


```
LL      IIIIII  BBBB BBBB  HH      HH  000000  UU      UU  RRRRRRRR
LL      IIIIII  BBBB BBBB  HH      HH  000000  UU      UU  RRRRRRRR
LL      II      BB      BB  HH      HH  00      00  UU      UU  RR      RR
LL      II      BB      BB  HH      HH  00      00  UU      UU  RR      RR
LL      II      BB      BB  HH      HH  00      00  UU      UU  RR      RR
LL      II      BB      BB  HH      HH  00      00  UU      UU  RR      RR
LL      II      BBBB BBBB  HHHHHHHH  UU      UU  RRRRRRRR
LL      II      BBBB BBBB  HHHHHHHH  UU      UU  RRRRRRRR
LL      II      BB      BB  HH      HH  00      00  UU      UU  RR      RR
LL      II      BB      BB  HH      HH  00      00  UU      UU  RR      RR
LL      II      BB      BB  HH      HH  00      00  UU      UU  RR      RR
LL      II      BB      BB  HH      HH  00      00  UU      UU  RR      RR
LLLLLLLL  IIIIII  BBBB BBBB  HH      HH  000000  UUUUUUUUU  RR      RR
LLLLLLLL  IIIIII  BBBB BBBB  HH      HH  000000  UUUUUUUUU  RR      RR
```

```
....
....
....
```

```
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
LLLLLLLL  IIIIII  SSSSSSSS
LLLLLLLL  IIIIII  SSSSSSSS
```

.....

(2) 44
(3) 50
(4) 75

HISTORY ; Detailed Current Edit History
DECLARATIONS
LIB\$HOUR_OF_DAY -

.....

```

0000 1 .TITLE LIB$HOUR_OF_DAY ; Find numeric hour of day
0000 2 .IDENT 'V04-000'
0000 3
0000 4 *****
0000 5 *
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0000 23 *
0000 24 *
0000 25 *****
0000 26
0000 27
0000 28 FACILITY: Language-independent support library
0000 29 ++
0000 30 ABSTRACT:
0000 31
0000 32
0000 33 --
0000 34
0000 35 VERSION: 1
0000 36
0000 37 HISTORY:
0000 38
0000 39 AUTHOR:
0000 40
0000 41 Herb Jacobs November 1981
0000 42

```

LIB\$HOUR_OF_DAY
V04-000

H 12
; Find numeric hour of day
HISTORY ; Detailed Current Edit History

16-SEP-1984 02:05:38 VAX/VMS Macro V04-00
5-SEP-1984 01:46:06 [LOGIN.SRC]LIBHOUR.MAR;1

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(2)

0000 44 .SBTTL HISTORY ; Detailed Current Edit History
0000 45
0000 46 : EDIT HISTORY:
0000 47 :
0000 48 : 1-001 -

LOG
V04

.....


```
0000 50      .SBTTL  DECLARATIONS
0000 51
0000 52  ::
0000 53  :: INCLUDE FILES:
0000 54  ::
0000 55  ::
0000 56  ::
0000 57  :: EXTERNAL SYMBOLS:
0000 58  ::
0000 59  ::
0000 60  ::
0000 61  :: MACROS:
0000 62  ::
0000 63  ::
0000 64  ::
0000 65  :: PSECT DECLARATIONS:
0000 66  ::
0000 67  ::
00000000 68      .PSECT  _LIB$CODE          PIC, SHR, LONG, EXE, NOWRT
0000 69  ::
0000 70  ::
0000 71  :: EQUATED SYMBOLS:
0000 72  ::
0000 73  ::
```

.....

```

0000 75      .SBTTL LIB$HOUR_OF_DAY -
0000 76
0000 77      :++
0000 78      : FUNCTIONAL DESCRIPTION:
0000 79      :
0000 80      : This routine returns the numeric hour of the day for an input time
0000 81      : value. If the input value is omitted, the current hour of the day
0000 82      : at this time is returned. Midnite is considered 0, highest hour is
0000 83      : 23.
0000 84
0000 85      : CALLING SEQUENCE:
0000 86
0000 87      :     ret = LIB$HOUR_OF_DAY ( time_64_bit_Q, output_hour_L)
0000 88
0000 89      : INPUT PARAMETERS:
0000 90
0000 91      :     time_64_bit_Q - Address of a quadword representing time or 0
0000 92
0000 93      : IMPLICIT INPUTS:
0000 94
0000 95      :     If time_64_bit_Q is 0, then the current system time is used.
0000 96
0000 97      : OUTPUT PARAMETERS:
0000 98
0000 99      :     output_hour_L - Address of a longword to recieve the hour
0000 100
0000 101     : IMPLICIT OUTPUTS:
0000 102
0000 103     :     NONE
0000 104
0000 105     : COMPLETION CODES:
0000 106
0000 107     :     SSS_NORMAL      - success
0000 108
0000 109     : SIDE EFFECTS:
0000 110
0000 111     :     NONE
0000 112
0000 113     :--
0000 114     .entry -
0000 115 lib$hour_of_day, ^M<>
50 00000000'8F 0000 0002 116      movl   #lib$_invarg,r0 ; assume error
      6C 02 91 0009 117      cmpb   #2,(ap) ; are there at least 2 arguments
      36 1A 000C 118      bgtru  100$ ; branch if not
51 04 AC D0 000E 119      movl   4(ap),r1 ; get address of quadword time
      0F 12 0012 120      bneq  20$ ; branch if specified
51 7E 7E 0014 121      movaq  -(sp),r1 ; area to recieve time in, r1 addr of area
      0017 122      $gettim_s(r1) ; get current time
      21 50 E9 0020 123      blbc  r0,100$ ; branch if error
51 50 50 23C34600 8F 7B 0026 124 20$: movq   (r1),r0 ; get the time
      51 D4 002F 125      ediv  #60*10*1000*1000,r0,r0,r1 ; get the time in minutes
51 50 50 51 7B 0031 126      clrl  r1 ; time in minutes from 1858 is only 32 bits
      51 D4 0036 127      ediv  #60,r0,r0,r1 ; time in hours into r0
51 50 50 18 7B 0038 128      clrl  r1 ; again only 32 bits
      08 BC 51 D0 003D 129      ediv  #24,r0,r0,r1 ; r0 number of days, r1 hour of day
      50 01 D0 0041 130      movl  r1,@8(ap) ; store the hour number
      50 01 D0 0041 131      movl  #1,r0 ; set success

```


LIB\$HOUR_OF_DAY
V04-000

; Find numeric hour of day
LIB\$HOUR_OF_DAY -

K 12

16-SEP-1984 02:05:38 VAX/VMS Macro V04-00
5-SEP-1984 01:46:06 [LOGIN.SRC]LIB\$HOUR.MAR;1

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(4)

04 0044 132 100\$: ret
0045 133
0045 134 .end

; exit, clean stack if needed

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V04

LIB\$HOUR_OF_DAY
Symbol table

; Find numeric hour of day

L 12

16-SEP-1984 02:05:38
5-SEP-1984 01:46:06

VAX/VMS Macro V04-00
[LOGIN.SRC]LIBHOUR.MAR;1

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LIB\$HOUR_OF_DAY 00000000 RG 01
LIB\$ INVARG ***** X 01
SYSSGETTIM ***** GX 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		
_LIB\$CODE	00000045 (69.)	01 (1.)	PIC	USR	CON	REL	LCL	SHR	EXE	RD	NOWRT	NOVEC	LONG		

! Performance indicators !

Phase	Page faults	CPU Time	Elapsed Time
Initialization	29	00:00:00.05	00:00:00.77
Command processing	107	00:00:00.42	00:00:02.86
Pass 1	113	00:00:00.36	00:00:02.86
Symbol table sort	0	00:00:00.00	00:00:00.00
Pass 2	40	00:00:00.20	00:00:01.71
Symbol table output	1	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	294	00:00:01.05	00:00:08.22

The working set limit was 1050 pages.
1797 bytes (4 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 2 local symbols.
134 source lines were read in Pass 1, producing 14 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:[LOGIN.OBJ]LOGIN.MLB;1	0
-\$255\$DUA28:[SYS.OBJ]LIB.MLB;1	0
-\$255\$DUA28:[SYSLIB]STARLET.MLB;2	2
TOTALS (all libraries)	2

12 GETS were required to define 2 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS\$:LIBHOUR/OBJ=OBJ\$:LIBHOUR MSRC\$:LIBHOUR/UPDATE=(ENH\$:LIBHOUR)+EXECMLS/LIB+LIB\$:LOGIN/LIB

LOG
V04

