


```
FFFFFFFFF    000000    RRRRRRRR    TTTTTTTTTT    IIIIII    MM    MM    EEEEEEEEEE
FFFFFFFFF    000000    RRRRRRRR    TTTTTTTTTT    IIIIII    MM    MM    EEEEEEEEEE
FF          00      00    RR      RR    TT          II    MMMM    MMMM    EE
FF          00      00    RR      RR    TT          II    MMMM    MMMM    EE
FF          00      00    RR      RR    TT          II    MM  MM  MM    EE
FF          00      00    RR      RR    TT          II    MM  MM  MM    EE
FFFFFFFFF    00      00    RRRRRRRR    TT          II    MM    MM    EEEEEEEEE
FFFFFFFFF    00      00    RRRRRRRR    TT          II    MM    MM    EEEEEEEEE
FF          00      00    RR  RR      TT          II    MM    MM    EE
FF          00      00    RR  RR      TT          II    MM    MM    EE
FF          00      00    RR      RR    TT          II    MM    MM    EE
FF          00      00    RR      RR    TT          II    MM    MM    EE
FF          00      00    RR      RR    TT          II    MM    MM    EE
FF          000000    RR      RR    TT          IIIIII    MM    MM    EEEEEEEEEE
FF          000000    RR      RR    TT          IIIIII    MM    MM    EEEEEEEEEE
```

```
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
LLLLLLLLLLL IIIIII    SSSSSSSS
LLLLLLLLLLL IIIIII    SSSSSSSS
```

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FOR\$TIME
Table of contents

; return system time in 8-byte array^{K 2}

16-SEP-1984 00:02:46 VAX/VMS Macro V04-00

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**F

(2) 50
(3) 61
(4) 88

HISTORY ; Detailed Current Edit History
DECLARATIONS
FOR\$TIME - return system as an 8 byte string


```

0000 1      .TITLE  FOR$TIME      ; return system time in 8-byte array
0000 2      .IDENT  /1-002/      ; File: FORTIME.MAR
0000 3
0000 4
0000 5 :*****
0000 6 :*
0000 7 :*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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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: FORTRAN SUPPORT LIBRARY
0000 30 : ++
0000 31 : ABSTRACT:
0000 32
0000 33 :      Call system service $ASCTIM to return system time to user
0000 34 :      area.
0000 35
0000 36 : --
0000 37
0000 38 : VERSION: 0
0000 39
0000 40 : HISTORY:
0000 41
0000 42 : AUTHOR:
0000 43 :      Jonathan M. Taylor, 18-Aug-77: Version 0
0000 44
0000 45 : MODIFIED BY:
0000 46
0000 47
0000 48

```


FOR\$TIME
1-002

M 2
; return system time in 8-byte array 16-SEP-1984 00:02:46 VAX/VMS Macro V04-00
HISTORY ; Detailed Current Edit History 6-SEP-1984 11:00:35 [FORRTL.SRC]FORTIME.MAR;1

Page 2
(2)

```
0000 50 .SBTTL HISTORY ; Detailed Current Edit History
0000 51
0000 52
0000 53 ; Edit History for Version 0 of FOR$TIME
0000 54 ;
0000 55
0000 56 ; 0-3 - Remopve FOR$FLAG JACKET. TNH 11-July-78
0000 57 ; 0-4 - remove MTH$$JACKET HND references. TNH 26-July-78
0000 58 ; 1-001 - Update version number and copyright notice. JBS 16-NOV-78
0000 59 ; 1-002 - Add "_" to the PSECT directive. JBS 22-DEC-78
```

FOR
1-0

.....

```
0000 61 .SBTTL DECLARATIONS
0000 62
0000 63 :
0000 64 : INCLUDE FILES:
0000 65 : oerr.mar
0000 66 :
0000 67 :
0000 68 : EXTERNAL SYMBOLS:
0000 69 : .GLOBL SYSSASCTIM
0000 70 :
0000 71 :
0000 72 : MACROS:
0000 73 : NONE
0000 74 :
0000 75 :
0000 76 : PSECT DECLARATIONS:
00000000 77 : .PSECT _FOR$CODE PIC, SHR, LONG, EXE, NOWRT
0000 78 :
0000 79 :
0000 80 : EQUATED SYMBOLS:
0000 81 : NONE
0000 82 :
0000 83 :
0000 84 : OWN STORAGE:
0000 85 : NONE
0000 86
```

.....


```

0000      88      .SBTTL FOR$TIME - return system as an 8 byte string
0000      89
0000      90      :++
0000      91      : FUNCTIONAL DESCRIPTION:
0000      92      : Returns system time as an 8 byte string in the form
0000      93      : HH:MM:SS. Build a string descriptor on the stack that points
0000      94      : to the users area. Call system service $ASCTIM to do all
0000      95      : the work.
0000      96
0000      97      : CALLING SEQUENCE:
0000      98      : CALL FOR$TIME (8_byte_array.wb.ra)
0000      99
0000     100
0000     101      : INPUT PARAMETERS:
0000     102      : 8_byte_array the addr of 8 bytes into which the
0000     103      : string is to be placed
0000     104
0000     105      : IMPLICIT INPUTS:
0000     106      : NONE
0000     107
0000     108      : OUTPUT PARAMETERS:
0000     109      : NONE
0000     110
0000     111      : IMPLICIT OUTPUTS:
0000     112      : NONE
0000     113
0000     114      : COMPLETION CODES:
0000     115      : NONE
0000     116
0000     117      : SIDE EFFECTS:
0000     118      : NONE
0000     119
0000     120      :--
0000     121
0000     122
0000     123      .ENTRY FOR$TIME, ^M<>
7E      7E      04 AC D0 0002 124      MOVL 4(AP), -(SP) ; build a string descriptor
010E0008 8F D0 0006 125      MOVL #^X10E0008, -(SP) ; len=8
50      5E D0 000D 126      MOVL SP, R0 ; R0 -> string descriptor
0010 127      $ASCTIM_S ,(R0),, #1 ; get time info only
001F 128      RET ; return to user
0020 129
0020 130
0020 131      .END
    
```


FOR\$TIME 00000000 RG 01
 SYSSASCTIM ***** G 00

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

PSECT name	Allocation	PSECT No.	Attributes
ABS	00000000 (0.)	00 (0.)	NOPIC USR
_FOR\$CODE	00000020 (32.)	01 (1.)	PIC USR

CON ABS LCL NOSHR NOEXE NORD NOWRT NOVEC BYTE
 CON REL LCL SHR EXE RD NOWRT NOVEC LONG

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

Phase	Page faults	CPU Time	Elapsed Time
Initialization	31	00:00:00.09	00:00:00.92
Command processing	120	00:00:00.48	00:00:02.95
Pass 1	97	00:00:00.52	00:00:02.49
Symbol table sort	0	00:00:00.00	00:00:00.00
Pass 2	38	00:00:00.32	00:00:01.35
Symbol table output	2	00:00:00.01	00:00:00.01
Psect synopsis output	2	00:00:00.01	00:00:00.01
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	292	00:00:01.44	00:00:07.74

The working set limit was 900 pages.
 1591 bytes (4 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.
 131 source lines were read in Pass 1, producing 11 object records in Pass 2.
 2 pages of virtual memory were used to define 2 macros.

+-----+
 ! Macro library statistics !
 +-----+

Macro library name	Macros defined
_\$255\$DUA28:[SYSLIB]STARLET.MLB;2	2

15 GETS were required to define 2 macros.

There were no errors, warnings or information messages.

MACRO/ENABLE=SUPPRESSION/DISABLE=(GLOBAL,TRACEBACK)/LIS=LIS\$:FORTIME/OBJ=OBJ\$:FORTIME MSRC\$:FORTIME/UPDATE=(ENH\$:FORTIME)

0184 AH-BT13A-SE
VAX/VMS V4.0

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A large grid of 100 small, dimly lit computer terminal screens. Each screen displays various data, including text-based reports, tables, and some graphical elements like bar charts. The text on the screens is mostly illegible due to low contrast and resolution, but some titles are visible, such as 'FORSTOP LIS', 'FORLDFR LIS', 'FORTIMEDS LIS', 'FORLDFW LIS', 'FORLDFRN LIS', 'FORLDFRU LIS', and 'FORTIME LIS'. The overall appearance is that of a multi-user computer environment from the late 1970s or early 1980s.