CIP V10 L716

SOFTWARE RELEASE BULLETIN

<u>Important</u>

Two copies of the CIP V10 L716 Software Release Bulletin (SRB) and the Field
Change Announcement (FCA) are included in the CIP field kit. One copy is for
the customer and the other is for the Control Data Customer Engineer (CE).
The Maintenance Software Reference Manuals and microfiche also need to be
provided to the CE. Please ensure your CE receives this information. It is
important that the CE be aware of all CIP features and cautions.

Control Data Corporation recommends that this Software Release Bulletin be
read in its entirety prior to any CIP V10 L716 installation.

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Contents

Introduction to CIP V10 L716

The CYBER Initialization Package (CIP) consists of hardware/software interface modules. The modules are released on tape and must be installed to disk for system operation. The CIP V10 L716 release supports CYBER 170/180 models 810, 815, 825, 830, 835, 840, 845, 850, 855, 860, 870, 960, 962, 990, 992, 994, and 995. The CIP V10 L716 module levels are listed in the table below:

> NOTE: Please consult your Field Change Announcement (FCA) sheet to verify that the hardware is at the appropriate level prior to the installation of CIP V10 L716.

Release Levels

Module	Level
CTI	716
MSL	716
EDD/RCM	716
DFTx/DBDx/ECRx	05
EI	21
MDD	13
SCI	04
SCD	05

Structure of the CIP V10 L716 Tape

CIP 810/815/825/830/835/840/845/850/855/860/870/960/990/994/995

File 1   CIP V10 L716 deadstart file.

File 2   CTITEXT.

File 3   Empty file.

File 4   NOS peripheral microcode.

File 5   NOS/BE peripheral microcode.

File 6   Procedure to install peripheral microcode onto the NOS/BE operating system.

File 7   Seldom-used and unsupported diagnostics that can be loaded at the option of the site maintenance personnel. Instructions for copying file 7 to a tape for installation are contained in appendix C.

CIP 962/992

File 1   CIP V10 L716 file.

CIP V10 L716 Support

Any problem with CIP V10 L716 should be reported on a Programming System Report (PSR), specifying the nature of the problem. Please include the CIP type, version and level number on each PSR, for example CIP 830 V10 L716 where 830 is the type, 10 is the version, and 716 is the level.

Microcode problems should be reported on Technical Action Request (TAR) forms. To communicate verbally, contact Customer Service Support: 1-800-345-9903 for the United States and Canada and 612-851-4131 for international customers.

Any problem with the media or CIP V10 L716 package contents should be reported to Software Manufacturing and Distribution (SMD). A report form, "THE SOFTWARE MANUFACTURING AND DISTRIBUTION CRITIQUE LETTER," accompanies each CIP tape. To order replacement CIP tapes, please complete this form. Be sure to include a description of the problem, your return mailing address and the type of tape you require, such as CIP 830 V10 L716. Send the form with the defective tape to SMD so that a replacement tape can be sent to you.

Replacement tapes may also be ordered by phone, 612-482-3747. Even if the replacement CIP V10 L716 tape is ordered by phone, please return the defective CIP V10 L716 tape accompanied by the form.

Changes for this Release

CTI

Effective with CIP V9 L700, installation of CIP components is accomplished by a two step process. The first step consists of installing all hardware related CIP tape components. The second step, which is required for sites running NOS/VE, consists of installing the NOS/VE boot programs.

By splitting the process into two steps, the NOS/VE boot programs can be replaced on the CIP device without requiring reinstallation of the CIP tape when switching between different levels of NOS/VE. A CTI utility, Install NOS/VE Boot Programs, is available to support an initial or update installation of the NOS/VE boot programs.

The NOS/VE 1.4.1 L716 boot programs are packaged for release on the NOS/VE 1.4.1 L716 deadstart tape. The Install NOS/VE Boot Programs utility is only available when deadstarting from the CIP disk and not from the CIP tape.

The additional features to CTI are as follows:

o Support for CYBER 960/962/992/994.

o Support for DFT V5.

o Modification to status CPU and disable ports.

EDD/RCM

The Express Deadstart Dump (EDD) and Restore Central Memory (RCM) utilities have been enhanced as follows:

o Support for CYBER 960/962/992/994.

o Support for I4C.

o Support for 5698 tapes on configurations with an I4C IOU.

EI

The Environmental Interface (EI) module was modified to support the CYBER 960/962 mainframes, to support 256 megabyte memory and to correct the element number in EICB messages.

DFT

The Dedicated Fault Tolerance (DFT) module has the following modifications:

o All internal DFT 6xx coded errors, including new errors from model
  dependent overlays and packet communication, are recorded in the non
  register status buffer for subsequent logging to the engineering logs.
  Additionally, all Environment/Power Warning and Top of Hour conditions
  are reported via the non register status buffers, thus freeing up two or
  more of the maintenance status buffers for other mainframe error
  handling.

o The P, Q, A, and K registers for all running PPs are periodically
  captured by DFT and saved in the DFT Resident Data area via two circular
  buffers in central memory. This feature enables detection of a hung PP
  condition when analyzing dumps.

o Utilizes the Error Control Record (stored in the common disk area and
  maintained in central memory) in conjunction with MDD to establish the
  criteria for conditional handling of mainframe element errors (i.e.
  freeze on, or ignore specific error conditions). This capability can
  be used by Technical Support personnel when isolating a subset of
  mainframe errors.

o Supports logging of lost SIT interrupts via the non register status
  buffer after detecting each lost SIT interrupt condition. Additionally,
  DFT resets the SIT to cause the lost SIT interrupt to be generated within
  2 seconds.

o Processes CPU corrected error processing and continues processing of CPU
  corrected errors until the error threshold has been reached. DFT
  suppresses CPU corrected error processing and logging until the
  beginning of the next hour to prevent continual processing of the same
  error condition.

o During a recovery deadstart, verifies that the DFT/operating system buffer table structures are intact by locating the Start of Table and End of Table delimiters in each table.

o Provides fault tolerance support for the CYBER 960/962 and I4C hardware.

SCI / MDD

The System Console Interface (SCI) module has the following modifications:

o VPB mode has been changed to support the CYBER 960/962 mainframes and the I4C IOU, which is the IOU for CYBER 962 mainframes.

o The MDD and VPB modes have been modified to create, update, and display DFT V5 structures and to support 256 megabytes of central memory.

o VPB checks the response from DFT requests during deadstart and issues an appropriate message to the EICB and to the DFT nonregister status buffer (NRSB) if an error occurs.

o The DFT message line displayed by SCI in the upper right corner of the console has been made more visible through use of inverse video and flashing characters.

MSL

The Maintenance Software Library (MSL) has the following modifications:

o The utility ITL4, which can be used to load 5698 (IPI) microcode, was added to MSL for CYBER 840/845/850/855/860/870/960/962/990/992/994/995.

o Support for CYBER 960/962/992/994 was added to CMSE.

o Support for the I4C IOU was added to MSL with the following new diagnostics: CHD44, CMA44, EXT44, FII44, HYDR4, IPI44, ISI44, MRA44, MRT44, PMT44, PMU44, CCA44, QLT44, TPM44, UESM4, and UHYD4.

Mainframe Microcode

810/815/825/830

CIP 810/815/825/830 V10 L716 mainframe microcode was not modified for this release.

835

CIP 835 V10 L716 mainframe microcode was not modified for this release.

840/845/850/855/860/870

CIP 840/845/850/855/860/870 V10 L716 mainframe microcode was not modified for this release.

960/962

CIP 960/962 V10 L716 mainframe microcode is new for this release when compared with the CIP V9 L700 release.

990/992/994/995

CIP 990/995 V10 L716 mainframe microcode was not modified for this release. CIP 992/994 V10 L716 mainframe microcode is new for this release when compared with the CIP V9 L700 release.

Peripheral Microcode

MA462 (834/836 Disk)

Peripheral microcode MA462-D06 guarantees a 5017 general status after a seek if microcode is not loaded in the control module.

MA464 (895 Disk)

Peripheral microcode MA464-D10 corrects the situation where the general status was incorrectly set to zero if a CU end interrupt was received. This caused busy failures, FIPS timeouts, and no record found problems reported by HPA.

A problem where sense byte format five information was incorrectly reported is fixed by the clearing of detailed status before performing a seek.

MB301 (IPI Tape)

Peripheral microcode MB301-D012 is new for this release of CIP and is used to support IPI tape. The utility ITL4 is used to rewrite the peripheral microcode into the PROMS if required for IPI tape.

MB401 (FSC Tape)

Peripheral microcode MB401-D04 reports the block ID when status is read and the correct parity in word 2 of the general status. This level must be used if the site is using NOS 2.5.3 L688 or later.

MB466 (7990 Mass Storage Extended)

Peripheral microcode MB466-D03 has the following modifications:

o Reports a message waiting interrupt if a status of hexadecimal 24 is received on the FIPS interface.

o Waits for a control unit initiated selection if a status of hexadecimal 70 is reported. This is peculiar to 7990 MSE because of the architecture of the subsystem.

o Eliminates unnecessary FIPS NOP commands.

o Clears all message flags if a host restart message is received.

MB467 (698 Tape)

Peripheral microcode MB467-D02 corrects the problem where function timeouts
occur when executing two copies of T7X, because T7X does not handle busy
status correctly.   No room was left in T7X to correct the problem, so MB467
was changed to wait longer for a not busy status.

Installation

CIP V10 L716 Installation

An extra copy of the CIP V10 L716 SRB and the Field Change Announcements has
been provided in the CIP V10 L716 field kit.   One copy is for the customer
and the other copy must be delivered to the Control Data Customer Engineer
(CE).   The Maintenance Software Reference Manuals and microfiche must also
be delivered to the CE.   The CYBER Initialization Package (CIP) User's
Handbook, revision M (60457180 must be available for shared usage.

Control Data Corporation recommends that all sites upgrade to CIP V10 L716.

CIP V10 L716 and Operating System Compatibility

CIP V10 L716 may be installed as released if your site is running any of the
following operating system release levels. Operating systems released prior
are outside the support window and may not work. Sites that wish to use a
previously released operating system may do so at their own risk.

NOS   2.7.1 L716
               2.6.1 L710/L688   (CYBER 960/994 only)
               2.6.1 L700/L688
               2.5.3 L688
               2.5.2 L678/L670

NOS/BE   1.5 L712
               1.5 L682
               1.5 L664

NOS/VE   1.4.1 L716
               1.3.1 L700
               1.2.3 L688
               1.2.2 L678

CIP V10 L716 Backlevel Support

Customers may upgrade to CIP V10 L716 and continue to use an operating
system that is not at the latest release level. No CIP tape modification is
necessary unless your site is running dual state with NOS 2.6.1 L700/688
or NOS 2.7.1 L716 and NOS/VE 1.2.3 L688 or a prior level.

CIP 810/815/825/830/835/840/845/850/855/860/870/960/990/994/995

A. Do not install CIP when the CIP disk is in use. Installation of CIP should be accomplished only when CIP has sole access to the disk to avoid conflicts with operating system access and possible file corruption.

In dual state, the CIP device must be defined to the host operating system (NOS or NOS/BE). The CIP disk may either be defined in the NOS/VE configuration as state=OFF or must be omitted entirely from the NOS/VE configuration. NOS/VE does not use a device with state=OFF unless it is a CIP disk, and then only for DFT access.

For NOS/VE standalone, the CIP device must be state=ON. It is also recommended that the CIP disk also be the system disk.

You may alternate between dual state and standalone, using the same PHYSICAL_CONFIG and configuration prolog files by changing the state of the CIP disk to state=OFF when running dual state.

B. Perform the following steps to install CIP V10 L716 to the CIP disk:

1. If you plan to run dual state with NOS 2.6.1 L700/688 or NOS 2.7.1 L716 and intend to use NOS/VE 1.2.3 L688 or a prior level, you must create a modified CIP tape based on the CIP currently in use by replacing SCI with the version from the CIP V10 L716 tape. You must use this tape when installing the NOS/VE boot components.

   If this combination does not apply, skip to step 2.

   Perform the following steps to create the modified CIP tape:

   a. Obtain the following:

      o The CIP tape which matches the level of NOS/VE you are currently running.

      o The CIP V10 L716 tape.

      o A scratch tape for the modified CIP tape that you will create.

   b. To replace SCI, have the site analyst perform the following steps at the system console or from an interactive terminal:

      REQUEST,CIP,VSN=CIP,D=PE,F=SI,LB=KU.
         assign the CIP V10 L716 tape
      GTR,CIP,SCI.OVL/SCI
      UNLOAD,CIP.
      REQUEST,OLD,VSN=OLD,D=PE,F=SI,LB=KU.
         assign the CIP tape matching the NOS/VE level to be used:

for NOS/VE Level	use CIP Level
1.2.3 L688	V8 L688
1.2.2 L678	V7 L678

```
LIBEDIT,P=OLD,N=NEW,B=SCI.
UNLOAD,OLD.
REQUEST,SCR,VSN=SCR,D=PE,F=SI,LB=KU.
   assign the scratch tape
REWIND,NEW,SCR.
COPYBF,NEW,SCR.
UNLOAD,SCR,NEW.
```

Use this modified CIP tape when installing the NOS/VE boot programs described in step 6.

2. If the CIP disk contains a CIP level prior to CIP V6 L664 or you are unsure, dump all permanent files that reside on the CIP disk before terminating your system. You must use the initial installation option to install CIP V10 L716 and reload your permanent files once CIP installation is complete. If the update installation option is used you will see the error UNABLE TO PERFORM -UPDATE- INSTALL. COMMON DISK AREA NOT INITIALIZED. An initial installation should be done after your permanent files are dumped.

   If CIP V6 L664 or later was previously installed, the update option may be used to install CIP V10 L716 and permanent files do not require dumping and reloading.

   Use of the update or initial installation option is documented in the CYBER Initialization Package (CIP) User's Handbook, revision M (60457180).

   After identifying the type of CIP installation and, if necessary dumping permanent files, deadstart from the CIP V10 L716 tape and perform either the update or the initial installation.

3. If your site does not use NOS/VE, skip to step 8, otherwise deadstart from the CIP V10 L716 disk.

4. Select the U (Utilities) option.

5. Select the V (Install NOS/VE Boot Programs) option.

6. Mount one of the following based on the descriptions given:

   a. If you created a modified CIP tape in step 1, mount this tape.
   b. If you plan to run NOS/VE 1.4.1 L716, mount the NOS/VE 1.4.1 L716 deadstart tape. (Note that the CIP V10 L716 tape does not contain the required NOS/VE boot programs.)
   c. In any other case, mount the CIP tape that matches the level of NOS/VE that you plan to run.

7. Describe the path to the tape drive containing the tape identified in step 6 and install the NOS/VE boot programs.

8. The CIP V10 L716 installation process is complete. You may proceed to the peripheral microcode and operating system installation.

If you wish to alternate between the two levels of NOS/VE for any reason, you may do this using the same CIP disk by following steps 3-7 to install the NOS/VE boot components matching the NOS/VE system level you are

deadstarting.   Steps 3-7 must be repeated immediately before each
deadstart of a NOS/VE system that is at a different release level than
the NOS/VE system most recently executed on that mainframe.

CIP 962/992

To install the console software, refer to the CDC 19003 System Console
Hardware Operation/Maintenance Guide, publication number 60463610 revision
D. To install CIP V10 L716, refer to the CYBER Initialization Package (CIP)
User's Handbook, revision M (60457180).   When installing the NOS/VE boot
programs for NOS/VE 1.4.1 L716, the NOS/VE 1.4.1 L716 deadstart tape must be
used.

Peripheral Microcode Installation

New levels of peripheral microcode for NOS and NOS/BE are distributed via
CIP V10 L716. The NOS/VE operating system obtains peripheral microcode from
the common disk area, which is installed with CIP V10 L716, and does not
require the operating system deadstart tape to be modified.

Acquiring the peripheral microcode from the CIP V10 L716 tape for
installation onto the operating system is an operation separate from CIP V10
L716 installation. NOS peripheral microcode is contained on file 4 of the
CIP tape, NOS/BE peripheral microcode on file 5.   File 6 is a procedure to
aid in the installation of peripheral microcode onto the NOS/BE operating
system. The following steps describe how to install peripheral microcode
onto an operating system deadstart tape.

NOS Sites

NOS sites must update the operating system deadstart tape if it is not at
NOS 2.7.1 L716.   The following procedure installs peripheral microcode onto
an operating system tape and directs its installation.

1. Deadstart NOS.

2. Mount the CIP V10 L716 tape.

3. Enter the following commands at the system console under DIS or from an
    interactive terminal:

    REQUEST,CIP,VSN=CIP,D=PE,F=SI,LB=KU,PO=RF.
    SKIPF,CIP,3.
    COPYBF,CIP,LGO.
    RETURN,CIP.
    COMMON,SYSTEM.
    SYSGEN,DST,SYSTEM,LGO,NEW,USERD,density.   where density is the density
                                               of the new deadstart tape
                                               (PE or GE)

These steps create a new deadstart tape containing the new peripheral microcode. The new tape is requested with a VSN of NDT. It should be assigned with the VSN,est,NDT command from the system console, where est is the EST ordinal of the tape drive where the operating system tape is written.

4. If CIP V10 L716 has not been installed to disk yet, use the process documented in the CIP V10 L716 Installation section, mentioned previously.

5. Perform a level 0 (zero) NOS deadstart with the new tape.

NOS/BE Sites

To incorporate the latest peripheral microcode from the CIP V10 L716 tape onto NOS/BE, follow the steps below:

1. Deadstart NOS/BE.

2. Mount the CIP V10 L716 tape.

3. Enter the following commands at the system console:

   n.DIS.
   REQUEST,CIP,VSN=CIP,NT,PE,NORING.
   SKIPF,CIP,5,17.
   BEGIN,,CIP.

   When this procedure terminates, all peripheral microcode used by NOS/BE is CATALOGed with ID=CWARE. The deadstart tape must now be rebuilt using the appropriate NOS/BE build job (DST1 or DST3) as described in the NOS/BE Installation Handbook.

4. If CIP V10 L716 has not been installed to disk yet, use the process documented in the CIP V10 L716 Installation section, mentioned previously.

5. Deadstart NOS/BE with the new tape.

NOS/BE UEM Installations

CIP allocates space on CYBER 8xx mainframes for EI, page tables and required CM resident binaries. In addition, DFT requires CM space for its tables. These requirements change depending on the type of mainframe, the amount of memory and the number of CPUs. The CM remaining for UEM is summarized in the following table:

Mainframe Type	CM Size x 1000B			NOS/BE Level
	8 MB	16 MB	32 MB	
810/810A/815/825/830/830A/835	2737	6735	6777	L682 or prior
	2736	6734	6776	L712
840/840A/845/850/850A/855/860	2735	6733	6777	L682 or prior
860A/870/870A	2733	6731	.6775	L712
960	N/A	N/A	N/A	L682 or prior
	2706	6704	6774	L712
990/990E/994/995E	2665*	6663*	6775*	L682 or prior
	2662*	6660*	6772*	L712

* If the mainframe has a second CPU, subtract another 1000B.

All values should be multiplied by 1000B. The first line gives the values for NOS/BE systems at level 682 or prior and the second gives values for level 712. The 32 MB size includes all systems greater than 32 MB.

General Notes / Cautions

A. It is recommended that only one CIP V10 L716 operating system deadstart device per mainframe be used, due to the retention of mainframe configuration information between deadstarts by CTI on the deadstart disk. It is not recommended to have two mainframes share a common CIP V10 L716 device.

B. Beginning with CIP V7, clearing the MRT forces a memory initialization by CTI. This is necessary because with CM RELOAD, CTI no longer writes CM (EI and the CIP directory) on recovery deadstarts. This requires that the FWA of the CIP buffer be maintained in the MRT. A message is displayed when the H option under the Utilities display is selected informing the user of the consequences of clearing the MRT.

C. The NOS/VE deadstart process in standalone mode is very sensitive to the contents of central memory. If the contents of memory are not as NOS/VE left them from a previous standalone deadstart (or not as CTI initialize mainframe left them), the NOS/VE deadstart hangs in the PP boot and no message is displayed to indicate the hang. Use the Initialize mainframe option on the Utilities display after changing memory, page size, or maintenance activities, to avoid such hangs.

D. After performing any physical (hardware) mainframe reconfiguration, the mainframe reconfiguration table (MRT) must be cleared prior to an operating system load. After the MRT is cleared, any logical (CTI) reconfiguration information must be reentered. The steps required to clear the MRT are as follows:

1. Deadstart from the CIP V10 L716 disk.

2. At the CIP V10 L716 Initial Options display, enter a U (Utilities).

3. At the Utilities display, enter an H (clear the mainframe reconfiguration table). The following messages are displayed:

            CLEARING THE MRT WILL CAUSE THE
            FOLLOWING ITEMS ON THE NEXT
            DEADSTART,

            ALL MAINFRAME MEMORIES WILL
            BE INITIALIZED FOR OS LOADS.

            CM RELOAD FROM EDD TAPE OPTION
            WILL NOT BE AVAILABLE.

        (CR) TO CONTINUE

4. Enter a (CR).

The MRT is now cleared and all previous reconfiguration entries are deleted. These include all the items specified in the CYBER Initialization Package (CIP) User's Handbook, revision M (60457180).

E. When displaying or entering memory while using MDD with a hexadecimal address that begins with the hex digits AD, the user must enter the parameter name. For example, to display the contents of byte AD(16), enter the command DB AD=AD.

F. LDS (long deadstart) must be run before CTI power-on initialization can execute. Running LDS ensures good parity in location 7777B of all PPs. On a CYBER 170-815/825, LDS fails with status summary errors on the first run after a power-on. A second execution clears the errors.

G. MDD mode of SCI is designed to allow an analyst to observe the condition of a mainframe before NOS/VE begins its initialization routines. For SCI to begin the deadstart of NOS/VE, the user should press the F7 key on a CC634B console. If a console other than a CC634B is used, the operator should enter an RS (RECORD SEPARATOR = 1E hexadecimal) and a lower case w. This is true regardless of the origin port of the deadstart or the port that MDD is to drive.

H. On a CYBER 835, when MDD is initiated at deadstart for standalone NOS/VE, the F7 key may not correctly initiate the NOS/VE deadstart. When this problem occurs, the operator sees only the MDD banner on the MDD console (or a garbled MDD banner). The operator should enter an F7 followed by a lower case w to continue deadstart.

I.   When using dual state, if you deadstart NOS/BE on a dual CPU CYBER 870 or 995, a false (218) FATAL CPU1 ERROR is received in the CERFILE which is also displayed on the NOS/VE console when that system is deadstarted. This error message does not prevent NOS/VE from using the CPU, thus the message can be ignored. To avoid having the error message appear at all, obtain PSR NBOE611 from SOLVER and install it in your NOS/BE system.

J.   When using a CMTS (698) tape drive, an alternate deadstart does not work on the first attempt (PSR CTIA568). The alternate deadstart does work on the second attempt.

K.   When switching from using dual state to standalone NOS, CIP V10 L716 must be reinstalled with an initial installation to ensure the proper level of SCI is installed.

L.   When installing the NOS/VE boot programs for NOS/VE 1.4.1 L716, the NOS/VE 1.4.1 L716 deadstart tape must be used. If the CIP V10 L716 tape is used, no warning message is issued stating that the NOS/VE boots are not installed until NOS/VE 1.4.1 L716 operating system deadstart is attempted.

M.   Beginning with CIP V9 L700, CIP no longer supports NOS/VE systems that were released prior to NOS/VE 1.2.2 L678.

N.   Beginning with NOS/VE 1.4.1, NOS/VE supports the capability of disabling CPU elements, in a dual CPU environment, while the system is executing on-line. CIP currently does not provide a user interface to clear the CPU down status via CTI. The action required to clear this status is to clear the MRT on the CIP disk. See item D in this section for a description on how to clear the MRT.

O.   Beginning with CIP V10 L716, the 2K page size is not supported on CYBER 960/962 or 992/994 type mainframes.

P.   If your site installs CIP V10 L716 on a CYBER 962/992, you must use NOS/VE 1.4.1 L716. The message NOS/VE DEADSTART REQUIRED is returned if you attempt to use NOS/VE 1.3.1 L710.

Q.   On CYBER 962/992 after L716 console software installation please destroy L710 console software. It is obsolete and should never be used.

R.   A problem exists with EDD on multireel dumps that EDD overwrites any predefined label with its own label on the second and third reels of tape. This problem is scheduled to be fixed with the next CIP release.

MSL Notes/Cautions

A. Users should read the MSL15X Reference Manual (60456530) before attempting to use MSL products on the CIP V10 L716 release.

B. Microfiche program listings of CTI, microcode, SCI, SCD, MDD, DFT, and EI are available at the discretion of the District Technical Operational Support (TOS) managers or the Country Central Office.

C. CMSE reserves certain channels (including the channels numbered identical to those of the monitor PP), the display driver PP, and the PP communications channel. These are defined by initial CMSE display items 6 and 7. These channels and PPs may be redefined before proceeding with the loading of CMSE to allow diagnostics to run on peripheral equipment connected to them.

D. Some MSL diagnostics use channels to communicate between PPs. If one of these diagnostics is loaded into PP 10, CMSE hangs.

E. Caution must be exercised if command buffers that call CONFIG are changed. CONFIG modifies command buffers by fixed line numbers.

F. Deleting DEMOT's OUTPUT files (*DP,fn command), or any other file created without a 77 table (such as the flaw map from FMU), results in the error message PRFX TABLE MISMATCH appearing in the keyboard area error/message line. Although the file was deleted and the error message can be cleared with no need to retry the command, the disk space used by such a file is not released by CMSE. If a SRT FULL situation is encountered, CIP V10 L716 requires reinstallation using the update installation option.

G. The memory tests generally do not execute properly if CMSE is using central memory for communication.

H. If you are bringing up CMSE from tape after an initial power-on of a CYBER 810, 810A, 815, 815S, 825, 825S, 830 or 830A, you must clean up central memory before executing any reads or writes.

Execute these CMSE commands:

```
CX,M         master clear CMC
CE,I         clear IOU errors
CE,M         clear memory errors
ER,M,20,0    clear memory environment control register
ER,M,21,0    clear memory bounds register
```

(If you are deadstarting from disk, use CTI's U-I-M path.)

I. If the 834/836 disk subsystem is down on a CYBER 170-815/825 or CYBER 810A/830A and you are forced to execute from tape, it is recommended that the program DPDS be used to isolate the failures. Functionally, DPDS is identical to the DEMOT programs FSD and DTI. The advantage of using DPDS is that less time is required to load and execute.

J. A problem currently exists where NOS/VE may destroy CIP V10 L716 when CIP is installed to an 844 disk and is subsequently used as the CIP device by NOS/VE. Correction to CIP is planned when a determination of the problem has been made.

K. To run the I4 (CIO) PP based diagnostics, central memory has to be enabled at the initial CMSE display by entering 8.3 (parameter change). The diagnostics do not run without CM enabled. Refer to Service Bulletin 6945. The diagnostics that are affected are:

    o CCA4 - 170 DMA (CIO) channels
    o ISI4 - Intelligent Subsystem Interface (ISI) channels
    o IPI4 - Intelligent Peripheral Interface (IPI) channels
    o HYDR - DMA enhanced ISI channel adapter to 887 disk test
    o UESM - ESM/STORNET monitor
    o UHYD - ISI channel off-line monitor of 887 disk in-line test
    o DEMOT diagnostics (CIO)

    Note: The 170 DMA IOU diagnostic CCA4 leaves the CIO IOU in a state that the DEMOT diagnostics can't use. A deadstart followed by a U-I-M sequence corrects the problem.

Appendix A

Mainframe/Peripheral Microcode and FCA Index Levels

Mainframe Microcode

Mainframe System Type	Microcode Version	Mainframe System Type	Microcode Version
CYBER 180-810/830	15	CYBER 810A/830A	15
CYBER 170-815/825	15	CYBER 840A	09
CYBER 170/180-835	16	CYBER 850A	12
CYBER 180-840	09	CYBER 860A	11
CYBER 170/180-845	11	CYBER 870A	11
CYBER 180-850	12	CYBER 960/962-11	05**
CYBER 170/180-855	10	CYBER 960/962-31	05**
CYBER 180-860	11	CYBER 992	21**
CYBER 180-990/995	21	CYBER 994	21**

Peripheral Microcode

These are the versions of peripheral microcode furnished on the CIP V10 L716 tape and the current versions with which CIP was tested.

Name	Version	Description
MA401	08	844FT disk peripheral microcode
MA454	04	FSC disk peripheral microcode
*MA462	06	ISD disk adapter peripheral microcode
*MA464	10	895 disk peripheral microcode
MA466	03	5870 NIP peripheral microcode
MA710	13	844HT disk peripheral microcode
MA721	12	885/FMD disk peripheral microcode
MA722	03	885/FMD DEMA disk peripheral microcode
**MB301	012	IPI tape peripheral microcode
*MB401	04	FSC tape peripheral microcode
MB434	14	66X tape peripheral microcode
MB465/CW63X	04	639 ISMT tape control module peripheral microcode
*MB466	03	7990 mass storage subsystem peripheral microcode
*MB467	02	698 CMTS tape peripheral microcode
MD422	07	834 disk diagnostics
MD424	03	836 disk diagnostics
MH422	07	834 disk COS
MH424	03	836 disk COS
MH426	08	9853 disk COS

* Changed with the CIP V10 L716 release when compared to CIP V9 L700.
** New with the CIP V10 L716 release when compared to CIP V9 L700.

Field Change Announcement (FCA) Index Levels

FCA plug and play index levels are documented on the FCA sheet distributed with CIP V10 L716.

Appendix B

PSR List

The following PSR IDENTS have been added to CIP V10 L716 since the CIP V9 L700 release:

CIPA142	CIPA145	CIPA153	CIPA155	CIPA156	CIPA161	
CTIA517	CTIA521	CTIA522	CTIA523	CTIA525	CTIA527	CTIA528
CTIA529	CTIA530	CTIA532	CTIA533	CTIA535	CTIA536	CTIA537
CTIA539	CTIA540	CTIA541	CTIA542	CTIA549	CTIA550	CTIA551
CTIA552	CTIA553	CTIA554	CTIA556	CTIA558	CTIA559	CTIA560
CTIA561	CTIA562	CTIA565	CTIA566	CTIA567	CTIA569	CTIA570
CTIA572	CTIA573	CTIA575	CTIA576	CTIA578	CTIA579	CTIA585
CTIA588	CTIA590	CTIA594	CTIA595	CTIA596	CTIA599	CTIA600
CTIA601	CTIA604	CTIA607	CTIA608	CTIA609	CTIA611	CTIA613
CTIA614	CTIA616	CTIA617	CTIA619	CTIA620	CTIA621	CTIA622
CTIA623	CTIA625	CTIA626	CTIA631	CTIA632	CTIA633	CTIA634
CTIA636	CTIA637	CTIA638	CTIA640	CTIA644	CTIA646	CTIA649
CTIA650	CTIA652	CTIA653	CTIA655	CTIA660	CTIA661	CTIA662
CTIA663	CTIA664	CTIA665	CTIA669	CTIA673	CTIA676	CTIA677
CTIA687						
DFTA032	DFTA059	DFTA115	DFTA120	DFTA129	DFTA135	DFTA139
DFTA140	DFTA141	DFTA142	DFTA143	DFTA145	DFTA146	DFTA149
MSLA631	MSLA787	MSLA798	MSLA825	MSLA829	MSLA842	MSLA846
MSLA848	MSLA849	MSLA850	MSLA851	MSLA853	MSLA854	MSLA855
MSLA856	MSLA857	MSLA858	MSLA859	MSLA860	MSLA861	MSLA862
MSLA864	MSLA864	MSLA865	MSLA866	MSLA867	MSLA869	MSLA872
MSLA873	MSLA876	MSLA877	MSLA878	MSLA879	MSLA880	MSLA883
MSLA884	MSLA889	MSLA892	MSLA897	MSLA900	MSLA901	MSLA903
MSLA905	MSLA906	MSLA909	MSLA910	MSLA911	MSLA914	MSLA916
MSLA917	MSLA918	MSLA919	MSLA921	MSLA925	MSLA926	MSLA927
MSLA928	MSLA929	MSLA930	MSLA931	MSLA932	MSLA933	MSLA934
MSLA935	MSLA937	MSLA940	MSLA944	MSLA945	MSLA946	MSLA947
MSLA948	MSLA950	MSLA953	MSLA954	MSLA956	MSLA959	MSLA968
MSL0628	MSL0631					
MSMA344	MSMA413	MSMA432	MSMA489	MSMA490	MSMA491	MSMA494
MSMA495	MSMA496	MSMA497	MSMA498	MSMA499	MSMA500	MSMA501
MSMA502	MSMA503	MSMA504	MSMA505	MSMA506	MSMA507	MSMA510
MSMA512	MSMA514	MSMA515	MSMA516	MSMA520	MSMA523	MSMA524
MSMA525	MSMA531	MSMA532	MSMA533	MSMA534	MSMA535	MSMA540
MSMA541	MSMA544	MSMA545	MSMA547	MSMA548	MSMA549	MSMA550
MSMA551	MSMA553	MSMA554	MSMA555	MSMA561	MSMA562	MSMA565
MSMA566	MSMA567	MSMA568	MSMA569			
NVOP268	NVOQ583	NVOQ679	NVOQ686	NVOQ968	NVOR103	NVOR070
NVOR181	NVOR315	NVOR349	NVOR355	NVOR483	NVOR670	NVOR746
NVOR859	NVOR870	NVOR878	NVOR895	NVOR944	NVO3376	NVO4043

Appendix C

File 7 Installation Instructions

Contents

File 7 on all CIP V10 L716 tapes with MSL contains the following programs:

```
FFU01-FFU99A
FLM00-FLM99C
FSM00-FSM99A
F4401-F4499A
F7X00-F7X99A
F8801-F8899A
PDP01-PDP99B
BCX-9X6
MY8-9VJ
MY9-9VT
LDC-9V5
MTC-9UP
S2C-8JU
SCX
CID-7AZ
MYP-9VX
PAGE2         CYBER 960/990/994/995 only
STAT2         CYBER 960/990/994/995 only
TASE2         CYBER 960/990/994/995 only
TIVE2         CYBER 960/990/994/995 only
PAGE065       CYBER 170/180-845/855 and CYBER 840/840A through 870/870A only
STAT065       CYBER 170/180-845/855 and CYBER 840/840A through 870/870A only
TASE065       CYBER 170/180-845/855 and CYBER 840/840A through 870/870A only
TIVE065       CYBER 170/180-845/855 and CYBER 840/840A through 870/870A only
GENM          CYBER 170/180-845/855 and CYBER 840/840A through 870/870A only
CACHE-CACHEB  CYBER 170/180-845/855 and CYBER 840/840A through 870/870A only
TRPEM-TRPEB   CYBER 170/180-845/855 and CYBER 840/840A through 870/870A only
VAUTO-VAUTOB  CYBER 170/180-845/855 and CYBER 840/840A through 870/870A only
```

Installation Instructions

To copy file 7 to another tape for installation by TDX, refer to the NOS or NOS/BE instructions below.

NOS Instructions

```
JOB.
USER,user,pw,family.
CHARGE,charge,project.
REQUEST,CIP,VSN=CIP,NT,PE,F=SI,LB=KU,PO=R.
REQUEST,COPY,VSN=COPY,NT,PE,F=SI,LB=KU,PO=W.
SKIPF,CIP,6.
COPYBF,CIP,COPY.
```

NOS/BE Instructions

```
JOB/account
REQUEST,CIP,VSN=CIP,NT,PE,NORING.
REQUEST,COPY,VSN=COPY,NT,PE,RING.
SKIPF,CIP,6,17.
COPYBF,CIP,COPY.
```

Refer to the MSL15X Reference Manual for a description of TDX.

Appendix D

CC598A/CC598B Console Software

Introduction

The CC598A/CC598B console software was installed on the hard disk at the factory prior to shipment. Applying power to the console automatically executes this software.

Reinstallation

On CYBER 962/992 after L716 console software installation please destroy L710 console software. It is obsolete and should never be used.

Should it become necessary to reinstall the console software, refer to the CDC 19003 System Console Hardware Operation/Maintenance Guide, publication number 60463610 revision D.

Problem Reporting

Problems and requests for software enhancements should be submitted through the SOLVER database using the product identifier CSW.

Console Software Notes/Cautions

When entering CC598A/CC598B console or remote passwords under either the console MODIFY REMOTE ACCESS PASSWORD or the MODIFY CONSOLE PASSWORD displays, be careful not to enter non-alphanumeric characters. The console accepts them, however remote access is denied if the password contains a non-alphanumeric character.

When reinstalling the CIP to the hard disk it is necessary to have both the tape drive and the hard disk on cluster 0 of the I4 IOU.

CONTROL DATA
CORPORATION

PERIPHERAL
FIELD CHANGE ANNOUNCEMENTS
PRODUCT 895/7165

NO.   20298680
REV: 48 (N)
PAGE 3 OF 3
DATE: 12/01/88

19-CONFIGURATION MANAGEMENT-88

F C A I N D E X	EQUIP AFFEC	SERIES CODE FROM	SERIES CODE TO	FCO INFORMATION DESCRIPTION & SYMPTOM	PAK TYPE	FCO NO	CO-REQ FCO NO	PRE-REQ FCO NO	SYS INST HRS	ARIES MESS-AGE		REFERENCE THE APPROPRIATE SFCA TO DETERMINE SYSTEM PLUG AND PLAY LEVELS	LINE ID
8	FR205A	17	18	CYBER UDI CHANGE	N/A	ECO ONLY	N/A	N/A	0.5	F81020			39
8	FV720A	13	14	CYBER UDI CHANGE	"	"	"	"	"	"			40
9	FR205A	18	19	FIPS UDI CHANGE	"	"	"	"	"	F81021			41
9	FV720A	14	15	FIPS UDI CHANGE	"	"	"	"	"	"			42
9	FR205B	---	01	CYBER CH CPLR	* * * * * * * B A S E L I N E * * * * * * *								43
9	FV720B	---	01	CYBER CH CPLR OPTION	* * * * * * * B A S E L I N E * * * * * * *								44
9	FR205B	01	02	MAINT. MOD. CHANGE	N/A	ECO ONLY	N/A	N/A	0	F81640			45
10	MF126H	13	14	FUNCTIONAL FLOPPY DISK CHANGE	"	DJ18045	"	"	"	F82112			46
11	MA464D	08	09	CCC CONTROLWARE CHANGES INCLUDED IN CIP9 L700	"	ECO ONLY	"	"	N/A	F82113			47
12	MA464D	09	10	CCC CONTROLWARE CHANGES INCLUDED IN CIP10 L716	"	"	"	"	"				48 *

ORIGINATOR(PROG.MGR.)	MGR. PA AHPD	MGR. PA CDED	GEN. MGR. AHPD	GEN. MGR. CDD	VICE PRESIDENT CDED

(*) — Denotes Change
N/A — Not Applicable
(") — S~~~ ~~ previous entry

For a complete system view, reference
appropriate Field Change Announcements
(FC~~~~)~ ~~~~~~~~ ~~~~~~~~~ ~~~~~~

CONTROL DATA
CORPORATION

19-CONFIGURATION MANAGEMENT-88

PERIPHERAL
FIELD CHANGE ANNOUNCEMENTS
PRODUCT 698 (Cyber Magnetic Tape Subsystem)

NO.   22110266
REV: 31 (G)
PAGE   2 OF 2
DATE: 11/05/87

FCA INDEX	EQUIP AFFEC	SERIES CODE FROM	TO	DESCRIPTION & SYMPTOM	PAK TYPE	FCO NO	CO-REQ FCO NO	PRE-REQ FCO NO	SYS INST HRS	ARIES MESS-AGE	REFERENCE THE APPROPRIATE SFCA TO DETERMINE SYSTEM PLUG AND PLAY LEVELS	LINE ID	
1	3PCWC-0HI	N/A	N/A	FIELD PWR CONV KIT 380 TO 220	* * * * * * * * * * *B A S E L I N E * * * *							20	
1	3PCWC-1HI	N/A	N/A	FIELD PWR CONV KIT 220 TO 380	* * * * * * * * * * *B A S E L I N E * * * *							21	
1	YA323A	N/A	N/A	INSTALL KIT	N/A	ECO ONLY	N/A	N/A	N/A	F80507		22	
2	FR205A	17	18	CYBER UDI CHANGE	"	"	"	"	0.5	F81020		23	
2	FV720A	13	14	CYBER UDI CHANGE	"	"	"	"	"	"		24	
3	FR205A	18	19	FIPS UDI CHANGE	"	"	"	"	"	F81021		25	
3	FV720A	14	15	FIPS UDI CHANGE	"	"	"	"	"	"		26	
3	FR205B	---	01	CYBER CHNL CPLR	* * * * * * * B A S E L I N E * * * * * * *							27	
3	FV720B	---	01	CYBER CHNL CPLR OPTION	* * * * * * * B A S E L I N E * * * * * * *							28	
3	FR205B	01	02	MAINT. MOD. CHANGE	N/A	ECO ONLY	N/A	N/A	0	F81640		29	
3	308VC 0HI	C	D	MAG TAPE UNIT 60HZ	"	CA 49277	"	"	1.0	F81839		30	*
3	308WC 0HI	C	D	MAG TAPE UNIT 50HZ	"	"	"	"	1.0	"		31	*

ORIGINATOR(PROG.MGR.)	MGR. PA AHPD	MGR. PA CDD	MGR. PA CDED	GEN. MGR. AHPD	GEN. MGR. DEV ENG	VICE PRESIDENT CDED
K.E. SWANSON	J.R. RUBLE	N/A	J.E. BERGSTROM	A.H. HARTLEY	R.A. MOE	D.L. SLAIS

(*) — Denotes Change
N/A — Not Applicable
(") — Same as previous entry

For a complete system view, reference
appropriate Field Change Announcements
(FCA's): Mainframe – Peripheral – System.

CONTROL DATA
CORPORATION

MAINFRAME
FIELD CHANGE ANNOUNCEMENTS
PRODUCT 960-11, 31,   + OPTIONS

NO. 10302250
REV. 26 (G)
PAGE 2 OF 2
DATE 12/01/88

19-CONFIGURATION MANAGEMENT-88

FCA INDEX	EQUIP AFFEC	SERIES CODE FROM	SERIES CODE TO	DESCRIPTION & SYMPTOM	PAK TYPE	FCO NO	CO-REQ FCO NO	PRE-REQ FCO NO	SYS INST HRS	ARIES MESS-AGE	CIP	CML	NOS 2.X	NOS BE	NOS VE	LINE NO
1	GD311A	N/A	01	400HZ PWR UNIT			***	BASELINE		****	V9 L704C	L710	V2.6.1 L710	N/A	V1.3.1 L710**	19
1	CG121A	N/A	01	CIP KIT 960-11/31/32			***	BASELINE		****	"	"	"	"	"	20
1	DU208A	N/A	01	960 CABLE KIT			***	BASELINE		****	"	"	"	"	"	21
1	AT478B	01	02	SHORT PATH WHEN USED ON 960	1JEH 1JVH	CA 50176	N/A	N/A	0.1	N/A	"	"	"	"	"	22
1	AT481B	01	02	SHORT PATH WHEN USED ON 960	"	"	"	"	"	"	"	"	"	"	"	23
1	N/A	N/A	N/A	CML L716 RELEASE	N/A	N/A	N/A	N/A	N/A	"	"	L716	"	"	N/A	24
1	AT509A	01	02	EXT. CLOCKS MISALIGNED	"	CA 49825	"	"	0.5	"	"	"	"	"	V1.3.1 L710**	25
1	CG121A	01	02	CIP 960 V10 L716 RELEASE	"	N/A	"	"	N/A	"	V10 L716	"	"	"	"	26 |*

ORIGINATOR(PROG.MGR.)	MGR. PA AHPD	MGR. PA CDD	MGR. PA CDED	GEN. MGR. AHPD	GEN. MGR. CDD	VICE PRESIDENT CDED
J.E.BERGSTROM	M.A.REKER		J.D.KROESCH	W.B.WILLIAMSON		T.J.RILEY

(*) – Denotes Change
(**) – BCU L710AA is required.
N/A – Not Applicable
(") – Same as previous entry

For a complete system view, reference
appropriate Field Change Announcements
(FCA's): Mainframe – Peripheral – System

CONTROL DATA
CORPORATION

19-CONFIGURATION MANAGEMENT-88

FIELD CHANGE ANNOUNCEMENTS
PRODUCT CDCNET 26XX

NO. 53595895
REV: 48 (M)
PAGE 3 OF 3
DATE: 11/21/88

FCA INDEX	EQUIP AFFEC	SERIES CODE FROM	TO	DESCRIPTION & SYMPTOM	PAK TYPE	FCO NO	CO-REQ FCO NO	PRE-REQ FCO NO	SYS INST HRS	ARIES MESS-AGE	MTI	MDI	TDI	NDI	RTI	LINE ID
3	700UP-6HI	N/A	N/A	CDC 537 PRINTER 120 VOLTS AC	* * *	* * * * * * * BASE LINE * * * * * * *					03	N/A	03	N/A	03	37
3	700UP-5HI	N/A	N/A	CDC 537 PRINTER 220 VOLTS AC	* * *	* * * * * * * BASE LINE * * * * * * *					"	"	"	"	"	38
3	DY226A	10	11	BUS PARITY ERROR	MC1	CA 49087	N/A	N/A	.25	F81320	"	03	N/A	"	N/A	39
4	N/A	N/A	N/A	DCNS 1.2.5 L688 CDCNET RELEASE	N/A	N/A	"	"	N/A	F81519	04	04	04	04	04	40
4	DY267A	N/A	01	8-PORT RS-232C ASYNC LIM	* * *	* * * * * * * BASE LINE * * * * * * *					"	N/A	"	N/A	"	41
4	N/A	N/A	N/A	DCNS 1.3L700 CDCNET RELEASE	N/A	N/A	N/A	N/A	N/A	N/A	"	04	"	04	"	42
4	DY229B	01	02	CAC ERRORS	4Part LIM	CA 49717	"	"	.25	"	"	"	"	"	"	43
4	700UP-6HI	01	02	PROM CHANGE	N/A	CA 49626	"	"	.5	"	"	N/A	"	N/A	"	44
4	700UP-5HI	01	02	PROM CHANGE	"	"	"	"	.5	"	"	"	"	"	"	45
4	DY245A	06	07	SHORT POWER-ON DIAGNOSTICS	MPB	CA 49711	"	"	.25	"	"	"	"	"	"	46
5	DY226A	11	12	I4C CHANNEL ERROR	MCI	CA 49716	"	"	"	N/A	"	"	"	"	"	47
5	N/A	N/A	N/A	DCNS 1.4 L716 CDCNET RELEASE	N/A	N/A	N/A	N/A	N/A	N/A	05	05	"	"	"	48 *

ORIGINATOR(PROG.MGR.)	MGR. PA AHPD	MGR. PA CDD	MGR. PA CDED	GEN. MGR. AHPD	GEN. MGR. CDD	VICE PRESIDENT CDED
W. C. Veazie	D. B. Folsom		J. D. Kroesch	W. B. Williamson	T. R. Kirsch	T. J. Riley

(*) - Denotes Change
N/A - Not Applicable
(") - Same as previous entry

For a complete system view, reference
appropriate Field Change Announcements
(FCA's): Mainframe - Peripheral - System.

CONTROL DATA CORPORATION

CONFIGURATION MANAGEMENT

PERIPHERAL FIELD CHANGE ANNOUNCEMENT PRODUCT 887 (IHD)

NO. 1029729B
REV. 14 (A)
PAGE 1 OF 1
DATE 3/24/88

FCA INDEX	EQUIP AFFEC	SERIES CODE FROM	SERIES CODE TO	DESCRIPTION & SYMPTOM	PAK TYPE	FCO NO	CO-REQ FCO NO	PRE-REQ FCO NO	SYS INST HRS	ARIES MESSAGE	RESULTANT PRODUCT INDICES	LINE ID
1	PA601A	N/A	01	50 HZ. DRIVE	• •	• B	A S E	L I N	E • •	• • •		1
1	PA601B	N/A	01	60 HZ. DRIVE	• •	• B	A S E	L I N	E • •	• • •		2
1	GH488A	N/A	01	50 HZ. CABINET	• •	• B	A S E	L I N	E • •	• • •		3
1	GH488B	N/A	01	60 HZ. CABINET	• •	• B	A S E	L I N	E • •	• • •		4
1	PA601A	01	16	BLOCK POINT	N/A	ECO	N/A	N/A	N/A	N/A		5
1	PA601B	01	16	BLOCK POINT	N/A	ECO	N/A	N/A	N/A	N/A		6
1	GH488A	01	ALL	BLOCK POINT	N/A	ECO	N/A	N/A	N/A	N/A		7
1	GH488B	01	ALL	BLOCK POINT	N/A	ECO	N/A	N/A	N/A	N/A		8
2	PA601A	16	17	DUAL CHANNEL TO HOST	BFC	DJ 32503	DJ 32497	N/A	1.0	N/A		9
2	PA601B	16	17	DUAL CHANNEL TO HOST	BFC	DJ 32503	DJ 32497	N/A	1.0	N/A		10
2	PA601A	17	ALL	BLOCK POINT	N/A	ECO	N/A	N/A	N/A	N/A		11
2	PA601B	17	ALL	BLOCK POINT	N/A	ECO	N/A	N/A	N/A	N/A		12
2	PA601A	19	ALL	MINOR CODE CHANGE REPLACES DJ32503	N/A	DJ 32537	DJ 32497	N/A	1.0	N/A		13
2	PA601B	19	ALL	MINOR CODE CHANGE REPLACES DJ32503	N/A	DJ 32537	DJ 32497	N/A	1.0	N/A		14

REFERENCE THE APPROPRIATE SFCA TO DETERMINE SYSTEM PLUG AND PLAY LEVELS

ORIGINATOR (PROD.MGR)	MGR. QA AHPD	MGR. ENG CDED	MGR. PA CDED	GEN. MGR. AHPD		VICE PRESIDENT CDED
J. L. BACHMAN	D. B. FOLSOM	R. A. MOENACH	J. D. KROESCH	W.B. WILLIAMSON		T. J. RILEY

(•) – DENOTES CHANGE
N/A – NOT APPLICABLE
(") – SAVE AS PREVIOUS ENTRY

FOR A COMPLETE SYSTEM VIEW, REFERENCE
APPROPRIATE FIELD CHANGE ANNOUNCEMENTS
(FCA'S); MAINFRAME – PERIPHERAL – SYSTEM.

CONTROL DATA
CORPORATION

19-CONFIGURATION MANAGEMENT-88

PERIPHERAL
FIELD CHANGE ANNOUNCEMENTS
PRODUCT 7990
MASS STORAGE SYSTEM

NO.   22697034
REV: 57 (L)
PAGE   3 OF 4
DATE: 10/25/88

F C A I N D E X	EQUIP AFFEC	SERIES CODE FROM	TO	FCO INFORMATION DESCRIPTION & SYMPTOM	PAK TYPE	FCO NO	CO-REQ FCO NO	PRE-REQ FCO NO	SYS INST HRS	ARIES MESS-AGE	REFERENCE THE APPROPRIATE SFCA TO DETERMINE SYSTEM PLUG AND PLAY LEVELS	L I N E I D
3	FR205A	13	14	CAPACITOR POLARITY	N/A	ECO ONLY	N/A	N/A	0	F79435		39
3	FR205A	14	15	REDUCE POWER REQUIREMENT	"	"	"	"	"	F79436		40
3	FR205A	15	16	698/FR205/FV720	"	"	"	"	"	F79437		41
3	FV720A	12	13	698/FR205/FV720	"	"	"	"	"	"		42
4	BF706A	04	05	VENDOR MICROCODE CHANGE – VERSION M862V1.TCD	"	CA 48070	"	"	0.5	F80619		43
4	BF706B	04	05	VENDOR MICROCODE CHANGE – VERSION M862V1.TCD	"	CA 48070	"	"	0.5	"		44
5	FR205A	17	18	CYBER UDI CHANGE	"	ECO ONLY	"	"	0	F81020		45
5	FV720A	13	14	CYBER UDI CHANGE	"	"	"	"	"	"		46
6	FR205A	18	19	FIPS UDI CHANGE	"	"	"	"	"	F81021		47
6	FV720A	14	15	FIPS UDI CHANGE	"	"	"	"	"	"		48
6	FR205B	----	01	CYBER CH CPLR	* * * * * * * B A S E L I N E * * * * * * * *							49
6	FV720B	----	01	CYBER CH CPLR OPTION	* * * * * * * B A S E L I N E * * * * * * * *							50
6	FR205B	01	02	MAINT. MOD. CHANGE	N/A	ECO ONLY	N/A	N/A	0	F81640		51
7	MB466D	01	02	CYBER CH CPLR CONTROLWARE	"	CA 48275	"	"	2.0	F82149		52
7	BF706A	05	06	VENDOR MICROCODE CHANGE VERSION M862VX.PF2	"	"	"	"	"	"		53
7	BF706B	05	06	VENDOR MICROCODE CHANGE VERSION M862VX.PF2	"	"	"	"	"	"		54
8	MB466D	02	03	CYBER CHANNEL COUPLER CONTROLWARE	"	CA 50015	"	CA 48275	"	----		55 *
8	BF706A	06	07	VENDOR MICROCODE CHANGE VERSION M862SD.PF3	"	"	"	"	"	----		56 *

ORIGINATOR (PROG.MGR.)	MGR. PA AHPD	MGR. PA CDD	MGR. PA. CDED	GEN. MGR. AHPD	GEN. MGR. DEV/ENGRG	VICE PRESIDENT CDED
K.E. Swanson	R.E. Chun	N/A	J.E. Bergstrom	A.H. Hartley	R.A. Moe	D.L. Slais

(*) - Denotes Change
N/A - Not Applicable
(") - Same as previous entry

For a complete system view, reference
appropriate Field Change Announcements
(FCA's): Mainframe - Peripheral - System.

CONTROL DATA
CORPORATION

19-CONFIGURATION MANAGEMENT-88

PERIPHERAL
FIELD CHANGE ANNOUNCEMENTS
PRODUCT 7990
MASS STORAGE SYSTEM

NO.   22697034
REV: 57 (L)
PAGE   4 OF 4
DATE: 10/25/88

FCA INDEX	EQUIP AFFEC	SERIES CODE FROM	SERIES CODE TO	DESCRIPTION & SYMPTOM	PAK TYPE	FCO NO	CO-REQ FCO NO	PRE-REQ FCO NO	SYS INST HRS	ARIES MESS-AGE	REFERENCE THE APPROPRIATE SFCA TO DETERMINE SYSTEM PLUG AND PLAY LEVELS	LINE ID
8	BF706B	06	07	VENDOR MICROCODE CHANGE VERSION M862SD.PF3	N/A	CA 50015	N/A	CA 48275	2.0	----		57 *

ORIGINATOR(PROG.MGR.)	MGR. PA AHPD	MGR. PA CDD	MGR. PA. CDED	GEN. MGR. AHPD	GEN. MGR. DEV/ENGRG	VICE PRESIDENT CDED
K.E. Swanson	R.E. Chun	N/A	J.E. Bergstrom	A.H. Hartley	R.A. Moe	D.L. Slais

(*) - Denotes Change
N/A - Not Applicable
(") - Same as previous entry

For a complete system view, reference
appropriate Field Change Announcements
(FCA's): Mainframe - Peripheral - System.

ADDENDUM

for

CIP 960/962/992/994 V10 L716A

Introduction

After the release of CIP 960/962/992/994 V10 L716, which you may have received previously, some problems were found which requires the release of this CIP.

o CTI is passing the free running counter incorrectly at deadstart on CYBER 960, 962, 992, 994. As a result, the operating system date and time may be inaccurate.

o DFT needs to master clear the CPU on CYBER 960/962 when a deadman timeout occurs.

o CTI locks up on CYBER 960/962 when the CTI U-I commands are done if certain hardware failures have occured.

These problems are corrected with the L716A release. The orginal CIP 960/962/992/994 L716 should no longer be used.

Installation

The new CIP V10 L716A can be installed, using the instructions contained in the SRB part number SMD800436, with an UPDATE or INITIAL install. Use of these options is documented in the CYBER Initialization Package (CIP) User's Handbook, part number 60457180 revision M.

Control Data Corporation is sorry for any inconvenicence this problem may have caused you.

ADDENDUM

for

CIP V10 960/962
L716A

Problem

On CYBER 960/962 the tests RFST, DEBUG, CRPT, BYTE, NUMR, and EDIT may report failures if PIT is enabled.

Solution

Since PIT interrupts are not being used by the operating system, it has been decided to stop testing with PIT. The command buffers will be modified for the next release.

ADDENDUM

for

CIP 960/962/992/994 V10 L716A

Introduction

After the release of CIP 960/962/992/994 V10 L716, which you may have received previously, some problems were found which requires the release of this CIP.

o CTI is passing the free running counter incorrectly at deadstart on CYBER 960, 962, 992, 994. As a result, the operating system date and time may be inaccurate.

o DFT needs to master clear the CPU on CYBER 960/962 when a deadman timeout occurs.

o CTI locks up on CYBER 960/962 when the CTI U-I commands are done if certain hardware failures have occured.

These problems are corrected with the L716A release. The orginal CIP 960/962/992/994 L716 should no longer be used.

Installation

The new CIP V10 L716A can be installed, using the instructions contained in the SRB part number SMD800436, with an UPDATE or INITIAL install. Use of these options is documented in the CYBER Initialization Package (CIP) User's Handbook, part number 60457180 revision M.

Control Data Corporation is sorry for any inconvenicence this problem may have caused you.

ADDENDUM

for

CIP V10 960/962
L716A

Problem

On CYBER 960/962 the tests RFST, DEBUG, CRPT, BYTE, NUMR, and EDIT may
report failures if PIT is enabled.

Solution

Since PIT interrupts are not being used by the operating system, it has
been decided to stop testing with PIT. The command buffers will be
modified for the next release.

ADDENDUM

for

960 and 962 Level 716B

SMD800436C

Introduction

This special release of CIP 960/962 V10 L716B is being issued to handle the hardware changes for the redesigned LMA module (JS arrays). The following features have been added:

o CTI correction to support dual CPU and page table changes.
o Mainframe microcode modification for DEBUG failures.
o DFT5 correction for CM word being cleared, 962 load device correction, and dual CPU support.
o MCT3 correction for dual CPU support.
o MDT3 correction for failures on margins.
o The programs CMEM, LMT3, SMT3, BPT3, EXCH, TRAP, FCT1, FCT5 and EME were modified to support the redesigned LMA module (JS arrays).

The changes are designed so they work on a CYBER 960/962 with or without the hardware changes installed.

Installation

The new CIP V10 L716B can be installed, using the instructions contained in the SRB part number SMD800436, as an UPDATE or INITIAL install. Use of these options is documented in the CYBER Initialization Package (CIP) User's Handbook, part number 60457180 revision M.

Notes/Cautions

Command buffers ALLMI3, ALLMI3B, INSTALL, and INSTALB shorten the execution of the diagnostic CMEM. The diagnostic CMEM can be run using the command buffers CMEM3 or CMEM3B.

If the CMSE command AR is used, the IOU PFS register 81 bit 59 (radial interface parity error) may occur or the MAC may hang while displaying the IOU maintenance registers. The problem is corrected with CIP L727 release.

To correct the problem for CYBER 960 bring up CMSE from disk and replace the CMSE routine MG4040 as follows:

1. CP,4,MG4040   load MG4040 into PP4
2. BP,4,7600   display PP4 memory at address 7600
3. EP,4,7615,5400   change location 7615 from 5457 to 5400
4. EP,4,7616,10162   change location 7616 from 10156 to 10162
5. *DP,MG4040   delete program MG4040 from CIP disk
6. *WP4,MG4040,7543,10163   write program MG4040 to CIP disk

To correct the problem for CYBER 962 bring up CMSE from disk and replace the CMSE routine MG5037 as follows:

1. CP,4,MG5037   load MG5037 into PP4
2. BP,4,7000   display PP4 memory at address 7000
3. EP,4,7007,5400   change location 7007 from 5457 to 5400
4. EP,4,7010,7343   change location 7010 from 7337 to 7343
5. *DP,MG5037   delete program MG5037 from CIP disk
6. *WP4,MG5037,6733,7344   write program MG5037 to CIP disk