
0000 58 : RNH 11-FEB-81
0000 59 :
```

MTI  
2-

551  
1B1

ED  
08  
A9  
4F  
89  
EF  
15  
D0  
F1  
D4  
FB  
CF  
00

9C  
BA  
47  
90  
42  
F0  
AD  
8C  
8E  
BB  
D3  
FB  
7B  
3C

33  
D3  
23  
D1  
08  
20  
F9  
D0  
9E  
65  
89

```
0000 61 .SBTTL DECLARATIONS
0000 62
0000 63 :
0000 64 : INCLUDE FILES:
0000 65 : NONE
0000 66 :
0000 67 :
0000 68 :
0000 69 : EXTERNAL SYMBOLS:
0000 70 : NONE
0000 71 :
0000 72 :
0000 73 :
0000 74 : MACROS:
0000 75 : NONE
0000 76 :
0000 77 :
0000 78 :
0000 79 : PSECT DECLARATIONS:
0000 80 : .PSECT _MTH$CODE PIC, SHR, LONG, EXE, NOWRT
0000 81 :
0000 82 :
0000 83 : EQUATED SYMBOLS:
0000 84 : NONE
0000 85 :
0000 86 :
0000 87 :
0000 88 : OWN STORAGE:
0000 89 : NONE
0000 90 :
```

```

0000 92      .SBTTL  MTH$HSIGN - H Transfer of Sign
0000 93
0000 94      :++
0000 95      : FUNCTIONAL DESCRIPTION:
0000 96      :   Return the value of arg1 with the sign of arg2.
0000 97      :
0000 98
0000 99      : CALLING SEQUENCE:
0000 100     :
0000 101     :   CALL MTH$HSIGN (transfer_of_sign.wh.r, arg1.rh.r, arg2.rh.r)
0000 102     :
0000 103     :
0000 104     : INPUT PARAMETERS:
0000 105     :   The two input parameters are H floating-point
0000 106     :   values and are call-by-reference.
0000 107     :
0000 108
0000 109     : IMPLICIT INPUTS:
0000 110     :   NONE
0000 111     :
0000 112     : OUTPUT PARAMETERS:
0000 113     :   Because the H result is greater than 64 bits, it is returned
0000 114     :   as the first argument by reference, in accordance with
0000 115     :   system standards.
0000 116     :
0000 117     : IMPLICIT OUTPUTS:
0000 118     :   NONE
0000 119     :
0000 120     : COMPLETION CODES:
0000 121     :   NONE
0000 122     :
0000 123     : SIDE EFFECTS:
0000 124     :   NONE
0000 125     :
0000 126     :
0000 127     :--
0000 128
0000 129
0000 130
0000 131     .ENTRY  MTH$HSIGN,      ^M<>
0000 132
0000 133     MOVH   @8(AP), @4(AP)      ; Result = arg1
0000 134     BEQL   RETURN          ; Arg = 0, do not transfer sign
0000 135     EXTZV  #15, #1, @12(AP), R0 ; Get sign
0000 136     INSV   R0, #15, #1, @4(AP) ; Transfer
0000 137     RETURN: RET
0000 138
0000 139
0000 140     .END

```

```

0000 0000
04 BC 08 BC 70FD
50 0C BC 01 0F EF
04 BC 01 0F 50 F0
04

```

MTH\$SIGN  
Symbol table

: H Floating Transfer of Sign

J 6

16-SEP-1984 01:38:48  
6-SEP-1984 11:25:18

VAX/VMS Macro V04-00  
[MTHRTL.SRC]MTH\$SIGN.MAR;1

Page 5  
(4)

MT  
2-

MTH\$SIGN 00000000 RG 01  
RETURN 00000016 R 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	00000017 ( 23.)	01 ( 1.)	PIC USR CON REL LCL SHR EXE RD NOWRT NOVEC LONG

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

Phase	Page faults	CPU Time	Elapsed Time
Initialization	36	00:00:00.07	00:00:00.70
Command processing	126	00:00:00.52	00:00:03.23
Pass 1	67	00:00:00.41	00:00:03.91
Symbol table sort	0	00:00:00.00	00:00:00.00
Pass 2	40	00:00:00.34	00:00:02.30
Symbol table output	2	00:00:00.01	00:00:00.01
Psect synopsis output	2	00:00:00.02	00:00:00.14
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	275	00:00:01.38	00:00:10.51

The working set limit was 900 pages.  
1398 bytes (3 pages) of virtual memory were used to buffer the intermediate code.  
There were 10 pages of symbol table space allocated to hold 2 non-local and 0 local symbols.  
140 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\$:MTH\$SIGN/OBJ=OBJ\$:MTH\$SIGN MSRC\$:MTH\$SIGN/UPDATE=(ENH\$:MTH\$SIGN)

