

This guide describes the procedure for downloading Flash PROM software into various TxPORT products. The following table lists the applicable unit and the downloadable hexadecimal filename.

Device Type	Filename	Comments
1061	0038-xxx.hex	
2000	0001-xxx.hex	
2048	0012-xxx.hex	
3000	0002-xxx.hex	
3000 Ethernet	0007-xxx.hex	
3001	0004-xxx.hex	
3002	0055-xxx.hex	
3011 LanCard	0040-xxx.hex	3030/3060 Ethernet hardware revision 6.x or greater
3021	0039-xxx.hex	
3030	0017-xxx.hex	
3030/3060 Ethernet	0018-xxx.hex	3030/3060 Ethernet hardware revision 5.x or less
Token Ring	0019-xxx.hex	3030/3060 Token Ring hardware revision 5.x or less
3060	0021-xxx.hex	
3060-10	0057-xxx.hex	
3101/3102	0026-xxx.hex	
3111/3112	0029-xxx.hex	Non-LCD units
	0056-xxx.hex	LCD units
4001	0028-xxx.hex	
4051	0020-xxx.hex	
4101	0027-xxx.hex	
4151	0032-xxx.hex	
41TDM	0058-xxx.hex	Application Code
	0060-xxx.hex	FDL Downloader Code
8100	0013-xxx.hex	
8100 Ethernet	0014-xxx.hex	
8100A	0016-xxx.hex	
DSU-MP	0061-xxx.hex	DSP Code
	0062-xxx.hex	Xilinx Code

**xxx denotes the revision number.**

## Required Equipment

- ◆ PC with at least one available RS-232 serial (COM) port.
- ◆ 8-pin to 8-pin SUPV cable.
- ◆ Diskette containing the *download.exe* program.
- ◆ Diskette containing the hexadecimal file(s) to be downloaded to the unit (these files have a *.hex* extension).

## PC Setup



*This operation may reset all parameters to the factory default ROM settings and zero all performance registers. Refer to the unit's configuration guide and note the current settings before performing this procedure.*

- 1 Power-up the PC and create a directory to contain the program files. Since all of the files *must* be located in the same directory, we recommend you create a new directory, such as *c:\hex* or *c:\download*.
- 2 Copy all the files on the supplied diskette to the destination directory noting the complete file names of all hex files, such as 0029-214.hex for the PRISM 3111/3112.
- 3 Connect the PC serial COM port to the SUPV port of the unit using the appropriate cable assembly. Refer to the unit's reference manual for specific cable requirements.

## Downloading Procedure

- 1 Select the *download.exe* file. The TxPORT Flash Loader main screen is displayed as in Figure 1.
  - The Help option at the bottom of the screen allows you to review unit specific instructions for the device selected in the Device Type field.
  - The Utilities option allows you to save and restore the configuration parameters for the 8100A Site Controller.
- 2 Select the applicable Device Type using the arrow keys to highlight the field and the spacebar to toggle through the list of available products.
- 3 Select the Download Method to be used
  - **Switched** requires you to either configure a DIP switch setting or hold down specific front panel buttons to place the unit in a download mode. Refer to the On-line Help option for specific information concerning which switch or button to manipulate.



**Figure 1** TxPORT Flash Loader Screen

- **Messaged** places the unit in a download mode through a message transmitted from the download program. This option works only at 19200 kbps. Not all units support this Download Method.
- **NMS** option is available in the PRISM 41TDM only and operates at the baud rate specified for the unit's SUPV port.
- **FDL -> Far End** option is available in the PRISM 41TDM only and operates at the baud rate specified for the unit's SUPV port. This option allows you to download the file through the PRISM 41TDM and into the far-end unit.
- **DSU-MP FDL -> Far End** option is used to download the hexadecimal file to a far-end PRISM 41TDM through a PRISM 3060-10. This option operates at the specified baud rate for the SUPV port on the 3060-10. When selected, you must provide the slot number (1-6) and the DSU number (1-6) of the channel assigned to the far-end PRISM 41TDM.
- **DSU-MP in Slot** option is available in the DSU-MP (3060-10) only and operates at the baud rate specified for the unit's SUPV port. You provide the slot number of the card to receive the downloaded file.



*PRISM 41TDM only. When the Download Method is set to either NMS, FDL->Far End, or DSU-MP FDL->Far End, the unit being downloaded must have the current configuration settings saved to the stored parameters (Utilities/Store Parameters to EEPROM) for a successful download.*

- 4 Select the PC serial communications port to be used for the download procedure. You may choose either Com1, Com2 Com3, and Com4.
- 5 Select the baud rate for configuring the communication program. Not all baud rates are supported by every unit. Choices are 1200, 2400, 4800, 9600, 19200, 38400, 57600, and 64000. When the Download Method is set to either NMS, FDL->Far End, DSU-MP FDL->Far End, or DSU-MP in Slot, the download process will run at the SUPV bit rate currently running in the unit.
- 6 Enter the hexadecimal file to be downloaded. When you selected the device type, the program performs a look-up for existing applicable hexadecimal files in the local directory. If a file is found, it is displayed in this field. You can either accept this filename or enter another filename.
- 7 Select the Download option and press <return> for the download process to begin.



*The actual downloading procedure overwrites the existing program in Flash. Ensure that the appropriate file name is selected before pressing <return> on the Download option. Do not remove power or interrupt the download process in any manner.*

The process of erasing the Flash may last a couple of minutes. The PC message line indicates the current number of records sent:

```
Records Sent: --
```

If the entered filename is does not exist in the local directory, the following error message appears:


```
Cannot find file ----
Upload aborted, press a key to continue
```

- 8 Once the Flash is erased, the program begins counting the current number of data blocks being uploaded. For most products, this process takes only a few minutes to

complete. Remote downloads (FDL->Far End and DSU-MP FDL->Far End) take longer but are in-band with customer data traffic.

Records Sent: ----  
Percent Sent: --%

- 9 After the software is downloaded to the unit, the PC will beep to indicate completion. Most units automatically reset. Units requiring manual switch settings to enter the download mode must now be manually reset.

 *Do not remove power until the LEDs stop flashing.*

- 10 When all files have been downloaded, a factory default or maintenance reset operation is recommended to clear the unit's registers. This can be performed through the unit's terminal interface program or a switch setting. Refer to the unit's reference manual for terminal interface start-up procedures or the unit's configuration guide for switch settings.

## Technical Support

If the above procedures fail, repeat the download procedure again, ensuring that all steps are performed properly. If this second attempt fails, notify TxPORT Technical Support.

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