

Release Notice
C200 Series System Diagnostics V4.1
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CONVEX Computer Corporation



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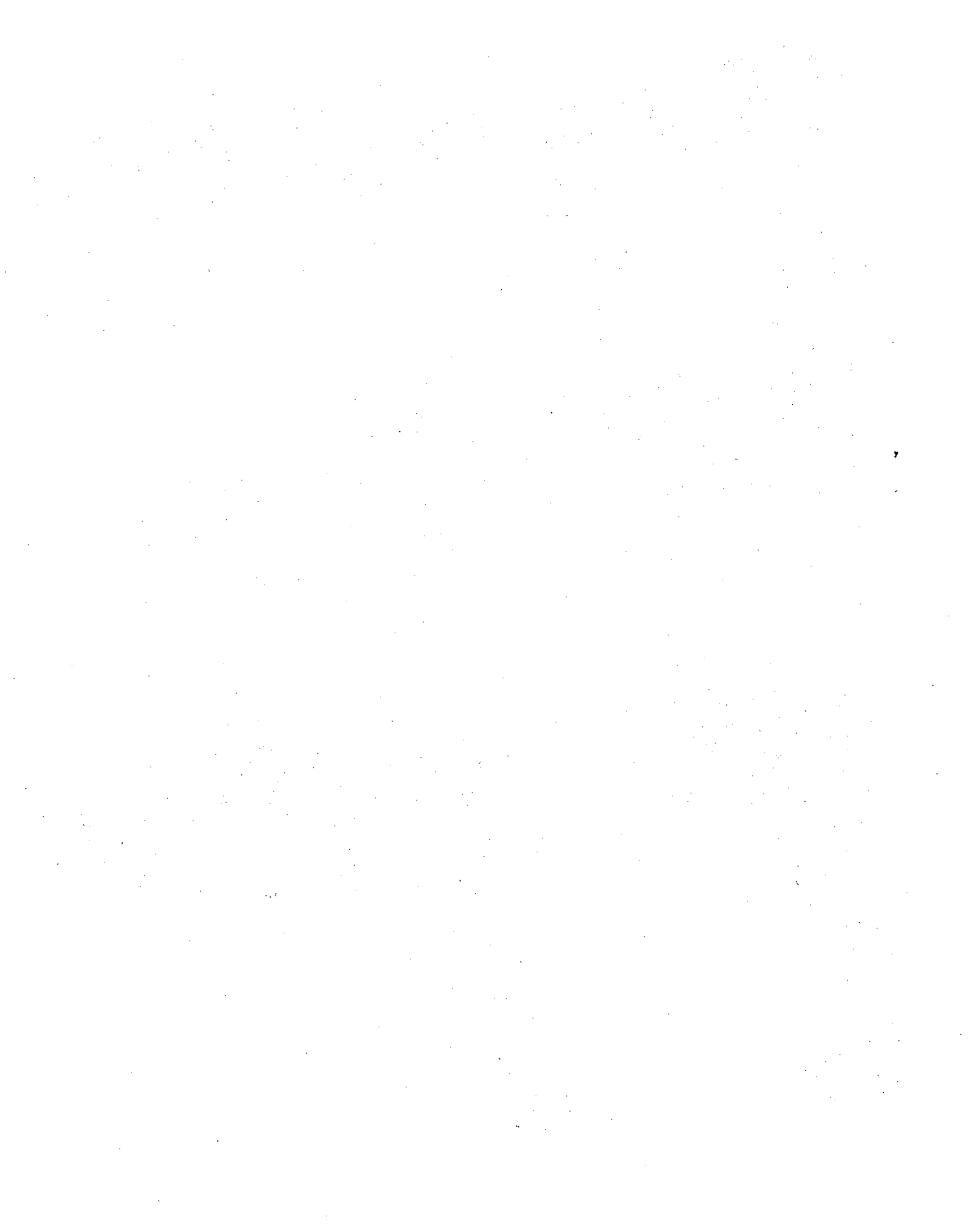
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Release Notice

1. Introduction

This document is intended to enhance and clarify the existing permanent documentation for this product with information that is up-to-the-minute, or was developed too late for inclusion in the permanent documentation. Always refer to this release notice before reporting questions or problems with C200 Series System Diagnostics. Your questions may be answered here. Fixes and workarounds are listed here that may save you time in rediscovering known problems.

The remaining sections in this document describe the contents of this release:

- Section 2 describes the contents of this distribution.
- Section 3 contains notes and warnings about the use of the software.
- Section 4 contains enhancements to the previous functionality.
- Section 5 describes fixes for previously reported problems.
- Section 6 describes known software problems.
- Section 7 contains known documentation problems.
- Section 8 contains description of new documentation.
- Appendix A contains instructions for installing this release on a C200 Series Service Processor Unit.
- Appendix B contains a list of the files contained on the release tape.

System Diagnostics consists of various functional-level test programs and diagnostic utilities that execute under the UNIX Version 7 operating system of the Service Processor Unit. All programs MUST execute in the offline diagnostic environment of SPU UNIX and are mutually exclusive with the operation of CONVEX UNIX on the main processors. These programs are the property of CONVEX Computer Corporation and are intended for use only by CONVEX Field Service.

2. Contents of This Distribution

The distribution package for this release of System Diagnostics consists of this document, distribution media for the software, and documentation. The specific contents of the software and documentation distribution are described in the following tables:

C200 Series System Diagnostics Media

ITEM	QTY	TYPE	PART NUMBER	DESCRIPTION	FORMAT
1.	1	QIC.	760-001015-219	System Diagnostics, V4.1	Installsw

If you do not already have the System Diagnostics Documentation, you will receive the Release Package.

C200 Series System Diagnostics Documentation

C200 Series Release Package

ITEM	QTY	TYPE	PART NUMBER	DESCRIPTION
1.	1	Manl.	760-000430-000	C2 Diagnostics Master Index, 4th ed.
2.	1	Manl.	760-000550-203	C2 Processor Diagnostics Manual, 3rd ed.
3.	1	Manl.	760-000599-200	C2 Processor Diagnostics Manual Addendum, 3rd ed. rev 1
4.	1	Manl.	760-000730-000	PBUS I/O System Diagnostics Manual, 3rd ed.
5.	1	Manl.	760-000830-000	C2 Diagnostics Utilities Manual, 3rd ed.
6.	1	Manl.	760-000830-001	C2 Diagnostics Utilities Manual Addendum, 3rd ed. rev 1

C200 Series Update Package

- Should include item 6 in release package.

3. Notes and Warnings

This section contains generally useful information or words of caution about the product.

- This release supercedes all previous versions of C200 Series System Diagnostics.
- The installation of the release results in the deletion of the following directories prior to loading the V4.1 files from the release tape:
 - /mnt/bin
 - /mnt/test
 - /mnt/man
- This release of C200 Series System Diagnostics requires the V4.0 (or later) release of C200 Series Diagnostics Database (760-001315-222) and the V5.1 (or later) release of SPU UNIX (760-001215-203). To support the installation of IDC (Integrated Disk Channel) ccu, the V5.2 (or later) release of SPU UNIX (760-001215-204) is required.
- This release does not support the special C210A and C201A CPU configurations.
- The following table lists the hardware configurators required to support the release of

System Diagnostics:

C200 Series Logic Configurator Specification

Logic Configurator	PART NUMBER
CX Configurator	400-000100-979
C2XX Shipping Configurator	400-000100-981

Board revision requirements

Board	Part Number	Rev.	Expected substest failures
IPP	410-001207-200	J or older	cpu4231 -s 31,42,44 cpu4233 -s 1010
		K or newer	none related to the IPP
DCU	410-001208-200	K or older	cpu4231 -s 323-324 cpu4241 -s 2505-2606 cpu4241 -s 4505-4606
		L or newer	none related to the DCU
EDC	410-001219-200	D or older	cpu4231 -s 323-324,400 cpu4241 -s 2505-2606 cpu4241 -s 4505-4606
		E or newer	none related to the EDC

- This release should only be installed by a qualified CONVEX Field Service representative. Please see Appendix A for installation details.

4. Enhancements

Utilities

The following enhancements have been made to utility programs in this release:

- All utilities (if applicable) were modified to recognize and support a maximum memory configuration of 2 Gigabytes. This includes recognition of the 410-006221 CUO and 410-006222 CUE utility boards, as well as MCM3 memory boards populated with 8 Megabyte DRAM Memory Modules (DMMs).

Test Programs

The following enhancements have been made to test programs in this release:

- All tests (if applicable) were modified to recognize and support a maximum memory configuration of 2 Gigabytes. This includes recognition of the 410-006221 CUO and 410-006222 CUE utility boards, as well as MCM3 memory boards populated with 8 Megabyte DRAM Memory Modules (DMMs).

5. Fixes

Utilities

- The **hard_logger** utility now correctly finds failing addresses (backplane) for MCM3 boards. Previously, the **hard_logger** would only find a failing address approximately 50% of the time, while printing a message stating that it couldn't locate the failing address in the MCM3 the other half of the time. It should be noted that if soft errors are being examined, it is not possible for the **hard_logger** to determine the failing address if multiple banks pulled soft errors, or if the MCM3 processed more than 255 memory requests after the soft error occurred.
- The soft error logging feature of **errintd** now logs soft errors with the correct address. The V4.0 C2 diagnostics release version of **errintd** logged soft errors with an incorrect address. As for the **hard_logger**, it is not possible for **errintd** to determine the failing address if multiple banks pulled soft errors, or if the MCM3 processed more than 255 memory requests after the soft error occurred.
- **Mminit** was unable to properly size memory on a system containing MCM3s that didn't have all of their DMM slots filled. This has been fixed.
- **Mcm3_config** was unable to correctly configure certain configurations of MCM3 memory boards, primarily those with some of their DMM slots unfilled. This has been fixed.

Test Programs

- **Misc4000** has been updated to be fully functional in C210/C220 systems. **Misc4000** requires that all cpus in the complex contain EFUs and EDCs, and will not be fully functional unless 3220 EFUs and 2219 EDCs are installed.

6. Known Software Problems

At the time this release notice was prepared, this section contains the known problems with this release of System Diagnostics software. Please refer to this list prior to reporting a problem in order to ensure that it has not been previously reported. Serious problems include workarounds if they are known.

Utilities

- None

Test Programs

- The diagnostic shell (**dshell**) incorrectly prints the description of some tests when it is invoked by entering

dshell test

This problem does not affect the functionality of dshell or any of the tests, regardless of whether the aforementioned description is correct or incorrect.

- The test **cpu4233** will very infrequently (about 1 time in 25 runs) fail subtest 521 when run on a C240 with 4 cpus under test. The subtest will fail with a cpu timeout. This is a result of a bug in the diagnostic software, and not an indication that the subtest actually failed. A work-around is to run the test again.
- The test **cpu4231** will not run on a C230 or C240 with less than 128MB of main memory. The following message will be displayed:

```
LCPU_014:get_start_address: Not enough physical memory
```

A work-around is to run the test on one or two heads at a time.

- When testing a Storage Technology Model 1968 or Model 1963 tape drive with **dev4200**, subtest 520 may fail.

7. Known Documentation Problems

There are no known documentation problems for this release.

8. New Documentation

There is no new documentation for this release.

Installing C200 Series System Diagnostics V4.1

Warnings

This section contains generally useful information or words of caution about the product.

- This release supercedes all previous versions of C200 Series System Diagnostics.
- The installation of the release results in the deletion of the following directories prior to loading the V4.1 files from the release tape:
 - /mnt/bin
 - /mnt/test
 - /mnt/man
- This release of C200 Series System Diagnostics requires the V4.0 (or later) release of C200 Series Diagnostics Database (760-001315-222) and the V5.1 (or later) release of SPU UNIX (760-001215-203). To support the installation of IDC (Integrated Disk Channel) ccu, the V5.2 (or later) release of SPU UNIX (760-001215-204) is required.
- This release does not support the special C210A and C201A CPU configurations.
- The following table lists the hardware configurators required to support the release of System Diagnostics:

C200 Series Logic Configurator Specification

Logic Configurator	PART NUMBER
CX Configurator	400-000100-979
C2XX Shipping Configurator	400-000100-981

Board revision requirements

Board	Part Number	Rev.	Expected subtest failures
IPP	410-001207-200	J or older K or newer	cpu4231 -s 31,42,44 cpu4233 -s 1010 none related to the IPP
DCU	410-001208-200	K or older L or newer	cpu4231 -s 323-324 cpu4241 -s 2505-2606 cpu4241 -s 4505-4606 none related to the DCU
EDC	410-001219-200	D or older E or newer	cpu4231 -s 323-324,400 cpu4241 -s 2505-2606 cpu4241 -s 4505-4606 none related to the EDC

- This release should only be installed by a qualified CONVEX Field Service representative.

Installation Procedure

1. If SPU UNIX is already booted, go to step 5.
2. Place the front panel key switch in the *local* position and depress the system reset button to boot SPU UNIX.
3. The soft front panel menu will be displayed. Change the mode to diagnostics and continue the boot process by entering the following commands at the **(fp)>** prompt:

```
(fp)> set mode=diagnostic (or sm=d)
(fp)> boot (or b)
```

4. The SPU UNIX bootstrap routine will prompt with:

```
SPU UNIX boot
:
```

You should enter a carriage return <CR> in response to the prompt. SPU UNIX will now boot and prompt with **(spu)>** when boot is complete.

NOTE: A file system check is performed during the boot procedure. If errors are detected in the file system, they will be corrected if possible. If it is not possible to automatically correct the errors, then you will be requested to execute */etc/fsck* manually to correct these errors before proceeding.

5. Verify SPU UNIX V5.1 or later is installed :

```
(spu)> more /UNIX_REV
```

If the file */UNIX_REV* is not present, then install SPU UNIX V5.1 or later. To support the installation of an **IDC** (Integrated Disk Channel) ccu, SPU UNIX V5.2 (760-001215-204) needs to be installed in accordance with the SPU UNIX V5.2 Release Notice (760-001230-000).

6. Verify that the CONVEX C200 Series Diagnostics Database release V4.0 or later is installed :

```
(spu)> more /mnt/DIAG_DB_REV
```

If the file `/mnt/DIAG_DB_REV` indicates that version V4.0 or later of the C200 Series Diagnostics Database is installed, proceed to the next step. If the file is not present or the version number displayed for Diagnostic Database is not V4.0 or later, then install C200 Series Diagnostics Database V4.0 (760-001315-222) in accordance with the C200 Series Diagnostics Database Release Notice (760-001030-005).

7. Place the CONVEX C200 Series System Diagnostics V4.1 tape (760-001015-219) in the cartridge tape unit and enter the following command:

```
(spu)> /etc/installsw -i
```

The installation of this release requires about 17 minutes.

8. A log of all tar operations is saved in `/tmp/installsw.tar`. should be removed as follows:

```
(spu)> rm /tmp/installsw.tar
```

9. After installation is complete, remove the tape from the cartridge tape unit.
10. If the desired mode of operation is diagnostic mode, then this step may be skipped. Otherwise, return to the soft front panel via the `/etc/reboot` command:

```
(spu)> /etc/reboot
```

Change the mode of operation setting to the *desired-mode*. Use the soft front panel *help* command if you need assistance.

```
(fp)> set mode=desired-mode
```

Place the front panel key switch in the *secure* position and enter the *boot* command to reboot the system:

```
(fp)> boot (or b)
```

11. This completes the installation of CONVEX C200 Series System Diagnostics. Note that the machine is automatically set up to the maximum configuration. All installed CPU's will be enabled and initialized to a C2 configuration.

B

Files list

The following is the *installsw* output from making the V4.1 System Diagnostics tape.

```
a /tmp/install1 1 blocks
a /tmp/install2 5 blocks
a mnt/bin/vioputil 32 blocks
a mnt/bin/ioputil 43 blocks
a mnt/bin/hsputil 140 blocks
a mnt/bin/boot_iop 265 blocks
a mnt/bin/boot_hsp 249 blocks
a mnt/bin/x 28 blocks
a mnt/bin/version 43 blocks
a mnt/bin/sfspread 225 blocks
a mnt/bin/pup 213 blocks
a mnt/bin/mcm3_config 376 blocks
a mnt/bin/mm_sniff 116 blocks
a mnt/bin/.diaginit 6 blocks
a mnt/bin/initall 3 blocks
a mnt/bin/hwlog 206 blocks
a mnt/bin/clock_sync 249 blocks
a mnt/bin/RC_Xfer 57 blocks
a mnt/bin/RC_Talk 25 blocks
a mnt/bin/vp_scn 285 blocks
a mnt/bin/syshalt 162 blocks
a mnt/bin/scn_ring 308 blocks
a mnt/bin/pte_cache 304 blocks
a mnt/bin/mmap 84 blocks
a mnt/bin/lib/dev4100.causes 6 blocks
a mnt/bin/lib/dev4100.help 8 blocks
a mnt/bin/lib/dev4110.help 7 blocks
a mnt/bin/lib/dev4200.help 5 blocks
a mnt/bin/lib/dev4300.help 4 blocks
a mnt/bin/lib/dev4400.help 3 blocks
a mnt/bin/lib/dev4410.help 10 blocks
a mnt/bin/lib/dev4500.help 3 blocks
a mnt/bin/lib/dev4510.help 5 blocks
a mnt/bin/lib/dev4540.help 14 blocks
a mnt/bin/lib/dev4600.help 5 blocks
a mnt/bin/lib/dev5130.causes 3 blocks
a mnt/bin/lib/dev5130.help 9 blocks
a mnt/bin/lib/dev5210.dhelp 20 blocks
a mnt/bin/lib/dev5210.help 41 blocks
a mnt/bin/lib/dev5300.dhelp 24 blocks
a mnt/bin/lib/dev5300.help 14 blocks
a mnt/bin/lib/dev_ultra.help 11 blocks
a mnt/bin/lib/dev_v3480.dhelp 28 blocks
a mnt/bin/lib/dev_v3480.help 10 blocks
```

a mnt/bin/lib/DB_diskfmt 6 blocks
a mnt/bin/lib/DBtapefmt 11 blocks
a mnt/bin/lib/HSPutil 74 blocks
a mnt/bin/lib/IOPutil 42 blocks
a mnt/bin/lib/vioputil.x00 45 blocks
a mnt/bin/lib/controllers 4 blocks
a mnt/bin/lib/get_defects.x00 111 blocks
a mnt/bin/lib/libccu.causes 1 blocks
a mnt/bin/lib/scn_help 7 blocks
a mnt/bin/lib/security_clear/mm_purge_ccu 2 blocks
a mnt/bin/lib/security_clear/mm_purge_spu 12 blocks
a mnt/bin/lib/security_clear/purge_cpu 33 blocks
a mnt/bin/lib/security_clear/purge_hsp 66 blocks
a mnt/bin/lib/security_clear/purge_iop 61 blocks
a mnt/bin/lib/security_clear/purge_patterns 1 blocks
a mnt/bin/lib/security_clear/purge_viop 59 blocks
a mnt/bin/lib/dev5510.dhelp 18 blocks
a mnt/bin/lib/dev5510.help 16 blocks
a mnt/bin/val_perr 1 blocks
a mnt/bin/secure 1 blocks
a mnt/bin/rita_perr 1 blocks
a mnt/bin/enable_cpu 1 blocks
a mnt/bin/disable_cpu 1 blocks
a mnt/bin/mkdiag_db 201 blocks
a mnt/bin/margin 304 blocks
a mnt/bin/look 29 blocks
a mnt/bin/man 45 blocks
a mnt/bin/errintd 352 blocks
a mnt/bin/cs 350 blocks
a mnt/bin/cop 314 blocks
a mnt/bin/config_chk 203 blocks
a mnt/bin/commreg 244 blocks
a mnt/bin/cpureg 280 blocks
a mnt/bin/cpuvreg 279 blocks
a mnt/bin/dcache 313 blocks
a mnt/bin/hard_logger 388 blocks
a mnt/bin/icache 351 blocks
a mnt/bin/map 241 blocks
a mnt/bin/memld 323 blocks
a mnt/bin/mm 447 blocks
a mnt/bin/mminit 592 blocks
a mnt/bin/scn_util 458 blocks
a mnt/bin/sp2util 173 blocks
a mnt/bin/sysreset 454 blocks
a mnt/bin/scnlink 113 blocks
a mnt/bin/dshell 89 blocks
a mnt/bin/get_defects 215 blocks
a mnt/bin/more 38 blocks
a mnt/bin/idcfmt 286 blocks
a mnt/bin/security_clear 689 blocks
a mnt/bin/iscn 462 blocks
a mnt/bin/e_reaper 35 blocks
a mnt/bin/CPU/mminit.x00 34 blocks
a mnt/test/misc4000.t 599 blocks
a mnt/test/CPU/p0r0_4040.2 3 blocks
a mnt/test/CPU/p0r0_4040.1 2 blocks
a mnt/test/CPU/cpu4040.rnn 116 blocks
a mnt/test/CPU/p0r0_4010.2 4 blocks
a mnt/test/CPU/p0r0_4010.1 3 blocks

a mnt/test/CPU/cpu4010.rnn 92 blocks
a mnt/test/CPU/mem4100.x01 29 blocks
a mnt/test/CPU/mem4100.x00 29 blocks
a mnt/test/CPU/cpu4030.rnn 421 blocks
a mnt/test/CPU/cpu4041.rnn 1613 blocks
a mnt/test/CPU/cpu4041.x00 1158 blocks
a mnt/test/CPU/cpu4231.rnn 604 blocks
a mnt/test/CPU/cpu4232.rnn 1013 blocks
a mnt/test/CPU/cpu4233.rnn 681 blocks
a mnt/test/CPU/cpu4241.rnn 4020 blocks
a mnt/test/CPU/cpu4241.x00 2822 blocks
a mnt/test/CPU/p0r0_4030.1 14 blocks
a mnt/test/CPU/p0r0_4030.2 3 blocks
a mnt/test/CPU/p0rN_4030.1 9 blocks
a mnt/test/CPU/p0rN_4030.2 2 blocks
a mnt/test/CPU/pccarry_4030 9 blocks
a mnt/test/CPU/p0r0_4041.1 11 blocks
a mnt/test/CPU/p0r0_4041.2 12 blocks
a mnt/test/CPU/p0rN_4041.1 1 blocks
a mnt/test/CPU/p0rN_4041.2 2 blocks
a mnt/test/CPU/p0r0_4231 24 blocks
a mnt/test/CPU/p0r0_4232 8 blocks
a mnt/test/CPU/p0r0_4233 45 blocks
a mnt/test/CPU/p0r0_4241 35 blocks
a mnt/test/CPU/p0rN_4231 30 blocks
a mnt/test/CPU/p0rN_4232 6 blocks
a mnt/test/CPU/p0rN_4233 41 blocks
a mnt/test/CPU/p0rN_4241 2 blocks
a mnt/test/CPU/segment7 1 blocks
a mnt/test/CPU/st_323_spt 1 blocks
a mnt/test/CPU/support_4231 34 blocks
a mnt/test/CPU/support_4233 1 blocks
a mnt/test/CPU/wrapl_4030 1 blocks
a mnt/test/CPU/wrapu_4030 9 blocks
a mnt/test/cpu4040.t 682 blocks
a mnt/test/cpu4010.t 685 blocks
a mnt/test/mem4100.t 913 blocks
a mnt/test/spu4000.t 701 blocks
a mnt/test/pi2_4000.x00 281 blocks
a mnt/test/pi2_4000.t 475 blocks
a mnt/test/pia4000.t 738 blocks
a mnt/test/cpx4000.t 622 blocks
a mnt/test/cpu4030.t 709 blocks
a mnt/test/cpu4041.t link to mnt/test/cpu4030.t
a mnt/test/cpu4231.t link to mnt/test/cpu4030.t
a mnt/test/cpu4232.t link to mnt/test/cpu4030.t
a mnt/test/cpu4233.t link to mnt/test/cpu4030.t
a mnt/test/cpu4241.t link to mnt/test/cpu4030.t
a mnt/test/cpu4XXX.t link to mnt/test/cpu4030.t
a mnt/test/tables/cpu4030_cl.o 1 blocks
a mnt/test/tables/cpu4030_st.o 26 blocks
a mnt/test/tables/cpu4041_cl.o 2 blocks
a mnt/test/tables/cpu4041_st.o 48 blocks
a mnt/test/tables/cpu4041_tm.o 7 blocks
a mnt/test/tables/cpu4231_cl.o 2 blocks
a mnt/test/tables/cpu4231_st.o 20 blocks
a mnt/test/tables/cpu4231_tm.o 3 blocks
a mnt/test/tables/cpu4232_cl.o 2 blocks
a mnt/test/tables/cpu4232_st.o 10 blocks

a mnt/test/tables/cpu4232_tm.o 2 blocks
a mnt/test/tables/cpu4233_cl.o 3 blocks
a mnt/test/tables/cpu4233_st.o 36 blocks
a mnt/test/tables/cpu4233_tm.o 4 blocks
a mnt/test/tables/cpu4241_cl.o 2 blocks
a mnt/test/tables/cpu4241_st.o 124 blocks
a mnt/test/tables/cpu4241_tm.o 17 blocks
a mnt/test/dev4100.t 510 blocks
a mnt/test/dev4100.x00 122 blocks
a mnt/test/dev4110.t 510 blocks
a mnt/test/dev4200.t 369 blocks
a mnt/test/dev4200.x00 85 blocks
a mnt/test/dev4300.t 428 blocks
a mnt/test/dev4300.x00 79 blocks
a mnt/test/dev4400.t 268 blocks
a mnt/test/dev4400.x00 69 blocks
a mnt/test/dev4410.t 339 blocks
a mnt/test/dev4410.x00 75 blocks
a mnt/test/dev4500.t 293 blocks
a mnt/test/dev4500.x00 71 blocks
a mnt/test/dev4510.t 274 blocks
a mnt/test/dev4510.x00 87 blocks
a mnt/test/dev4540.t 290 blocks
a mnt/test/dev4540.x00 66 blocks
a mnt/test/dev4540.xx0 19 blocks
a mnt/test/dev4540x.t 290 blocks
a mnt/test/dev4600.t 303 blocks
a mnt/test/dev4600.x00 76 blocks
a mnt/test/dev5130.t 594 blocks
a mnt/test/dev5130.x00 119 blocks
a mnt/test/dev5210.t 528 blocks
a mnt/test/dev5210.x00 108 blocks
a mnt/test/dev5210x.t 528 blocks
a mnt/test/dev5300.t 309 blocks
a mnt/test/dev5300.x00 113 blocks
a mnt/test/dev5300.xx0 29 blocks
a mnt/test/dev5300x.t 309 blocks
a mnt/test/dev5500.t 295 blocks
a mnt/test/dev5500.x00 72 blocks
a mnt/test/dev_ultra.t 287 blocks
a mnt/test/dev_ultra.x00 256 blocks
a mnt/test/dev_ultrax.t 287 blocks
a mnt/test/dev_v3480.t 383 blocks
a mnt/test/dev_v3480x.t 383 blocks
a mnt/test/idc4000.t 288 blocks
a mnt/test/io4000.t 628 blocks
a mnt/test/io4000.x00 31 blocks
a mnt/test/io4120.t 716 blocks
a mnt/test/io4120.x00 156 blocks
a mnt/test/io5000.t 696 blocks
a mnt/test/io5000.x00 50 blocks
a mnt/test/dev5510.t 304 blocks
a mnt/test/dev5510x.t 304 blocks
a mnt/test/dev5510.x00 87 blocks
a mnt/man/cat1/Intro.i 2 blocks
a mnt/man/cat1/Intro.1d 4 blocks
a mnt/man/cat1/adb.1 36 blocks
a mnt/man/cat1/awk.1 15 blocks
a mnt/man/cat1/boot_iop.1d 2 blocks

a mnt/man/cat1/cat.1 2 blocks
a mnt/man/cat1/cd.1 2 blocks
a mnt/man/cat1/chmod.1 6 blocks
a mnt/man/cat1/cmp.1 3 blocks
a mnt/man/cat1/commreg.1d 7 blocks
a mnt/man/cat1/config_chk.1d 4 blocks
a mnt/man/cat1/cop.1d 11 blocks
a mnt/man/cat1/copmod.1d 14 blocks
a mnt/man/cat1/cp.1 2 blocks
a mnt/man/cat1/cpureg.1d 5 blocks
a mnt/man/cat1/cpuvreg.1d 6 blocks
a mnt/man/cat1/cs.1d 14 blocks
a mnt/man/cat1/date.1 8 blocks
a mnt/man/cat1/dcache.1d 5 blocks
a mnt/man/cat1/dd.1 7 blocks
a mnt/man/cat1/df.1 2 blocks
a mnt/man/cat1/diaginit.1d 5 blocks
a mnt/man/cat1/diskfmt.1d 10 blocks
a mnt/man/cat1/dshell.1d 17 blocks
a mnt/man/cat1/echo.1 2 blocks
a mnt/man/cat1/errintd.1d 9 blocks
a mnt/man/cat1/fs.1d 12 blocks
a mnt/man/cat1/find_field.1d 6 blocks
a mnt/man/cat1/get_defects.1d 6 blocks
a mnt/man/cat1/grep.1 8 blocks
a mnt/man/cat1/hard_logger.1d 6 blocks
a mnt/man/cat1/hsputil.1d 13 blocks
a mnt/man/cat1/icache.1d 9 blocks
a mnt/man/cat1/idefmt.1d 92 blocks
a mnt/man/cat1/initall.1d 3 blocks
a mnt/man/cat1/ioputil.1d 12 blocks
a mnt/man/cat1/ipcs_server.1d 2 blocks
a mnt/man/cat1/isn.1d 2 blocks
a mnt/man/cat1/kermit.1 37 blocks
a mnt/man/cat1/kill.1 3 blocks
a mnt/man/cat1/lf.1 14 blocks
a mnt/man/cat1/ll.1 14 blocks
a mnt/man/cat1/ln.1 2 blocks
a mnt/man/cat1/ls.1 13 blocks
a mnt/man/cat1/man.1d 5 blocks
a mnt/man/cat1/map.1d 4 blocks
a mnt/man/cat1/margin.1d 8 blocks
a mnt/man/cat1/memld.1d 4 blocks
a mnt/man/cat1/mkdiag_db.1d 8 blocks
a mnt/man/cat1/mkdir.1 2 blocks
a mnt/man/cat1/mm.1d 24 blocks
a mnt/man/cat1/mm_sniff.1d 4 blocks
a mnt/man/cat1/mminit.1d 19 blocks
a mnt/man/cat1/more.1 3 blocks
a mnt/man/cat1/mt.1 6 blocks
a mnt/man/cat1/mv.1 3 blocks
a mnt/man/cat1/newdate.1 8 blocks
a mnt/man/cat1/od.1 8 blocks
a mnt/man/cat1/proctype.1 1 blocks
a mnt/man/cat1/prof.1 4 blocks
a mnt/man/cat1/ps.1 7 blocks
a mnt/man/cat1/pte_cache.1d 5 blocks
a mnt/man/cat1/pup.1d 3 blocks
a mnt/man/cat1/pwd.1 1 blocks

a mnt/man/cat1/reset.1 3 blocks
a mnt/man/cat1/ringrev_chk.1d 3 blocks
a mnt/man/cat1/rm.1 4 blocks
a mnt/man/cat1/scn_ring.1d 3 blocks
a mnt/man/cat1/scn_util.1d 9 blocks
a mnt/man/cat1/scnlink.1d 7 blocks
a mnt/man/cat1/secure.1d 3 blocks
a mnt/man/cat1/security_clear.1d 12 blocks
a mnt/man/cat1/sfpread.1d 3 blocks
a mnt/man/cat1/sh.1 47 blocks
a mnt/man/cat1/sleep.1 2 blocks
a mnt/man/cat1/sort.1 10 blocks
a mnt/man/cat1/sp2util.1d 14 blocks
a mnt/man/cat1/stty.1 6 blocks
a mnt/man/cat1/syshalt.1d 3 blocks
a mnt/man/cat1/sysreset.1d 6 blocks
a mnt/man/cat1/tail.1 3 blocks
a mnt/man/cat1/tar.1 11 blocks
a mnt/man/cat1/tee.1 2 blocks
a mnt/man/cat1/test.1 6 blocks
a mnt/man/cat1/time.1 2 blocks
a mnt/man/cat1/true.1 2 blocks
a mnt/man/cat1/uptime.1 2 blocks
a mnt/man/cat1/version.1d 10 blocks
a mnt/man/cat1/vi.1 7 blocks
a mnt/man/cat1/vioputil.1d 12 blocks
a mnt/man/cat1/vp_scn.1d 9 blocks
a mnt/man/cat1/which.1 2 blocks
a mnt/man/cat1/x.1d 3 blocks
a mnt/man/cat1/xed.1 38 blocks
a mnt/man/cat1/rita_perr.1d 6 blocks
a mnt/man/cat1/val_perr.1d 5 blocks
a mnt/man/cat4/Intro.4 3 blocks
a mnt/man/cat4/ct.4 10 blocks
a mnt/man/cat4/dk.4 11 blocks
a mnt/man/cat4/mem.4 2 blocks
a mnt/man/cat4/mtio.4 10 blocks
a mnt/man/cat4/null.4 1 blocks
a mnt/man/cat4/tty.4 45 blocks
a mnt/man/cat4/wndw.4 12 blocks
a mnt/man/cat5/DB_cop.5d 3 blocks
a mnt/man/cat5/DB_diskfmt.5d 8 blocks
a mnt/man/cat5/b.out.5 16 blocks
a mnt/man/cat5/backup.5 14 blocks
a mnt/man/cat5/controllers.5d 2 blocks
a mnt/man/cat5/core.5 3 blocks
a mnt/man/cat5/dir.5 3 blocks
a mnt/man/cat5/environ.5 3 blocks
a mnt/man/cat5/filsys.5 19 blocks
a mnt/man/cat5/fstab.5 8 blocks
a mnt/man/cat5/group.5 2 blocks
a mnt/man/cat5/ioconfig.5d 20 blocks
a mnt/man/cat5/mstab.5 2 blocks
a mnt/man/cat5/passwd.5 3 blocks
a mnt/man/cat5/softlog.5d 9 blocks
a mnt/man/cat5/tar.5 8 blocks
a mnt/man/cat5/termcap.5 56 blocks
a mnt/man/cat5/ttys.5 3 blocks
a mnt/man/cat5/ttytype.5 2 blocks

a mnt/man/cat5/types.5 4 blocks
a mnt/man/cat7/Intro.7 1 blocks
a mnt/man/cat7/ascii.7 4 blocks
a mnt/man/cat7/hier.7 7 blocks
a mnt/man/cat8/Intro.8 1 blocks
a mnt/man/cat8/backup.8 10 blocks
a mnt/man/cat8/bootchk.8 2 blocks
a mnt/man/cat8/cleanup.8 2 blocks
a mnt/man/cat8/fasthalt.8 2 blocks
a mnt/man/cat8/format.8 14 blocks
a mnt/man/cat8/fsck.8 16 blocks
a mnt/man/cat8/getty.8 4 blocks
a mnt/man/cat8/init.8 5 blocks
a mnt/man/cat8/installsw.8 28 blocks
a mnt/man/cat8/mkfs.8 7 blocks
a mnt/man/cat8/mklost+found.8 2 blocks
a mnt/man/cat8/mknod.8 2 blocks
a mnt/man/cat8/mount.8 4 blocks
a mnt/man/cat8/pstat.8 11 blocks
a mnt/man/cat8/pwrdown.8 2 blocks
a mnt/man/cat8/reboot.8 12 blocks
a mnt/man/cat8/sync.8 1 blocks
a mnt/man/cat8/update.8 2 blocks
a mnt/man/whatis 18 blocks
a mnt/man/man.index 6 blocks
a mnt/data/rt.dat 137 blocks
a doc/v4.1diag.rel 71 blocks

** Installsw Header File Copy **

Product: C2 Processor Diagnostics, Version: V4.1

Date created: May 9, 1991

Tape created by sheley

SPU tape device is /dev/rmt1

