


```

CCCCCCCC  HH      HH  KK      KK      SSSSSSSS  MM      MM      222222
CCCCCCCC  HH      HH  KK      KK      SSSSSSSS  MM      MM      222222
CC        HH      HH  KK      KK      SS        MMMM  MMMM  22      22
CC        HH      HH  KK      KK      SS        MMMM  MMMM  22      22
CC        HH      HH  KK      KK      SS        MM   MM   MM      22
CC        HH      HH  KK      KK      SS        MM   MM   MM      22
CC        HHHHHHHHHH  KKKKKK  SSSSSS  MM      MM      22
CC        HHHHHHHHHH  KKKKKK  SSSSSS  MM      MM      22
CC        HH      HH  KK      KK      SS        MM      MM      22
CC        HH      HH  KK      KK      SS        MM      MM      22
CC        HH      HH  KK      KK      SS        MM      MM      22
CC        HH      HH  KK      KK      SS        MM      MM      22
CCCCCCCC  HH      HH  KK      KK      SSSSSSSS  MM      MM      2222222222
CCCCCCCC  HH      HH  KK      KK      SSSSSSSS  MM      MM      2222222222

```

```

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

```

```

1 0001 0 MODULE CHKSM2 (
2 0002 0     LANGUAGE (BLISS32),
3 0003 0     IDENT = 'V04-000'
4 0004 0 ) =
5 0005 1 BEGIN
6 0006 1
7 0007 1
8 0008 1 *****
9 0009 1 *
10 0010 1 *  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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26 0026 1 *  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
27 0027 1 *
28 0028 1 *
29 0029 1 *****
30 0030 1
31 0031 1 ++
32 0032 1
33 0033 1 FACILITY: MOUNT Utility Structure Levels 1 & 2
34 0034 1
35 0035 1 ABSTRACT:
36 0036 1
37 0037 1     This routine computes the block checksum over the indicated
38 0038 1     byte count.
39 0039 1
40 0040 1 ENVIRONMENT:
41 0041 1
42 0042 1     STARLET operating system, including privileged system services
43 0043 1     and internal exec routines.
44 0044 1
45 0045 1 --
46 0046 1
47 0047 1
48 0048 1 AUTHOR: Andrew C. Goldstein, CREATION DATE: 24-Nov-1977 14:58
49 0049 1
50 0050 1 MODIFIED BY:
51 0051 1
52 0052 1     V03-001 HH0041     Hai Huang     24-Jul-1984
53 0053 1     Remove REQUIRE 'LIBD$: [VMSLIB.OBJ]MOUNTMSG.B32'.
54 0054 1
55 0055 1     V02-000 ACG0167     Andrew C. Goldstein, 18-Apr-1980 13:38
56 0056 1     Previous revision history moved to MOUNT.REV
57 0057 1 ++

```



```

63 0593 1 GLOBAL ROUTINE CHECKSUM2 (BUFFER, COUNT) =
64 0594 1
65 0595 1 |++
66 0596 1
67 0597 1 FUNCTIONAL DESCRIPTION:
68 0598 1
69 0599 1 This routine computes the additive block checksum over the indicated
70 0600 1 count. It stores the checksum at the given byte offset and returns
71 0601 1 a match or mismatch status.
72 0602 1
73 0603 1
74 0604 1 CALLING SEQUENCE:
75 0605 1 CHECKSUM (ARG1, ARG2)
76 0606 1
77 0607 1 INPUT PARAMETERS:
78 0608 1 ARG1: address of block to checksum
79 0609 1 ARG2: byte count of block
80 0610 1
81 0611 1 IMPLICIT INPUTS:
82 0612 1 NONE
83 0613 1
84 0614 1 OUTPUT PARAMETERS:
85 0615 1 NONE
86 0616 1
87 0617 1 IMPLICIT OUTPUTS:
88 0618 1 NONE
89 0619 1
90 0620 1 ROUTINE VALUE:
91 0621 1 1 if checksum is correct
92 0622 1 0 if not
93 0623 1
94 0624 1 SIDE EFFECTS:
95 0625 1 NONE
96 0626 1
97 0627 1 |--
98 0628 1
99 0629 2 BEGIN
100 0630 2
101 0631 2 MAP
102 0632 2 BUFFER : REF VECTOR [,WORD];
103 0633 2
104 0634 2 LOCAL
105 0635 2 SUM : WORD, ! running checksum
106 0636 2 STATUS; ! return status
107 0637 2
108 0638 2
109 0639 2 SUM = 0;
110 0640 2 INCR J FROM 0 TO .COUNT/2-1 DO
111 0641 2 SUM = .SUM + .BUFFER[J];
112 0642 2
113 0643 2 STATUS = .SUM EQL .BUFFER[.COUNT/2];
114 0644 2 BUFFER[.COUNT/2] = .SUM;
115 0645 2 RETURN .STATUS;
116 0646 2
117 0647 1 END; ! end of routine CHECKSUM2

```

.TITLE CHKSM2
.IDENT \V04-000\

.PSECT \$CODE\$,NOWRT,2

			0004 00000		.ENTRY CHECKSUM2, Save R2	: 0593
			52 B4 00002		CLRW SUM	: 0639
51	08	AC	02 C7 00004		DIVL3 #2, COUNT, R1	: 0640
		50	01 CE 00009		MNEGL #1, J	: 0641
			05 11 0000C		BRB 2\$	
		52	04 BC40 A0 0000E 1\$:		ADDW2 @BUFFER[J], SUM	
F7		50	51 F2 00013 2\$:		AOBLSS R1, J, 1\$	
			50 D4 00017		CLRL R0	: 0643
	04	BC41	52 B1 00019		CMPW SUM, @BUFFER[R1]	
			02 12 0001E		BNEQ 3\$	
			50 D6 00020		INCL R0	
	04	BC41	52 B0 00022 3\$:		MOVW SUM, @BUFFER[R1]	: 0644
			04 00027		RET	: 0647

: Routine Size: 40 bytes, Routine Base: \$CODE\$ + 0000

```

: 118      0648 1
: 119      0649 1 END
: 120      0650 0 ELUDOM

```

PSECT SUMMARY

Name	Bytes	Attributes
\$CODE\$	40	NOVEC,NOWRT, RD, EXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2)

Library Statistics

File	Total	Symbols Loaded	Percent	Pages Mapped	Processing Time
_S255\$DUA28:[SYSLIB]LIB.L32;1	18619	8	0	1000	00:01.9

COMMAND QUALIFIERS

CHKSM2
V04-000

B 4
16-Sep-1984 01:12:45
14-Sep-1984 12:45:16

VAX-11 Bliss-32 V4.0-742
DISK\$VMSMASTER:[MOUNT.SRC]CHKSM2.B32;1 Page 5 (2)

: BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LIS\$:CHKSM2/OBJ=OBJ\$:CHKSM2 MSRC\$:CHKSM2/UPDATE=(ENH\$:CHKSM2)

: Size: 40 code + 0 data bytes
: Run Time: 00:09.3
: Elapsed Time: 00:22.4
: Lines/CPU Min: 4207
: Lexemes/CPU-Min: 38627
: Memory Used: 81 pages
: Compilation Complete

CL
VC

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