



**SDM10**

**SOFTWARE VERIFICATION REPORT SUMMARY**

**CENTER FOR SPACE RESEARCH  
MASSACHUSETTS INSTITUTE OF TECHNOLOGY**

Title: **ACIS SW FEP Memory Verification Report**

Data Base Part Number:	36-57302.02	Date:	May 5th, 1997
Procedure Number:	36-57301.02	Procedure Name:	MemFep
Report Number:	36-57303.02	Report/Script File Name:	MemFep-2
Number of sub reports	Passed	1	
Number of sub reports	Failed	0	

Comments:

Test Deviations:

Table 1 in Procedure 36-57301.02 has I-Cache and D-Cache limits reversed. I-Cache = 64K  
D-Cache = 32K

§4.1 Test Case 1. Example program was not used. The ledLight program was loaded at a modified low-limit of D-Cache 0x80000050 and verified by comparison of memory dumps (Different) Same was done with high limit.

§4.1 Test Case 1. With D-Cache being verified, the 20PassParameter program was used and loaded at limits of I-Cache.

§4.2 Test Case 2. The 20PassParameter program was used and loaded at limits of Bulk memory.

Cognizant Engineer:

Robert J. Blozie

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Report Number: 1  
36-015 10.245

DATE RUN: 29 Apr 1997 at 15:10

VERIFICATION REPORT: 36-57303.02; REV: 01; Fep Memory

TEST PROCEDURE: 36-57301.02; REV: A;

TEST SCRIPT: Interactive

SCRIPT FILE: none

WORKING DIRECTORY: /amd/acis/h2/jimf/FepMemoryTest/

LAST MODIFIED: Apr 30, 1997

CEI PARAGRAPHS VERIFIED: 3.7.5.3a-6

PROCEDURE PARAGRAPHS VERIFIED: 4.1, 4.2, 4.3

NUMBER OF DEVIATIONS: 0

SOFTWARE VERSION: Flight-1.4

IPCL VERSION: ipcl\_struct.xs3,v 1.17 1996/07/18 09:12:41

HARDWARE CONFIGURATION: BEP=1E FEP=6E ON CYPRESS

HOST: cypress/sun4/sparc/80715546

TEST\_CONDUCTOR:

Jim Francis/ R Blozie  
MIT-CSR  
NE80-6009  
(617)253-8657

RCS STATUS: None

SUMMARY OF TEST RESULTS: 3 PASSED, 0 FAILED

The procedures performed verified: 1) that the FEP I-Cache and Bulk memory can be read, written and branched to at their limits as specified below. 2) That FEP D-Cache can be read and written to at its limits as specified below. 3) That all 6 FEPS can execute a program with 20 passed parameters.

Cognizant Engineer: *Jim Francis*

Date: 4/30/97

Quality Assurance: \_\_\_\_\_

Date: \_\_\_\_\_

LOCATION OF TEST FILES:

/amd/snebulos/h1/alan/VER\_PROCS/MemFep-jimf/FepMemoryTest/

SUMMARY OF TEST Procedure:

- 1) This procedure used a relocateable version of the 20 parameter test program.
  - a. 496 bytes were read starting at location (Icache) 0x80080000. The 20 parameter test program was loaded. A subsequent read showed that the 20 Parameter program was loaded.
  - b. An execute FEP at location 0x80080000 was sent with 20 parameters. The expected answer of 2870 was received.
  - c. 496 bytes were read starting at location (Icache) 0x800bfe10. The 20 parameter test program was loaded. A subsequent read showed that the 20 Parameter program was loaded.
  - b. An execute FEP at location 0x800bfe10 was sent with 20 parameters. The expected answer of 2870 was received.
  - e. 496 bytes were read starting at location (Bulk) 0xa0000000. The 20 parameter test program was loaded. A subsequent read showed that the 20 Parameter program was loaded.
  - f. An execute FEP at location 0xa0000000 was sent with 20 parameters. The expected answer of 2870 was received.
  - g. 496 bytes were read starting at location (Bulk) 0xa00bfe10. The 20 parameter test program was loaded. A subsequent read showed that the 20 Parameter program was loaded.
  - h. An execute FEP at location 0xa00bfe10 was sent with 20 parameters. The expected answer of 2870 was received.
- 2) This procedure used the ledLight program to load into Dcache limits.
  - a. 128 bytes were read starting at location (Dcache) 0x80000050. The ledLight test program was loaded. A subsequent read showed that the ledLight program was loaded.
  - b. 128 bytes were read starting at location (Dcache) 0x8001ff80. The ledLight test program was loaded. A subsequent read showed that the ledLight program was loaded.
- 3) This procedure used a relocateable version of the 20 parameter test program.
  - a. 496 bytes were read starting at location (Bulk) 0xa0000000. The 20 parameter test program was loaded. A subsequent read showed that the 20 Parameter program was loaded.
  - b. An execute FEP 0 at location 0xa0000000 was sent with 20 parameters. The expected answer of 2870 was received.
  - c. Steps a and b were repeated for all the remaining 5 FEPs.