

# **Non-MSL B826A CIP**

## **Software Release Bulletin (SRB)**

**This product is intended for use only as described in this document. Control Data cannot be responsible for the proper functioning of undescribed features and parameters.**

# Manual History

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SRB Level	CIP Level	Release Date
A	L803	November, 1992
B	B803A	March, 1993
C	L826	December, 1993
D	B826A	October, 1994

## Important

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Maintenance software reference manuals and microfiche are included with this SRB in the CIP field kit. Control Data strongly recommends reading this SRB in its entirety before installing CIP B826A. It is important that the CE be aware of all CIP B826A features and cautions before installing CIP.

For CYBER 960, 962, 970, 972, 992, and 994 computer systems, the CC598 console software was last updated at L803. If installing L803 console software at this time, Control Data also recommends reading the L803 CC598 Software Release Bulletin in its entirety before installing CIP.

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## Preface

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In addition to other pertinent information, this SRB describes CIP B826A enhancements and instructs how to install CIP B826A.

## Audience

The SRB is intended for the site analyst and hardware maintenance personnel.

## CIP B826A Support

Report CIP B826A problems on a Programming System Report (PSR), specifying the nature of the problem and indicating the CIP type and level number on each PSR (for example, CIP 970 B826A where 970 is the type and B826A is the level).

Report microcode problems on a Technical Action Request (TAR) form, or contact Customer Service Support at the appropriate number listed below:

1-800-345-6628 (within the United States or Canada)

1-612-482-3434 (outside the United States or Canada)

Report problems with the media or contents of the B826A CIP field kit to Software Manufacturing and Distribution (SMD). You can order replacement tapes from SMD by calling 1-612-482-3409 (if ordering a replacement tape by phone, please return the defective tape to SMD).

### NOTE

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If a tape is defective, before ordering new media, copy the defective CIP tape onto another tape via the operating system, then attempt to use the duplicate tape. Since the recovery process is more extensive on the operating system, the duplicate copy of CIP may correct the problem. If problems persist, however, order a replacement tape and return the defective CIP tape to SMD.

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## Related Software Release Bulletin

The following Software Release Bulletin, which is referenced later in this SRB, applies to CYBER 960, 962, 970, 972, 992, and 994 computer systems.

Reference Material	Publication Number
L803 CC598 Support Package SRB	SMD800745

# Introduction

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The CYBER Initialization Package (CIP) consists of hardware/software interface modules that are released on tape and must be installed on the CIP device for system operation. The CIP B826A release supports CYBER models 810, 815, 825, 830, 835, 845, 855, 870, and the CYBER 810A, 830A, 840, 840A, 850, 850A, 860, 860A, 870A, 960, 962, 970, 972, 990, 990E, 992, 994, and 995E.

## NOTE

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Before installing CIP B826A, consult your Field Change Announcement (FCA) sheet to verify that the hardware is at the appropriate level.

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## Release Levels

CIP B826A modules are released at the following levels:

Module	Level
CTI	826A
EDD/RCM	826A
DFTx/DBDx/ECRx	11 <sup>1</sup>
EI	30
MDD	13
SCI	10
SCD	05

The file structure of the CIP B826A tape is as follows:

- File 1 CIP B826A 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.

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<sup>1</sup> Interface specification 7D (I/F SPEC 7D) is also associated with this DFT level. DFT is at level 14 for CYBER 96X/97X systems.

# CIP Installation

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This section describes CIP B826A feature enhancements and the CIP installation procedure.

## Features and Enhancements

Following are brief descriptions of the CIP B826A features and enhancements.

### MH427 Peripheral Microcode

Peripheral microcode MH427, revision 15, supports the 5830 Disk Array Subsystem (DAS) at CIP B826A. Modifications to peripheral microcode MH427 for CIP B826A is as follows:

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#### NOTE

Only customers that plan to install 47444 disk drives need to install revision 15 of the MH427 microcode. Other than support for 47444 drives, no other features were added.

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- Code enhanced to support the 47444 (3.5-inch) disk drive. For additional information on this feature, refer to *47444 3.5-Inch Disk Drive Support* in chapter 12 of the L826AB BCU addendum (SMD 134624, revision B).

### MA466 Peripheral Microcode

Peripheral microcode MA466, revision 04, was modified to support newer model 4500 Xerox non-impact printers (NIP).

## Notes and Cautions

- Refer to the appropriate CYBER Initialization Package (CIP) Reference Manual for detailed information about CIP.

Publication Number	Applicable Systems
60000417	CIP Reference Manual; CYBER Models 810, 815, 825, 830; CYBER 810A, 830A Computer Systems
60000418	CIP Reference Manual; CYBER Models 835, 845, 855; CYBER 840, 850, 860 Computer Systems with IOU AB115A
60000419	CIP Reference Manual; CYBER 840A, 850A, 860A, 870A, 990, 990E, 995E; CYBER Models 845, 855; CYBER 840, 850, 860 Computer Systems with IOU AT478A/AT481A
60000420	CIP Reference Manual; CYBER 960, 970, 994 Computer Systems
60000421	CIP Reference Manual; CYBER 962, 972, 992 Computer Systems

- Control Data recommends that only one CIP B826A operating system deadstart device per mainframe be used (due to the retention of mainframe configuration information between deadstarts by CTI on the deadstart disk). Control Data also recommends that two mainframes *do not* share a common CIP B826A device.
- After performing any physical (hardware) mainframe reconfiguration activity, you must clear the mainframe reconfiguration table (MRT) prior to loading an operating system. After clearing MRT, you must reenter any logical (CTI) reconfiguration information. Use the following steps to clear the MRT:

- \_\_\_ 1. Deadstart from the CIP B826A deadstart device (deadstart disk). The Initial Options display appears.
- \_\_\_ 2. Select option U (Utilities) from the Initial Options display. The Utilities display appears.
- \_\_\_ 3. Select option H (Clear Mainframe Reconfiguration Table) from the Utilities display.

The following messages appear:

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. Press **Enter**.

This procedure clears MRT and deletes all previous reconfiguration entries. Refer also to chapter 2 of the appropriate CIP Reference manual for a description of the Clear Mainframe Reconfiguration Table menu option.

- 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, press F7 on the CC598 system console.
- When using dual state, if you deadstart NOS/BE on a dual CPU CYBER 995E, a false (218) FATAL CPU1 ERROR is sent to the CERFILE and is displayed on the NOS/VE console when the CYBER 995E is deadstarted. However, in the sense that this error message does not prevent NOS/VE from using the CPU, the message can be ignored. To eliminate the appearance of this error message, obtain PSR NB0E611 from SOLVER and install it in your NOS/BE system.
- CIP does not support tape drives configured on channels 0 or 1.



## CIP B826A Installation Procedure

The following paragraphs describe how to install CIP B826A.

### CIP B826A and Operating System Compatibility

You can install CIP B826A as released if your site is running any of the following operating system release levels on a single-IOU system. Operating systems released prior to those listed are outside the support window and may not work. Sites that use a previously released operating system do so at their own risk.

NOS/BE	1.5 L664
	1.5 L682
	1.5 L712
NOS	2.7.3 L780
	2.7.4 L797
	2.8.1 L803
	2.8.2 L826
NOS/VE	1.5.3 L765
	1.6.1 L780
	1.7.1 L803
	1.8.1 L826

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#### WARNING

Since operating systems released prior to those listed above are outside the support window, CIP B826A has not been verified with them. Sites that use CIP B826A with a previously released operating system do so at their own risk.

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### CIP B826A on Systems with Dual IOUs

Dual-IOU systems cannot be used on a dual-state system running NOS/BE unless they have installed modsets NB0E640, NB0E643, NB0E644, NB0E645, and NB0E649 which adds DFT V5 support to NOS/BE.

## CC598 Installation

For CYBER 960, 962, 970, 972, 992, and 994 computer systems, the CC598 console software was last updated at L803. If installing L803 console software at this time, you must install it before installing CIP B826A. Refer to the L803 CC598 SRB for instructions on how to install CC598 console software.

## CIP Installation

Do not install CIP when the CIP device is in use. CIP installation should be performed only when CIP has exclusive access to the CIP device 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 device, and then only for DFT access.

You may alternate between dual state and standalone, using the same PHYSICAL\_CONFIG file and configuration prolog file, by changing the state of the CIP disk to STATE=OFF when running dual state.

Install CIP B826A onto the CIP device by completing the following steps:

- \_\_\_ 1. Deadstart from the CIP B826A tape.
- \_\_\_ 2. Perform either an update or initial installation of CIP as instructed in chapter 2 of the appropriate CIP Reference manual
- \_\_\_ 3. Proceed by installing the peripheral microcode as described later in this section.

If you want to alternate between two unique levels of NOS/VE, you must first install NOS/VE boot components that match the NOS/VE system level you are about to deadstart. Use the procedure given in step 1, chapter 2 of the NOS/VE Installation Handbook to install NOS/VE boot components. You must repeat this procedure each time you deadstart a different version of NOS/VE.

## Peripheral Microcode Installation

New levels of peripheral microcode for NOS is distributed via CIP. Acquiring the peripheral microcode from the CIP B826A tape for installation onto the operating system is an operation separate from CIP B826A installation. NOS peripheral microcode is contained on file 4 of the CIP tape. The following NOS Microcode installation procedure describes how to install peripheral microcode onto a NOS operating system deadstart tape.

### NOS Microcode Installation

NOS sites must update the operating system deadstart tape if they are not at NOS 2.7.1 L716 or a later release. The following procedure installs peripheral microcode onto an operating system tape and directs its installation:

- \_\_\_ 1. Deadstart NOS.
- \_\_\_ 2. Mount the CIP B826A 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 to be written.

- \_\_\_ 4. If CIP B826A is not installed to disk yet, use the process documented in CIP Installation on the preceding page.
- \_\_\_ 5. Perform a level 0 (zero) NOS deadstart with the new tape.

### MH427 Peripheral Microcode Installation

MH427 peripheral microcode applies to CYBER models 840, 845, 850, 855, 860, and CYBER 960, 962, 970, 972, 990, 992, and 994 computer systems with a Disk Array Subsystem (DAS). However, the utility LEED,<sup>2</sup> which is required to install MH427 microcode, is provided only with the Maintenance Software Library. If you wish to update MH427 microcode, but do not have MSL, contact Customer Service Support.

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<sup>2</sup> LEED is described within the CYBER Systems Peripheral Diagnostic Reference Manual (publication number 60000144).

# Configuration Management

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This section lists the mainframe microcode, peripheral microcode, and FCA index levels provided on the CIP B826A tape.

## Mainframe Microcode Levels

The mainframe microcode level for CIP B826A is as follows:

Mainframe System Type	Release Level	Mainframe System Type	Release Level
CYBER 180-810/810A	M14AA16	CYBER 170-815	M11AA16
CYBER 180-830/830A	M13AA16	CYBER 170-825	M12AA16
CYBER 180-840/840A	M340x09	CYBER 170-835	M20AA17
CYBER 180-850/850A	M330x12	CYBER 170/180-845	M310x11
CYBER 180-860/860A	M320x11	CYBER 170/180-855	M300x10
CYBER 180-870/870A	M320x11	CYBER 990/995	M40Ax22
CYBER 96X/97X-31/32	M3A0x09	CYBER 990/995	M41Ax22
CYBER 96X/97X-11	M3B0x08	CYBER 992	M42Ax22
CYBER 994	M44Ax22		

## Peripheral Microcode Levels

Peripheral microcode versions furnished on the B826A CIP tape are as follows (CIP B826A was tested with these versions):

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	04	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
MB103	02	799x (Cartridge System/VE for 799x)
MB104	02	7992 Block-MUX MASSTOR
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
MB468	04	5680 cartridge tape peripheral microcode
MD422	07	834 disk diagnostics
MD424	03	836 disk diagnostics
MH422	07	834 disk COS
MH424	03	836 disk COS
MH426	09C	9853 disk COS
MH427	15	5830 DAS disk COS

## Field Change Announcement Index Levels

The Field Change Announcement (FCA) index level for CIP B826A is as follows:

Mainframe System Type	Release Level	Mainframe System Type	Release Level
CYBER 170-815	10	CYBER 180-810/810A	7
CYBER 170-825	11	CYBER 180-830/830A	7
CYBER 170/180-835	11	CYBER 180-840/840A	8
CYBER 170/180-845	11	CYBER 180-850/850A	8
CYBER 170/180-855	14	CYBER 180-860/860A/870A	8
CYBER 960/970	3	CYBER 962/972	2
CYBER 992	2	CYBER 990/995	16
CYBER 994	3		

### NOTE

CIP releases are no longer placed on a hardware FCA unless CIP is associated with the hardware change.

# CIP 962/972/992 Media Order Form

If your computer system is a CYBER 962, 972, or 992, complete the following form to indicate whether you want CIP delivered on cartridge tape or open-reel tape in future CIP field update kits. If you do not return the form, you will receive CIP on open-reel tape.

Fill out the CIP 962/972/992 media order form in its entirety (please print or type) and return to the following address:

Control Data  
Software Manufacturing and Distribution ARH230  
4201 Lexington Avenue N.  
St. Paul, MN 55126-6198  
USA

## CC598 Console Media Order Form

Mainframe Type (check one): ☐ 960  
☐ 962  
☐ 970  
☐ 962  
☐ 992  
☐ 994

Media Type (check one): ☐ 5 1/4" Disk (default)  
☐ 3 1/2" Disk

## CIP Media Order Form

CIP Type (check one): ☐ CIP 855  
☐ CIP 860  
☐ CIP 870  
☐ CIP 962/972  
☐ CIP 992

Media Type (check one): ☐ Open Reel Tape (default)  
☐ Cartridge Tape

Customer File Number (CRM) \_\_\_\_\_  
Mainframe Serial Number: \_\_\_\_\_

Form Completed By: \_\_\_\_\_  
Telephone Number: \_\_\_\_\_

Site Name and Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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