

**IBM 8285 NWAYS ATM WORKGROUP SWITCH
INSTALLATION INSTRUCTION
FOR
ATM UPGRADE KIT
FPGA LEVEL C31, C30, B50
OPERATIONAL MICROCODE VERSION V.1.5.4
BOOT MICROCODE VERSION V.1.5.4**

IBM INSTALLATION INSTRUCTIONS

1.1 TRADEMARKS AND SERVICE MARKS

The following terms, denoted by an asterisk (*), used in this Installation Instruction, are trademarks or service marks of the IBM Corporation in the United States or other countries.

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|------|------|
| OS/2 | AIX |
| IBM | PS/2 |
| UNIX | AT&T |

2.0 INSTALLATION INSTRUCTION

IBM INSTALLATION INSTRUCTIONS

2.1 BEFORE INSTALLATION

2.1.1 PURPOSE

The purpose of this document is to provide instructions for upgrading the 8285.

2.1.2 PREREQUISITE

HERE FOLLOW THE MINIMUM DIFFERENT PRE-REQUISITE LEVELS:

| Component | Feature code | Operational FPGA version | Flash Eeprom version | Boot Eeprom version |
|----------------|--------------|--------------------------|----------------------|---------------------|
| 8285 Base Unit | - - - | C10 | V.1.4.0 | V.1.4.0 |
| A4-FB100(mic) | FC 5004 | B40 | N/A | N/A |
| A4-FB100(sc) | FC 5002 | B40 | N/A | N/A |
| A2-MB155 | FC 5002 | B40 | N/A | N/A |
| A3-MB155 | FC 5003 | C10 | N/A | N/A |
| A12-TP25 | FC 5012 | C10 | N/A | N/A |
| A-CMU1 | FC 5102 | B40 | N/A | N/A |
| A-CMU2 | FC 5202 | B40 | N/A | N/A |
| A04MB-BRG | FC 5204 | B40 | N/A | N/A |
| A2-WAN | FC 5302 | B40 | N/A | N/A |

2.1.3 MACHINES AFFECTED

This installation instruction applies to the following 8285 levels:

| Component | Flash Eeprom version | Boot Eeprom version |
|----------------|----------------------|---------------------|
| 8285 Base Unit | V.1.4.0 | V.1.4.0 |
| | V.1.4.3 | V.1.4.3 |
| | V.1.5.0 | V.1.5.0 |
| | V.1.5.1 | V.1.5.1 |
| | V.1.5.2 | V.1.5.2 |

To know the current version of the operational code on your 8285, use the command "SHOW DEVICE" and look for the line beginning with "Flash EEPROM Version".

IBM INSTALLATION INSTRUCTIONS

IT IS HIGHLY RECOMMENDED TO UPGRADE THE MEDIA MODULES TO THE LATEST FPGA PICOCODE LEVEL INCLUDED IN THIS PACKAGE FOR YOUR CONVENIENCE.

2.1.4 DOWNLOAD THE 8285 WEB FILES ON YOUR WORKSTATION

The code files to upgrade (or restore) the Base Unit are available on the Internet. They consist of the boot and operational microcodes, the FPGA and MIB codes, so that text files in plain text or PDF (Acrobat reader) format.

These files must be placed in a directory reachable through TFTP, like /tmp for a Unix/AIX station, so that In-Band download toward the Base Unit can be performed.

After the files have been downloaded, on an AIX Workstation make sure that the files can be read by all users :

•Log in as "root" Set the path to the microcode files directory

Enter: `chmod a+r BT85V154.BIN` (Boot Code)

Enter: `chmod a+r 85V154.OPE` (Operational code)

Enter: `chmod a+r xxC30.ENC` (FPGA code)

2.1.5 REQUIREMENTS

2.1.5.1 In-band download method

You need to perform an in-band download operation for the FPGA picocode upgrade.

For the in-band download, you **MUST** have a TFTP Server connected to the ATM network, either in Classical IP, or in Ethernet or Token Ring LAN-Emulation, or in SLIP through the 8285 Console port.

* Classical IP mode

Make sure that your ATM network is configured for IP Over ATM (RFC 1577).
To configure your ATM network for IP over ATM:

1. Connect an ARP server to the ATM network. The ARP server will be used to map IP addresses to ATM addresses.
2. For each 8285 verify that the following parameters are configured:
 - ATM address of the ARP server
 - IP address and IP mask of the 8285

IBM INSTALLATION INSTRUCTIONS

- IP address of the default gateway
- 3. Verify the IP connectivity to the ARP server by entering a PING command on each 8285.
- 4. If your TFTP Server is not the ARP-Server, verify the IP connectivity to the TFTP Server by entering a PING command on each 8285.
The microcode file must be installed on that TFTP Server, in a directory reachable through TFTP.

* Ethernet or Token Ring LAN-Emulation mode

Make sure your network is configured in Ethernet or Token Ring LAN-Emulation.

To configure your network in Ethernet or Token Ring LAN-Emulation :

1. you must have an Ethernet or Token Ring LAN-Emulation server configured and ready.

You may use the local LES of the 8285. Refer to the section "Setting Up LAN Emulation Servers" in the Chapter 6 of the IBM 8285 Installation and User's guide (SA33-0381-00), or in the Chapter 14 of the IBM 8285 Installation and User's guide (SA33-0381-01).

2. you must configure the Ethernet or Token Ring LAN-Emulation Client on your 8285. Refer to the section "Setting SNMP Parameters" in Chapter 6 of the IBM 8285 Installation and User's guide (SA33-0381-00), or to the section "Setting Up a LAN-Emulation Client" in Chapter 14 of the IBM 8285 Installation and User's guide (SA33-0381-01).
3. you must have a TFTP Server somewhere in the IP network (either on the Emulated LAN, either behind an IP Gateway), and the microcode files installed on that TFTP Server.

* Serial Line IP (SLIP) mode

Make sure your SLIP workstation can act as a TFTP server.

NOTE: If you have TCP/IP for OS/2, the TFTP Server is 'TFTPD.EXE'.

1. Set up the 8285 Console configuration in SLIP Mode:

Refer to the section "Setting Up a Configuration Console in SLIP Mode" in Chapter 5 of the IBM 8285 Installation and User's guide (SA33-0381-00), or in Chapter 9 of the IBM 8285 Installation and User's guide (SA33-0381-01), for details on this.

2. Then set the TFTP server address to the SLIP remote address, to allow you to perform in-band download between your workstation and the 8285.

2.1.5.2 Out-of-Band download method

+--- **WARNING** -----+

| | | |
|----------------|-----------|-----|
| EC Number: N/A | P/N : N/A | P.5 |
|----------------|-----------|-----|

THE DOWNLOAD OUT-OF-BAND IS NOT SUPPORTED FOR THIS RELEASE.

2.1.6 REFERENCES

- * Release Note.
- * Installation Instruction for IBM Universal Code Download Kit, Part Number 80G3152
- * IBM 8285 Installation and User's guide (SA33-0381-01)
- * IBM 8285 Installation and User's guide (SA33-0381-00)
- * IBM 8285/8260 ATM Command Reference Guide (SA33-0385)
- * ProComm Reference Manual

2.2 UPGRADING THE 8285

o Before upgrade Reminder

Check that all the ATM components of your network are at the PREREQUISITE levels: refer to chapters "Prerequisite" and "Machines Affected" above.

o IMPORTANT

The following steps are showing an example of Inband Download in Classical IP mode, using the ARP server as TFTP server .

It is recommended to update ALL 8285 ATM hubs starting with the 8285 module that is the farthest from the ARP server in terms of SSI/NNI links hops.

You may log in to the 8285 console either LOCALLY using an ASCII terminal connected to the 8285 console port, or REMOTELY using a TELNET session.

```

+--- JUST IN CASE -----+
!
! Since a new migration process exists for the ATM upgrade kit, you
! might encounter new MAINTENANCE codes (please refer to the Release
! Note in the appendix B).
!
+-----+

```

2.2.1 STEP 0: SAVING CONFIGURATION BEFORE THE UPGRADE

+--- REMINDER -----

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|----------------|-----------|-----|
| EC Number: N/A | P/N : N/A | P.6 |
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IBM INSTALLATION INSTRUCTIONS

!
! It is recommended to perform the following steps with NO OPERATIONAL
! TRAFFIC flowing in your ATM campus network. Typically, this would be
! scheduled as part of a maintenance period. You would better save all
! your configuration parameters before.
!

+-----+

Before you begin the upgrade procedure we recommend to upload the configuration of each 8285 in your network :

1. Setup the TFTP parameters by entering the following commands:
 - o SET TFTP SERVER_IP_ADDRESS <ip address of the TFTP server>
 - o SET TFTP FILE_TYPE CONFIGURATION
 - o SET TFTP FILE_NAME
Provide the full path of the file when prompted
2. Start the upload inband procedure by entering:
UPLOAD
When prompted, type "Y" to confirm.

2.2.2 STEP 1: DOWNLOAD INBAND THE 8285 BOOT MICROCODE

Upgrade the 8285 boot microcode as follows:

1. Log in as the ADMINISTRATOR on the 8285 console
2. perform the following command:
 - o SET DEVICE MIGRATION NOT_ALLOWED
 - o SAVE DEVICE
3. Upgrade the 8285 boot microcode (Boot EEPROM) as follows:
 - a. Configure the TFTP parameters by entering the following commands:
 - o SET TFTP SERVER_IP_ADDRESS <ip address of the TFTP server>
 - o SET TFTP FILE_TYPE BOOT
 - o SET TFTP FILE_NAME
Type the full path name of the boot microcode file when prompted.
 - b. Make sure you can reach the TFTP server by entering:
PING <ip adress of the TFTP server>
(Stop ping by entering: Ctrl+C)
 - c. Start the download inband procedure by entering:
DOWNLOAD INBAND

IBM INSTALLATION INSTRUCTIONS

When prompted, type "Y" to confirm.

- d. Wait for successful termination of the download operation. The message Download successful is displayed.

This may also be checked by displaying the TFTP last transfer result with the command: "SHOW TFTP".

```
+--- NOTE -----  
!  
! The command "SHOW DEVICE" displays the new BOOT code version  
! which will become active.  
!  
! It will be displayed as V.1.5.4.  
!  
+-----
```

```
+--- IN CASE OF FAILURE -----+  
!  
! If the download inband operation fails, retry this step. If the  
! failure recurs, refer to the Troubleshooting chapter of IBM 8285  
!  
! Nways ATM Workgroup Switch: Installation and User's Guide.  
+-----+
```

2.2.3 STEP 2: DOWNLOAD INBAND THE 8285 OPERATIONAL MICROCODE

Upgrade the active 8285 operational microcode (Flash EEPROM) as follows:

1. Configure the TFTP parameters by entering the following commands:
 - o SET TFTP SERVER_IP_ADDRESS <ip address of the TFTP server>
 - o SET TFTP FILE_TYPE OPERATIONAL
 - o SET TFTP FILE_NAMEType the full path name of the operational microcode file when prompted.
2. Make sure you can reach the TFTP server by entering:
PING <ip address of the TFTP server>
(Stop ping by entering: Ctrl+C)
3. Start the download inband procedure by entering:
DOWNLOAD INBAND
When prompted, type "Y" to confirm.
4. Wait for successful termination of the download operation. The message

IBM INSTALLATION INSTRUCTIONS

Download successful is displayed.

This may also be checked by displaying the TFTP last transfer result through the command: "SHOW TFTP".

```
+--- NOTE -----+
!
! The command "SHOW DEVICE" displays the operational code level in
! backup.
!
! It will appear as V.1.5.4.
!
+-----+

+--- IN CASE OF FAILURE -----+
!
! If the download inband operation fails, retry this step. If the
! failure recurs, refer to the Troubleshooting chapter of IBM 8285
!
! Nways ATM Workgroup Switch: Installation and User's Guide.
!
+-----+
```

2.2.4 STEP 3 : DOWNLOAD INBAND THE 8285 FPGA PICOCODE

1. Configure the TFTP parameters by entering the following commands:
 - o SET TFTP SERVER_IP_ADDRESS <ip address of the TFTP server>
 - o SET TFTP FILE_TYPE FPGA
 - o SET TFTP FILE_NAME
Type the full path name of the FPGA file when prompted.
 - o SET TFTP TARGET_MODULE 1
2. Make sure you can reach the TFTP server by entering:
PING <ip address of the TFTP server>
(Stop ping by entering: Ctrl+C)
3. Start the download inband procedure by entering:
DOWNLOAD INBAND
When prompted, type "Y" to confirm.
4. Wait for successful termination of the download operation (it may take up to 10 minutes). The message Download successful is displayed.

This may also be checked by displaying the TFTP last transfer result with the command: "SHOW TFTP".

+--- NOTE -----+

!
! The command SHOW MODULE 1 VERBOSE displays the FPGA level in backup.
!
! It will appear as C30.
!
+-----+

+--- IN CASE OF FAILURE -----+

!If the download inband operation fails, retry this step. If the
! failure recurs, refer to the Troubleshooting chapter of IBM 8285
! Nways ATM Workgroup Switch: Installation and User's Guide.
+-----+

2.2.5 STEP 4 : DOWNLOAD INBAND THE FPGA PICOCODE ON MEDIA MODULES

+--- WARNING -----+

You must download the new FPGA picocode on all of the blades of the 8285 expansion before proceeding to the next steps.

1. Be sure that the status of ALL ATM media modules plugged in the 8285 is CONNECTED. This is a prerequisite for performing a download operation on an ATM media module. To verify that a module is CONNECTED, enter the SHOW MODULE ALL command from the 8285 console. To connect an isolated ATM media module, enter the SET MODULE n CONNECTED command, where "n" is the number of the slot where the ATM media module is installed.
2. Display the configuration of your CONNECTED ATM media modules by entering a SHOW MODULE ALL VERBOSE command. This allows you to distinguish the different media modules installed in the 8285
3. For EACH A4-FB100 module with MIC connectors (FC 5004)
 - a. PLEASE CHECK FIRST, THAT FPGA LEVEL B50 IS NOT ALREADY PRESENT IN THE A4-FB100 MIC (AS OPERATIONAL OR AS BACKUP) :
 - o SHOW MODULE n VERBOSE (n is the position of the blade)
 - o If FPGA level is B50, then skip to next blade
 - b. Configure the TFTP parameters by entering the following commands:
 - o SET TFTP SERVER_IP_ADDRESS <ip address of the TFTP server>
 - o SET TFTP FILE_TYPE FPGA
 - o SET TFTP FILE_NAME

IBM INSTALLATION INSTRUCTIONS

Type the full path name of the FPGA file when prompted

- o SET TFTP TARGET_MODULE n

Where "n" is the number of the slot where the A4-FB100 module is installed.

- c. Start the download inband procedure by entering:

DOWNLOAD INBAND

When prompted, type "Y" to confirm.

- d. Wait for successful termination of the download operation (it may take up to 10 minutes). The message Download successful is displayed.

+--- NOTE -----+

!

! The command SHOW MODULE N VERBOSE (where "n" is the number of the
! slot where the A4-FB100 MIC module is installed) displays the FPGA level in backup.
! It will appear as B50.

!

+-----+

+--- IN CASE OF FAILURE -----+

!

! If the download inband operation fails, retry the download. If
! the failure recurs, refer to the Troubleshooting chapter of IBM
! 8285 Nways ATM Workgroup Switch: Installation and User's Guide.

!

+-----+

- 4. For EACH A4-FB100 with SC connectors (FC 5104):

- a. PLEASE CHECK FIRST, THAT FPGA LEVEL B50 IS NOT ALREADY PRESENT
IN THE A4-FB100 (AS OPERATIONAL OR AS BACKUP) :

- o SHOW MODULE n VERBOSE (n is the position of the blade)
- o If FPGA level is B50, then skip to next blade

- b. Configure the TFTP parameters by entering the following commands:

- o SET TFTP SERVER_IP_ADDRESS <ip address of the TFTP server>
- o SET TFTP FILE_TYPE FPGA
- o SET TFTP FILE_NAME

Type the full path name of the FPGA file when prompted

- o SET TFTP TARGET_MODULE n

Where "n" is the number of the slot where the A4-FB100 module is installed.

- c. Start the download inband procedure by entering:

DOWNLOAD INBAND

When prompted, type "Y" to confirm.

IBM INSTALLATION INSTRUCTIONS

d. Wait for successful termination of the download operation (it may take up to 10 minutes). The message Download successful is displayed.

```
+--- NOTE -----+
! The command SHOW MODULE N VERBOSE (where "n" is the number of the
! slot where the A4-FB100 SC module is installed) displays the FPGA
! level in backup.
! It will appear as B50.
!
```

```
+--- IN CASE OF FAILURE -----+
!
! If the download inband operation fails, retry the download. If
! the failure recurs, refer to the Troubleshooting chapter of IBM
! 8285 Nways ATM Workgroup Switch: Installation and User's Guide.
+-----+
```

5. For EACH A2-MB155 (FC 5002):

a. PLEASE CHECK FIRST, THAT FPGA LEVEL B50 IS NOT ALREADY PRESENT IN THE A2-MB155 (AS OPERATIONAL OR AS BACKUP) :

- o SHOW MODULE n VERBOSE (n is the position of the blade)
- o If FPGA level is B50, then skip to next blade

b. Configure the TFTP parameters by entering the following commands:

- o SET TFTP SERVER_IP_ADDRESS <ip address of the TFTP server>
- o SET TFTP FILE_TYPE FPGA
- o SET TFTP FILE_NAME
Type the full path name of the FPGA file when prompted
- o SET TFTP TARGET_MODULE n
Where "n" is the number of the slot where the A2-MB155 module is installed.

c. Start the download inband procedure by entering:

DOWNLOAD INBAND

When prompted, type "Y" to confirm.

d. Wait for successful termination of the download operation (it may take up to 10 minutes). The message Download successful is displayed.

```
+--- NOTE -----+
!
! The command SHOW MODULE N VERBOSE (where "n" is the number of the
! slot where the A2-MB155 module is installed) displays the FPGA level in backup.
! It will appear as B50.
+-----+
```

IBM INSTALLATION INSTRUCTIONS

+--- IN CASE OF FAILURE -----+
! If the download inband operation fails, retry the download. If
! the failure recurs, refer to the Troubleshooting chapter of IBM
! 8285 Nways ATM Workgroup Switch: Installation and User's Guide.
+-----+

6. For EACH A3-MB155 (FC 5003):

- a. PLEASE CHECK FIRST, THAT FPGA LEVEL C31 IS NOT ALREADY PRESENT IN THE A3-MB155 (AS OPERATIONAL OR AS BACKUP) :
 - o SHOW MODULE n VERBOSE (n is the position of the blade)
 - o If FPGA level is C31, then skip to next blade
- b. Configure the TFTP parameters by entering the following commands:
 - o SET TFTP SERVER_IP_ADDRESS <ip address of the TFTP server>
 - o SET TFTP FILE_TYPE FPGA
 - o SET TFTP FILE_NAME
Type the full path name of the FPGA file when prompted
 - o SET TFTP TARGET_MODULE n
Where "n" is the number of the slot where the A3-MB155 module is installed.
- c. Start the download inband procedure by entering:
DOWNLOAD INBAND
When prompted, type "Y" to confirm.
- d. Wait for successful termination of the download operation (it may take up to 10 minutes). The message Download successful is displayed.

+--- NOTE -----+
!
! The command SHOW MODULE N VERBOSE (where "n" is the number of the
! slot where the A3-MB155 module is installed) displays the FPGA level in backup.
! It will appear as C31.
+-----+

+--- IN CASE OF FAILURE -----+
! If the download inband operation fails, retry the download. If
! the failure recurs, refer to the Troubleshooting chapter of IBM
! 8285 Nways ATM Workgroup Switch: Installation and User's Guide. !
+-----+

7. For EACH A12-TP25 (FC 5012):

IBM INSTALLATION INSTRUCTIONS

- a. PLEASE CHECK FIRST, THAT FPGA LEVEL C30 IS NOT ALREADY PRESENT IN THE A12-TP25 (AS OPERATIONAL OR AS BACKUP) :
 - o SHOW MODULE n VERBOSE (n is the position of the blade)
 - o If FPGA level is C30, then skip to next blade
- b. Configure the TFTP parameters by entering the following commands:
 - o SET TFTP SERVER_IP_ADDRESS <ip address of the TFTP server>
 - o SET TFTP FILE_TYPE FPGA
 - o SET TFTP FILE_NAME
Type the full path name of the FPGA file when prompted
 - o SET TFTP TARGET_MODULE n
Where "n" is the number of the slot where the A12-TP25 module is installed.
- c. Start the download inband procedure by entering:
DOWNLOAD INBAND
When prompted, type "Y" to confirm.
- d. Wait for successful termination of the download operation (it may take up to 10 minutes). The message Download successful is displayed.

+--- NOTE -----+
! The command SHOW MODULE N VERBOSE (where "n" is the number of the
! slot where the A12-TP25 module is installed) displays the FPGA level in backup.
! It will appear as C30.

+-----+
+--- IN CASE OF FAILURE -----+
! If the download inband operation fails, retry the download. If
! the failure recurs, refer to the Troubleshooting chapter of IBM
! 8285 Nways ATM Workgroup Switch: Installation and User's Guide.

8. For EACH A-CMU1, A-CMU2, A04MB-BRG, A2-WAN (FC 5102, 5202, 5204, 5300, 5008 and 5302) :
 - a. PLEASE CHECK FIRST, THAT FPGA LEVEL B50 IS NOT ALREADY PRESENT IN THE BLADE (AS OPERATIONAL OR AS BACKUP) :
 - o SHOW MODULE n VERBOSE (n is the position of the blade)
 - o If FPGA level is B50, then skip to next blade
 - b. Configure the TFTP parameters by entering the following commands:
 - o SET TFTP SERVER_IP_ADDRESS <ip address of the TFTP server>

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| EC Number: N/A | P/N : N/A | P.14 |
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IBM INSTALLATION INSTRUCTIONS

- o SET TFTP FILE_TYPE FPGA
 - o SET TFTP FILE_NAME
Type the full path name of the FPGA file when prompted
 - o SET TFTP TARGET_MODULE n
Where "n" is the number of the slot where the module is installed.
- c. Start the download inband procedure by entering:
DOWNLOAD INBAND
When prompted, type "Y" to confirm.
- d. Wait for successful termination of the download operation (it may take up to 10 minutes). The message Download successful is displayed.

+--- NOTE -----+
! The command SHOW MODULE N VERBOSE (where "n" is the number of the
! slot where the ATM module is installed) displays the FPGA level in backup.
! It will appear as B50.

+-----+

+--- IN CASE OF FAILURE -----+
! If the download inband operation fails, retry the download. If
! the failure recurs, refer to the Troubleshooting chapter of IBM
! 8285 Nways ATM Workgroup Switch: Installation and User's Guide.

+-----+

2.2.6 STEP 5 : ACTIVATE THE NEW 8285 MICROCODES AND FPGA PICOCODE

+--- REMINDER -----+
!
! This must be performed with NO OPERATIONAL TRAFFIC flowing in your ATM
! campus network. Typically, this would be scheduled as part of a maintenance period.
!
+-----+

1. Check for all the ATM module if a new level of FPGA C31, C30 or B50 is present in operational or backup :
 - o SHOW MODULE n VERBOSE
Where "n" is the number of the slot where the ATM module is present.
2. Activate the new version of 8285 operational microcode by entering the command:
 - o CLEAR ERROR_LOG
 - o SAVE ALL
 - o SWAP MICROCODE and confirm with Y

IBM INSTALLATION INSTRUCTIONS

3. The telnet session, if any, is broken (.../...)
4. Login as ADMINISTRATOR on the 8285 console
5. Perform the FPGA picocode SWAP, issue the command:
 - o SWAP FPGA_PICOCODE slot1 ... slot4

+--- WARNING -----+

YOU MUST PERFORM THE FPGA SWAP FOR THE 8285 BASE AND ALL THE ATM MEDIA BLADES FOR WHICH YOU HAVE DOWNLOADED FPGA PICOCODE.

IF THE FPGA PICOCODE B50, C31 OR C30 IS ALREADY PRESENT AND OPERATIONAL, THEN THE SWAP FOR THAT SLOT IS NOT NEEDED.

2.2.7 STEP 6 : CHECK THE NEW LEVELS OF CODES :

1. Log in as the ADMINISTRATOR on the 8285 console
2. The following table lists the microcode and FPGA versions that must be displayed for the 8285 at completion of the upgrade. Use the following commands :
 - o SHOW DEVICE
 - o SHOW MODULE n VERBOSE

| Component | Feature code | Operational FPGA version | Flash Eeprom version | Boot Eeprom version |
|----------------|--------------|--------------------------|----------------------|---------------------|
| 8285 Base Unit | - - - | C30 | V.1.5.4 | V.1.5.4 |
| A4-FB100(mic) | FC 5004 | B50 | N/A | N/A |
| A4-FB100(sc) | FC 5002 | B50 | N/A | N/A |
| A2-MB155 | FC 5002 | B50 | N/A | N/A |
| A3-MB155 | FC 5003 | C31 | N/A | N/A |
| A12-TP25 | FC 5012 | C30 | N/A | N/A |
| A-CMU1 | FC 5102 | B50 | N/A | N/A |
| A-CMU2 | FC 5202 | B50 | N/A | N/A |
| A04MB-BRG | FC 5204 | B50 | N/A | N/A |
| A2-WAN | FC 5302 | B50 | N/A | N/A |

2.2.8 STEP 7 : CHECKING NETWORK AND SAVING CONFIGURATION

After you complete the upgrade procedure for every 8285 ATM hub in your network, verify that your network is operational. To do this:

- o Check that all links are active, specifically the SSI and NNI links.

| | | |
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| EC Number: N/A | P/N : N/A | P.16 |
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IBM INSTALLATION INSTRUCTIONS

- o Check the connectivity between the TFTP server and each 8285 in the network using the PING command.

- o Once the links are up and running successfully, we recommend to upload the configuration of each 8285 in your network :
 1. Setup the TFTP parameters by entering the following commands:
 - SET TFTP SERVER_IP_ADDRESS <ip address of the TFTP server>
 - SET TFTP FILE_TYPE CONFIGURATION
 - SET TFTP FILE_NAMEProvide the full path of the file when prompted
 2. Start the upload inband procedure by entering:
UPLOAD
When prompted, type "Y" to confirm.

```
+--- MIGRATION COMPLETE -----+
!
! You have successfully completed the ATM FIRMWARE upgrade.
!
+-----+
```

2.3 AFTER INSTALLATION

Insert the companion Release Note in your publications binder.

END OF DOCUMENT