


```

MM      MM      TTTTTTTTTT  HH      HH      JJ      IIIIII  SSSSSSSS  IIIIII  GGGGGGGG  NN      NN
MM      MM      TTTTTTTTTT  HH      HH      JJ      IIIIII  SSSSSSSS  IIIIII  GGGGGGGG  NN      NN
MMMM    MMMM    TT          HH      HH      JJ      II       SS        II       GG        NN      NN
MMMM    MMMM    TT          HH      HH      JJ      II       SS        II       GG        NN      NN
MM      MM      TT          HH      HH      JJ      II       SS        II       GG        NN      NN
MM      MM      TT          HH      HH      JJ      II       SS        II       GG        NN      NN
MM      MM      TT          HHHHHHHHHH  JJ      JJ      II       SSSSSS  II       GG        NN      NN
MM      MM      TT          HHHHHHHHHH  JJ      JJ      II       SSSSSS  II       GG        NN      NN
MM      MM      TT          HH      HH      JJ      II       SS        II       GG      GGGGGG  NN      NN
MM      MM      TT          HH      HH      JJ      II       SS        II       GG      GGGGGG  NN      NN
MM      MM      TT          HH      HH      JJ      II       SS        II       GG      GG        NN      NN
MM      MM      TT          HH      HH      JJ      II       SS        II       GG      GG        NN      NN
MM      MM      TT          HH      HH      JJ      IIIIII  SSSSSSSS  IIIIII  GGGGGG  NN      NN
MM      MM      TT          HH      HH      JJJJJJ  IIIIII  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      IIIIII  SSSSSSSS
LLLLLLLLLLLL IIIIII  SSSSSSSS
LLLLLLLLLLLL IIIIII  SSSSSSSS

```


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

MT
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```
0000 1 .TITLE MTHSJISIGN JISIGN function
0000 2 .IDENT /1-002/ ; File: MTHJISIGN.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 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, 14-JUL-77: Version 0
0000 42 :
0000 43 : MODIFIED BY:
0000 44 :
0000 45 :
0000 46 :
```


MTHSJISIGN
1-002

D 4

JISIGN function 16-SEP-1984 01:45:16 VAX/VMS Macro V04-00 Page 2
HISTORY ; Detailed Current Edit History 6-SEP-1984 11:26:28 [MTHRTL.SRC]MTHJISIGN.MAR;1 (2)

0000 48 .SBTTL HISTORY ; Detailed Current Edit History
0000 49
0000 50
0000 51 ; Edit History for Version 0 of MTHJISIGN
0000 52 :
0000 53 : 0-2 - Remove MTH\$FLAG_JACKET. TNH 5-July-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$JISIGN
0000 84
0000 85      :++
0000 86      : FUNCTIONAL DESCRIPTION:
0000 87      :
0000 88      :
0000 89      : CALLING SEQUENCE:
0000 90      :     NONE
0000 91      :
0000 92      :
0000 93      : INPUT PARAMETERS:
0000 94      :     NONE
0000 95      :
0000 96      : IMPLICIT INPUTS:
0000 97      :     NONE
0000 98      :
0000 99      : OUTPUT PARAMETERS:
0000 100     :     NONE
0000 101     :
0000 102     : IMPLICIT OUTPUTS:
0000 103     :     NONE
0000 104     :
0000 105     : COMPLETION CODES:
0000 106     :     NONE
0000 107     :
0000 108     : SIDE EFFECTS:
0000 109     :     NONE
0000 110     :
0000 111     :--
0000 112
0000 113
50 04 BC 0000 0000 114      .ENTRY MTH$JISIGN, ^M<>
09 09 19 0002 115      MOVL @4(AP), R0      ; R0 = arg1
0006 116      BLSS NEGARG      ; branch if negative arg1
0008 117
0008 118      ; arg1 is non-negative, look at sign of arg2
0008 119      :
08 BC 03 05 0008 120      TSTL @8(AP)
03 18 000B 121      BGEQ . EXIT      ; both args are positive, nothing to do
000D 122 NEGATE:
50 50 CE 000D 123      MNEGL R0, R0      ; negate arg1
0010 124 EXIT:
04 0010 125      RET
0011 126
0011 127      ; arg1 is negative, check sign of arg2
0011 128      :
0011 129 NEGARG:
08 BC 03 05 0011 130      TSTL @8(AP)
F7 18 0014 131      BGEQ NEGATE      ; if arg2 positive then negate arg1
04 0016 132      RET
0017 133
0017 134
0017 135      .END

```

MTH\$JISIGN
Symbol table

JISIGN function

G 4

16-SEP-1984 01:45:16
6-SEP-1984 11:26:28

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

Page 5
(4)

EXIT	00000010	R	01
MTH\$JISIGN	00000000	RG	01
NEGARG	00000011	R	01
NEGATE	0000000D	R	01

```

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

```

PSECT name	Allocation	PSECT No.	Attributes												
ABS	00000000 (0.)	00 (0.)	NOPICT 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	41	00:00:00.05	00:00:01.40
Command processing	115	00:00:00.48	00:00:03.83
Pass 1	67	00:00:00.36	00:00:01.76
Symbol table sort	0	00:00:00.00	00:00:00.00
Pass 2	37	00:00:00.32	00:00:01.23
Symbol table output	2	00:00:00.01	00:00:00.01
Psect synopsis output	2	00:00:00.02	00:00:00.08
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	266	00:00:01.24	00:00:08.32

The working set limit was 900 pages.
1328 bytes (3 pages) of virtual memory were used to buffer the intermediate code.
There were 10 pages of symbol table space allocated to hold 4 non-local and 0 local symbols.
135 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\$:MTHJISIGN/OBJ=OBJ\$:MTHJISIGN MSRC\$:MTHJISIGN/UPDATE=(ENH\$:MTHJISIGN)

[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]
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MTHMIN0 LIS	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	MTHMAX1 LIS	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]
[Screenshot]	MTHJDMNT LIS	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	MTHMSGDEF LIS	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]
[Screenshot]	[Screenshot]	MTHJHMNT LIS	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	MTHSGN LIS	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]
[Screenshot]	[Screenshot]	[Screenshot]	MTHJMAX0 LIS	[Screenshot]	[Screenshot]	MTHMOD LIS	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]
[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	MTHSIGNAL LIS	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	MTHSORTR2 LIS	[Screenshot]
[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]
[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	MTHJINT LIS	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	MTHSINCS LIS	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	MTHSORT LIS	[Screenshot]	[Screenshot]
MTHININT LIS	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	MTHRANDOM LIS	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]
[Screenshot]	MTHJIGNNT LIS	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	MTHMINI LIS	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]
[Screenshot]	[Screenshot]	MTHJISGN LIS	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	MTHSIGN LIS	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	[Screenshot]	MTHSINH LIS	[Screenshot]	[Screenshot]	[Screenshot]