Installation Instruction

for

Ethernet 24-Port 10BASE-T Module

8260 Multiprotocol Intelligent Switching Hub

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Before Installation

Purpose

The purpose of these instructions is to provide microcode update to Ethernet 24-Port 10BASE-T Module via Field B/M P/N 80G3415

Machines affected

This EC E28000 applies to IBM 8260 feature code 1024.

Requirements

1. For LOCAL Out-of-BAND download (loading via the RS232 port of the Management Module).

You must have :

- An IBM PC/AT or compatible with a 3.5 inch diskette drive.
- An 80 column video monitor (monochrome or color).
- 640K of available RAM on the PC .
- A Null modem connection from the PC to the Management Module for local download.

NOTE :

Cable P/N 6323741, Adapter 58G4422, and Interposer 58G2861 that were received with your 8260 can be used to create the NULL MODEM connection.

- The IBM code diskette P/N 80G3417 provided with this change.
- the IBM Universal Code Download kit (Feature Code 3150)
- 2. For REMOTE Out-of-Band downloading you must have :
 - A PC with the same characteristics as for the LOCAL load

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• Two Asynchronous Modems and RS232 cables

NOTE: It is recommended that you use a V32 modem to load at speed of 9600 Bps.

3. For Inband downloading please refer to :

Chapter "Inband Download procedure" in this document.

Chapter "Downloading 8260 Modules" in 8260 DMM User's Guide

DOWNLOAD Commands are in the Management Commands section of 8260 DMM Commands Guide

Preparation

- 1. Familiarize yourself with the installation instructions before starting installation.
- 2. Familiarize yourself with the Universal Code Download kit. If not yet done, install UCDK using the Installation Instructions 80G3152.
- 3. Check all the items and count the parts listed on the B/M to be installed to determine that all the parts were received.
- 4. To secure the Diskette(s), you may want to build backup diskettes(s).

Line settings

The 8250/8260 feature factory defaults settings are:

- Speed: 9600 bps
- Parity: None
- Data bits: 8
- Stop bits: 1

Note: For connections at speeds other than 9600 bps, the 8250/8260 module terminal parameters will have to be changed to the desired speed. Refer to the appropriate *Installation and Operations Guide*, or *User's Guide*.

The ProComm procedure for line settings is as follows.

1. Press the "Alt-P" keys

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2. Select combination 11:

9600,N,8,1,COM1

- 3. Change the adapter address if it differs from "COM1" by selecting options 21, 22 or 23 for COM2, COM3 or COM4 respectively.
- 4. Save the changes by selecting option 24.
- 5. Quit the line settings procedure by pressing the "ESC" key.

Terminal Setup

After pressing the "Alt-S" keys, the Setup menu is displayed. Select option 2 to setup the terminal parameters as follows.

| Terminal Emulation | VT100 |
|-----------------------------|--|
| Duplex | FULL |
| Flow Control | NONE |
| CR Translation (in) | CR Disables Carriage Return translation (executable code only) |
| CR Translation (out) | CR Disables Carriage Return translation (executable code only) |
| BS Translation | NON-DEST No character deletion, move cursor only. |
| BS Key Definition | BS Keystroke sent by BS |
| Line Wrap | OFF Truncates lines with a length greater than 80 Characters. |
| Scroll | ON |
| | |

| Break Length (ms) | 350 Length of time for break condition. |
|-------------------|--|
| Enquiry (Ctrl-E) | OFF No response to Ctrl-E (ENQ). |

Installation time

Out of Band download time depends on number of bytes to be transfered. Usually you can compute an approximative time on a basis of 30K bytes per minute.

Installation

Safety

This update will be performed with the machine powered ON

• Review the Safety Notices delivered with the shipping group.

References

8260 DMM Commands Guide, and 8260 DMM User's Guide.

Procomm Reference Manual.

Details of Installation

Terminal Usage

Warning: Consider the following when using a terminal to manage this device:

- IBM recommends that you use VT-100 terminal emulation with this product.
- If you use an IBM 31XX terminal, make sure not to use the [SEND] key. Use the [RETURN] key instead.

General diskette(s) content(s) description

The IBM distribution diskette to use for download of microcode consists of:

- Two microcode files (for OPERational and BOOT codes)
- Two command files (xxxx.CMD) that encapsulate a ProComm SENDFILE XMODEM "filename" command. (one for OPERational and one for BOOT)

Specific diskette contents description

Ethernet 24-Port 10BASE-T Module diskette (P/N 80G3417) contains the files:

- *ETPV104.OP* Ethernet 24-Port 10BASE-T Module operational microcode file
- ETPV104.CMD Ethernet 24-Port 10BASE-T Module Operational Command file
- ETPV102.BT Ethernet 24-Port 10BASE-T Module Boot microcode file
- ETPV102.CMD Ethernet 24-Port 10BASE-T Module Boot Command file

Current levels of code

Before to start download procedure, note the current levels of BOOT and FLASH codes in the Ethernet 24-Port 10BASE-T Module card. (using the SHOW DEVICE Command). Then apply download only for code that is down level compared to the Boot code version V1.02 and Flash code version V1.04 levels.

Out-of-Band Download Procedure:

- 1. Make a backup copy of IBM distribution diskette.
- 2. Establish the connection between your PC and the management module. Refer to the appropriate *Installation and Operations Guide*, or *User's Guide*.
- 3. Start the ProComm software
- 4. After the terminal screen is displayed, press the "Alt-B" keys to specify the diskette unit on which will be mounted the distribution diskette (A or B generally). The drive address is entered in the "PATH" input field. For example **a**:
- 5. Insert the IBM distribution microcode diskette P/N 80G3417 in selected diskette drive.

- 6. Start the download out-of-band procedure that pertains to the Management module the terminal is connected to.
- 7. To upgrade Ethernet 24-Port 10BASE-T Module operational code
 - Enter the command **download out_of_band module** <**slot.subslot> operational** to initiate the download of operational code to the Ethernet 24-Port 10BASE-T Module module specified by slot and subslot information.
 - When the management module is expecting the file to be sent (you may see the "Please initiate file transfer" prompt message):
 - a. Press the "Alt-F5" key
 - b. **you must select the ETPV104.CMD file** in order to initiate the download of the Flash code version V1.04 on the Ethernet 24-Port 10BASE-T Module.
 - c. File transfer progress will be indicated on the terminal until completion.
- 8. To upgrade the Ethernet 24-Port 10BASE-T Module Boot code
 - Enter the command **download out_of_band module** <**slot.subslot> boot** to initiate the download of boot code to the Ethernet 24-Port 10BASE-T Module module specified by slot and subslot information.
 - When the management module is expecting the file to be sent (you may see the "Please initiate file transfer" prompt message):
 - a. Press the "Alt-F5" key
 - b. **you must select the ETPV102.CMD file** in order to initiate the download of the Boot code version V1.02 on the Ethernet 24-Port 10BASE-T Module.
 - c. File transfer progress will be indicated on the terminal until completion.
 - At the end of the download the module will reboot.

INBAND download procedure :

The DMM provides an inband download feature that allows you to update 8260 blades using TFTP (Trivial File Transfer Protocol).

Use the following procedure to perform an inband download of the Operational code.

Note: To download other files, the same procedure may be repeated for each binary file_name you need to download .

- 1. Verify that the TFTP server is able to PING the DMM.
- 2. Be sure to have running TFTP Daemon on your server.
- 3. Transfer the binary file(s) from the diskettes to a directory on your TFTP server.

copy the following files :

- a. ETPV104.OP
- 4. Starting from this step the procedure has to be repeated for each binary file_name.
- 5. Configure the TFTP parameters in the DMM by issuing the following management commands as shown:
 - a. DMM> set tftp file_name file names
 - 1) ETPV104.OP
 - b. DMM> set tftp server_ip_address x.x.x.x
 - c. DMM> clear tftp results
 - d. DMM> save tftp

Note:

This can be accomplished either by TELNETing to the DMM or by directly attaching to the DMM front panel serial port via and RS-232 connection.

- 6. 'SAVE ALL' command
- 7. Issue the SHOW TFTP command to verify the TFTP parameters previously set.

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DMM>> SHOW TFTP

8. Issue the appropriate INBAND DOWNLOAD command as shown below to begin the download.

For Ethernet 24-Port 10BASE-T Module upgrade you must use the following commands :

- a. 8260>> download inband module slot.subslot Operational
- 9. Once the download process begins, do no press any keys or interfere with the process. The download takes 25 30 seconds to complete and its progress is shown by a dotted line that lengthens on the screen. When the download completes successfully the device will reboot you may be prompted to login the module again.
- 10. Verify that the code is now the updated version with SHOW DEVICE command.
- 11. Repeat the process until you have downloaded all the binary files.

After installation

Labelling

After installation of the microcode, change the part number of the upgraded module(s) to the following new P/Ns:

• P/N 80G3337 for Ethernet 24-Port 10BASE-T Module FC 1024

Publication update

Add the provided Release Note P/N 80G3404 in your publication binder.

Parts disposition

not applicable

Machine Records

• Update the MACHINE HISTORY, ETC., to reflect:

E28000 as installed to the existing procedures.

• Report the installation and quality according to the existing procedures.

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