Release Notes

English

Lotem 800 Quantum

version **3.72.02**

Document Number:
653-00691-EN

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RE37,376	5,325,217	5,532,728	5,742,743	5,996,499	6,158,345	6,353,216
4,558,302	5,339,176	5,561,691	5,764,374	5,998,067	6,159,659	6,366,339
4,743,091	5,343,059	5,568,595	5,764,381	6,003,442	6,164,637	6,371,026
4,992,864	5,355,446	5,576,754	5,771,794	6,014,471	6,180,325	6,377,739
5,049,901	5,359,451	5,579,115	5,785,309	6,016,752	6,181,362	6,387,597
5,079,721	5,359,458	5,592,309	5,813,346	6,031,932	6,181,439	6,396,422
5,103,407	5,367,360	5,594,556	5,818,498	6,043,865	6,186,068	6,396,618
5,111,308	5,384,648	5,600,448	5,854,883	6,060,208	6,189,452	6,407,849
5,113,249	5,384,899	5,608,822	5,861,904	6,063,528	6,191,882	6,414,755
5,122,871	5,412,491	5,615,282	5,861,992	6,063,546	6,204,874	6,422,801
5,124,547	5,412,737	5,625,766	5,875,288	6,072,518	6,208,369	6,435,091
5,132,723	5,420,702	5,636,330	5,894,342	6,090,529	6,214,276	6,441,914
5,150,225	5,420,722	5,649,220	5,900,981	6,096,461	6,217,965	6,450,092
5,153,769	5,459,505	5,650,076	5,934,196	6,098,544	6,260,482	6,456,396
5,155,782	5,473,733	5,652,804	5,942,137	6,107,011	6,266,080	6,476,931
5,157,516	5,481,379	5,680,129	5,946,426	6,112,663	6,266,134	6,477,955
5,208,818	5,488,906	5,691,823	5,947,028	6,115,056	6,267,054	6,509,903
5,208,888	5,497,252	5,691,828	5,958,647	6,121,996	6,268,948	6,541,181
5,247,174	5,508,828	5,696,393	5,966,504	6,130,702	6,283,589	6,545,772
5,249,067	5,509,561	5,699,174	5,969,872	6,134,393	6,295,076	6,564,018
5,283,140	5,517,359	5,699,740	5,973,801	6,136,509	6,299,572	
5,291,273	5,519,852	5,708,736	5,986,819	6,137,580	6,318,266	
5,323,248	5,526,143	5,713,287	5,995,475	6,147,789	6,352,816	

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Document No. 653-00691-EN

Revised May 2004

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Introduction

We are pleased to send you the latest revision of Lotem 800 II software. These release notes highlight the changes and improvements that were made to release 3.72 of the software (part number 634-00133A).

This version supports all Lotem Quantum platesetters, except the Quantum Spectrum.

What Is in These Release Notes

The release notes include the following sections:

Prerequisites—lists the required prerequisites.

Loading Software Version 3.72—describes the firmware needed for running the software.

New Features—describes improvements made to the software.

Problems Fixed—describes previous problems that were fixed in this version release.

Known Problems—lists problems that are not yet resolved.

Appendix A: Loading Version 3.72—describes how to load this software release.

Appendix B: Upgrading the Splot—describes how to upgrade Splot.

Appendix C: Loading Firmware—describes how to load the firmware.

Prerequisites

1. Lotem 800/850 Quantum versions (for existing platesetters): 3.51.20 or higher.



Note: Platesetters running on versions 3.50.05 (or less), must first upgrade to version 3.51.20. Then the TMCE dongle must be defined as described on page 14, and *only after* the dongle has been defined, can the platesetter be upgraded to version 3.72. Failure to comply with this prerequisite will render the platesetter unworkable.

   - **Operating system:** Windows 95, version 2.0 - 501V1R083.

2. **Workstation:** Brisque software version 4.0.97 or higher.
   Operating system: Windows 95, version 2.0 - 501V1R083.
   MCU control board comp level L and higher.
   NUC Comp level P

3. Lotem 800/850 Quantum with MCU version beta 2.

   - MCU control board comp level L and higher.
   - **Operating system:** Windows 95, version 2.0 - 501V1R083.

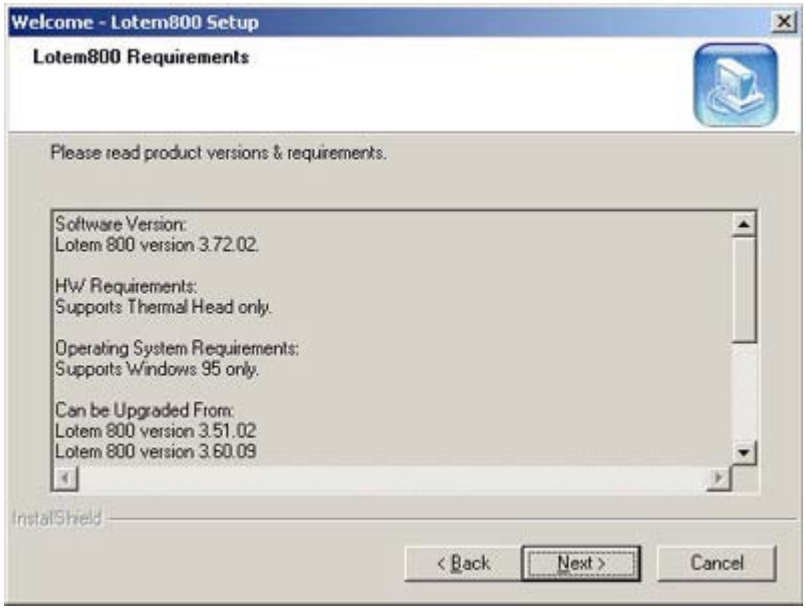
Loading Software Version 3.72

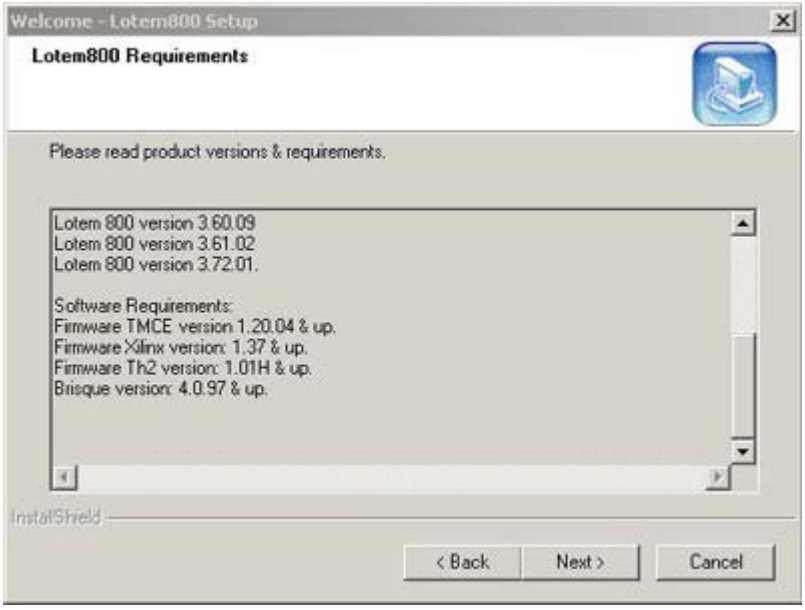
To load the software, see *Appendix A: Loading Version 3.72*.

This version runs with the following firmware:

- TMCE version 1.20.04 and higher
- Xilinx version 1.37 and higher

Th2 version 1.01H and higher.





New Features

This section lists features that were added in the new release of the Lotem 800 II software.

1. Supports Paper Disposal Warning Light (on platesetters with MCU).
2. New parameters were added to support 0.15 plates, allowing for more efficient separation.
   The new parameters are:

0.4 plate	Y Movement Rel For 0.4 plate [mm] = 0 X Backward Rel For 0.4 plate [mm] = 22.3
0.3 plate	Y Movement Rel For 0.3 plate [mm] = 0 X Backward Rel For 0.3 plate [mm] = 27
0.2 plate	Y Movement Rel For 0.2 plate [mm] = 0 X Backward Rel For 0.2 plate [mm] = 19
0.15 plate	Y Movement Rel For 0.15 plate [mm] = 42 X Backward Rel For 0.15 plate [mm] = 16

   No collisions occur between the loading system (tweezers) and the Lotem frame, even with a fully loaded upper tray.
   During plate separation, the existing method of calculating **X for backward** has been modified.



Note: The new calculation does not apply to plates with a thickness of 0.3, 0.2 and 0.4 mm. The calculation still utilizes the old default values.

   The modifications affect plates with a thickness of 0.15. A new movement has been added: **Y Up for 0.15**.
3. The default value of the paper disposal parameter **Others>LOTEM800V>IO OBJECTS>Paper Disposal Solenoid>Hold Current [mA]** has changed from 1300 to **1700**.

   During the installation process, the paper disposal parameter is set to its default value.
4. A new option for operating the punch more than once has been implemented: **Loading System>Loading System>Load Plate>From Punch Entry To Drum Entry Stage>Times to repeat Do Punch** (default = 1).
5. An unload patch has been added. This improves the unloading process by providing better synchronization between the drum motor and the unload tray motor.
   The default value of the **Loading System>Unload Plate>Tolerance For Unload Motor (mm)** parameter has changed from 3 to **15**.

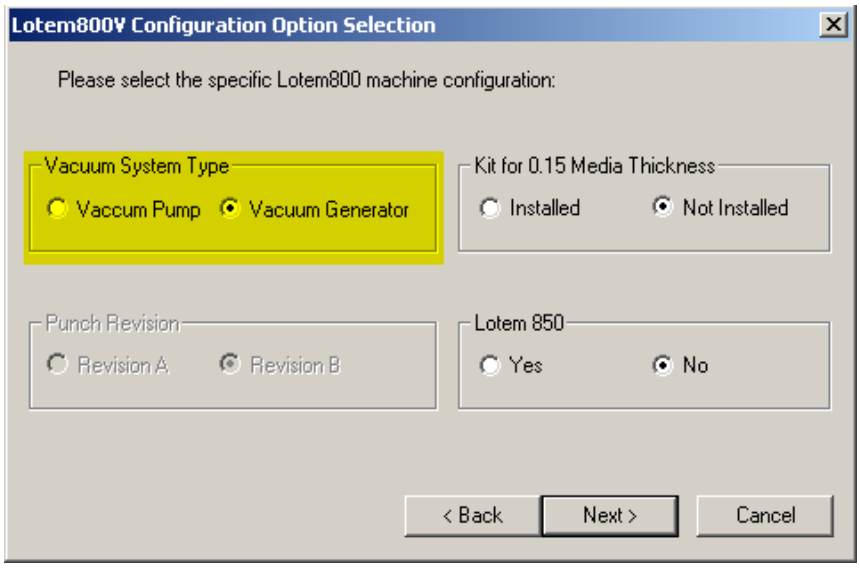
6. Supports conveyor speed types. Choose from either fixed speed or variable speed (default).

   - To set the variable speed do the following:
     Others>LOTEM800V>IO OBJECTS>Loading System>Unload Plate>Is Conveyor with Encoder Installed [FALSE =0, TRUE=1] (default = 1)
   - To adjust the speed, do the following:
     Loading System>Loading System>Unload Plate>First Conveyor Motor Speed = 5
     Loading System>Loading System>Unload Plate>Second Conveyor Motor Speed = 0.5

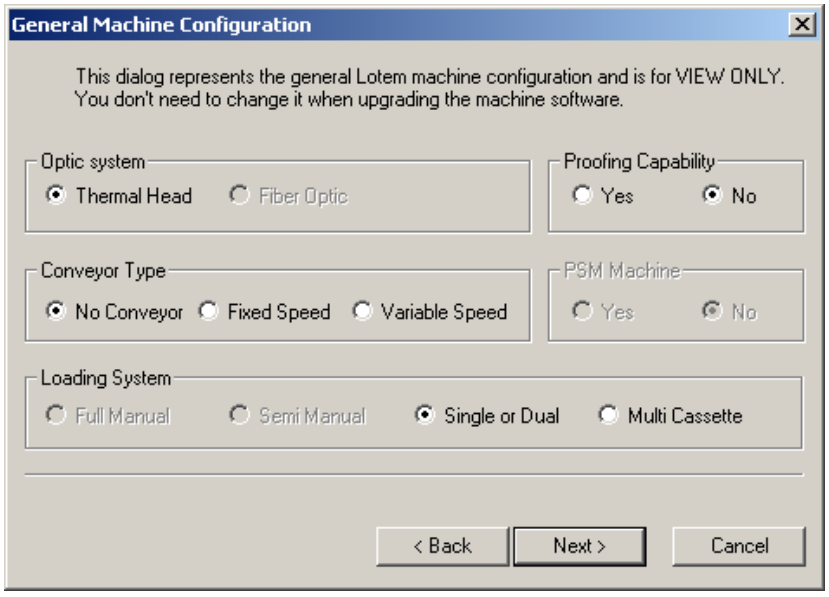
     (For earlier models, set the Conveyor Motor Speed value to 0)
     The recommended speed increments are 0.5 mm / sec
   - If the variable conveyor belt moves erratically during the unloading process, change the value of the **Others>LOTEM800V>IO OBJECTS>Unload Conveyor Motor>Velocity Kp** parameter from the default (10) to **1**

7. A balance correction has been implemented. All legal plate sizes can now be balanced.
   The default value of the **Others>LOTEM800V>IO OBJECTS>Balance System>Mechanical Stop Center Pos (deg)** parameter has changed from 270 to **267.5**

8. Support has been implemented for vacuum generators:



9. The installation process now supports a **No Conveyor** option:



10. To support a half resolution of **47.2 dpi** or **50 dpi**, make sure the value of the parameter **Others>LOTEM800V> Min Resolution** is set to **47** and not 60.

11. A new Splot version 3.64 has been introduced, which includes the following amendments:

    - Improved remote performance.
    - Some scripts have been configured to automatically activate the laser (for example bbsprofile.spt and beambalance.spt). It is no longer necessary to manually activate the laser.
    - Default port setting in LocalJig_include.spt has been configured to prevent any remote connection problems related to port and baud rate.

      To download and upgrade to this Splot version, see *Appendix B: Upgrading the Splot* on page 12.

Problems Fixed

This section lists problems that are resolved in the current release of the Lotem 800 II software.

- If you open the rear/front door via the solenoid dialog and then click **Stop**, you no longer receive the **Shut down the application** debug error message.
- The **Loading System >Loading System>Side2Side End Check pos mm** parameter always has a value of 187, even though there are platesetters for which this value is incorrect. The 187 value should not destroy the previous one (Del key change). In case of problems arising from platesetters without a registry at all, 187 will be the default. If as a result, you have problems with a new plate or the side to side process change the value of the parameter to **177**.
- Dead Lock in case of drum motor speed is no longer activated while performing load/unload grippers.
- The DLC script was changed to solve the problem of the dual loading cassette software deadlock.
- If you are trying to replace the tray when the paper disposal detector is covered, you are no longer presented with an error message.
- The cassette area protection for DLC problem has been resolved.

There is now a drum speed limitation when connecting remotely to Lotem Controller. You can monitor the Expose job.

Known Problems

This section lists known problems in the Lotem 800 II software. They may be outstanding issues from a previous release or new problems. When a problem listed here is resolved, the solution is described in the *Problems Fixed* section of the release notes for the next version of the Lotem 800 II software.

1. The two detectors, **Home and End Position Gripper**, will not function if they are in the same state - (ON /OFF). When this occurs, movement of Drum is not permitted. The system only identifies this problem in Start Up mode.
2. When installing the software, the following error message appears: **Unable to convert data base files**. Click **Next** and continue with the installation process.
3. When loading an illegal plate size, the following messages appear:
   - **Expose task aborted by host**
   - **Illegal loading system state**
   - **Drum motor go to position speed failed**
4. The new MCU tunnel cover design does not enable Lotem Controller to indicate whether the bridge cover is open or closed.
5. When the diagnostic application is running, a debug message sometimes appears when the application is closed. In order to avoid a PC crash, press Ignore and the application will close without any problems.
6. During the unloading process, the conveyor belt moves in the wrong direction causing the plate to remain on the belt instead of entering the processor.
   To overcome this problem, change the default value of the **Others>Lotem800V>IO OBJECTS>Unload Conveyor Motor>Speed Factor** parameter from -0.08 to **0.08**.

Appendix A: Loading Version 3.72

Before installing the software, do the following:

- Backup the **registry**, **database**, (copy to your laptop) and the **Splot file**.



Note: After performing the backup, navigate to the Registry file and write down on a piece of paper, the values for the **Y after centering** parameter and the **X extra to short pin for 0.2 mm plates** parameter. In addition, note the status of the **punch motor HP detectors**.
The installation reverts the parameters back to their default values. Test the platesetter to see if it correctly operates with the default values. If it does not operate, amend the parameter's two default values to those written on the piece of paper. In addition, make sure the **punch motor HP detectors** parameter retains its original value.

- Make sure you have the current CD version in case you need to revert back to it.
- Make sure you have **EZ Restore** in case you need to reinstall windows.
- Make sure you have:
  Lotem Windows 95 Operating System version 2.0 - 501V1R083,
  BIOS 1.2 (501V1R085) and Lotem 800/400 Software Startup A (501V51692A)



Note: To check which operating system is installed, right-click on any open folder. If Shared appears, you have Windows 95 version 2.0.

After installing the software, do the following:

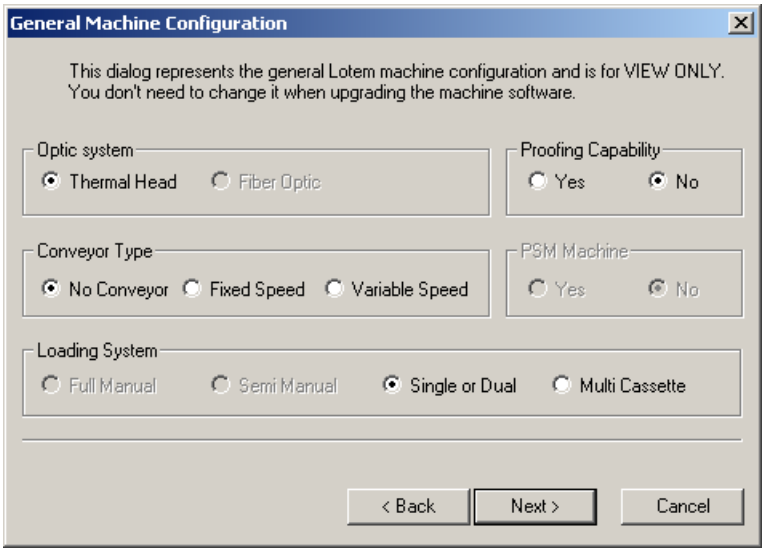
- Save the registry and the database onto two different diskettes.

After installing the software:

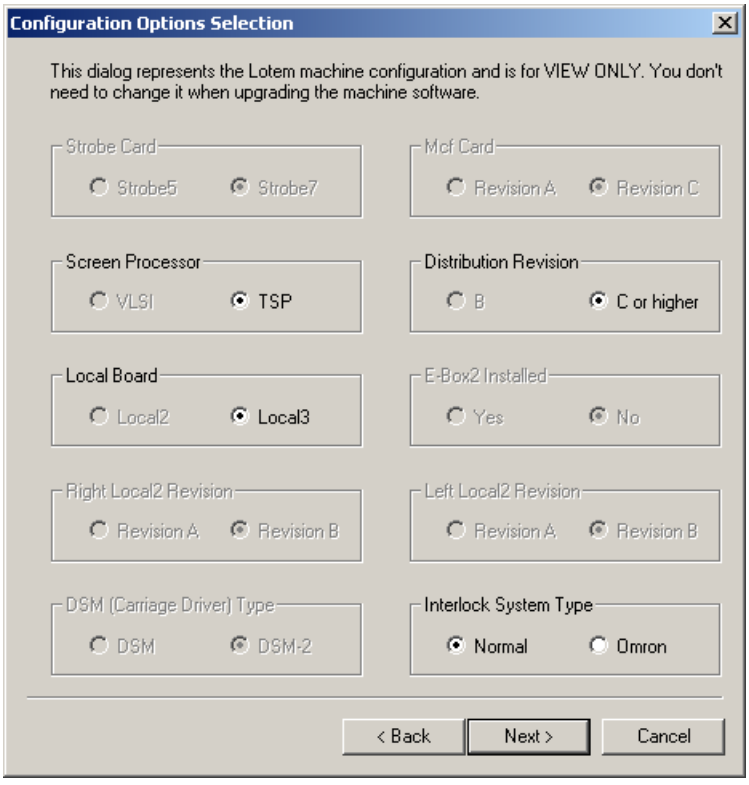
- Save the registry and the database onto two different diskettes.
- Load Internet Explorer from the version CD.

Configuration Options Selection dialogs

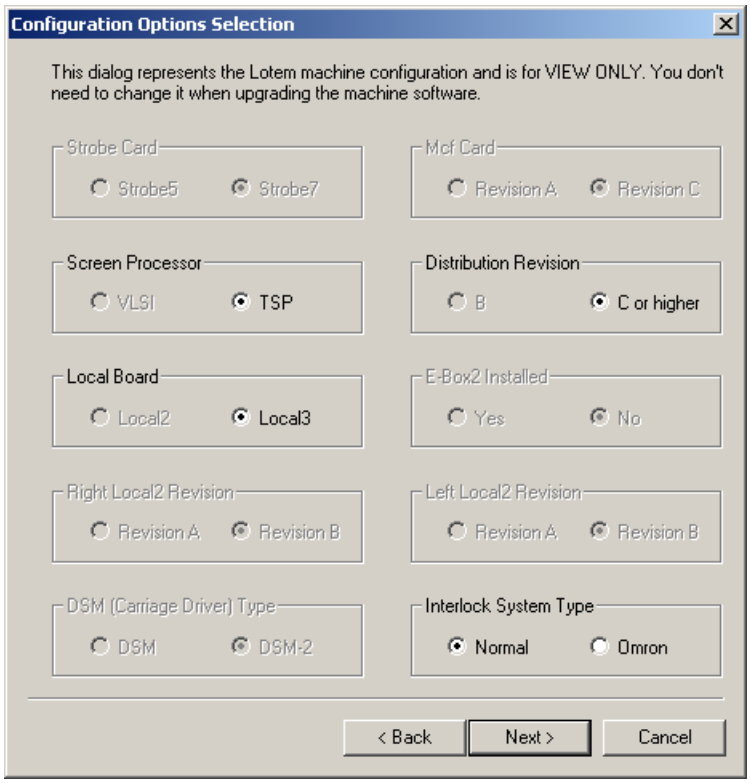
Insert the Lotem version 3.72 software CD into the CD driver. The Lotem Install Setup Wizard guides you through the setup process.
Following are new windows in the setup procedures of version 3.72:



Configuring the platesetter



Board configuration



System configuration

- After installation is complete, click **Finish** to return to the desktop.

  The **Lotem 800 II ver 3.72** icon is added to the desktop.

- Double-click the **Lotem 800 II ver 3.72** icon to activate the application.

Make sure the application status changes to **Ready**.

Appendix B: Upgrading the Splot

Please read the instructions below prior to upgrading.

Attention: If you usually access the Splot through the Service Shell, do not use this installer to upgrade the Splot, because it will only install a freestanding version of Splot.To upgrade the Splot as part of the Service Shell, first upgrade to Service Shell 2.4

To upgrade the Splot, do the following:

1. Download the Splot 3.64 Upgrade and Installation Procedure (103 KB).

   Note: The default location for the Splot is C:\TII\

2. Save the installer to your local PC. It can be downloaded from the Downloads section of the Splot TechPlanet site.

Note: This upgrade adds a new version of Splot to your Lotem Controller application. It will not override any previous versions. To remove any previous versions, use the original Uninstaller.

3. On your local PC, click **Open Splot** and check which Splot version you are currently running. The version number is displayed in the title bar of the **Main Command** window. If you are already running a Splot version 3.3x or higher/lower, double click **splot364.exe** and follow the Upgrade Procedures.

Note: This upgrade adds a new version of Splot to your Lotem Controller application. It will not override any previous versions. To remove any previous versions, use the original Uninstaller.

Appendix C: Loading Firmware

TMCE Main Firmware

1. Quantum>**reset boot**.

   A Boot>prompt appears.
2. Quit the terminal (Splot) to free the serial port.
3. Open DOS prompt by typing the following:

   C:\th2\tools\bload f=filename.bin p=8 i=main

   File name: **QuantumFmw120-03.bin, or mcefirmware.bin**

   Wait until it finishes loading successfully.
4. Start Splot.
5. Type Boot>**reset**.
6. Type Quantum>**scan eh_&Logicpower bon**.
7. Type Quantum>**reset**.

Xilinx Firmware

1. Quantum>**reset boot**

   A Boot>prompt appears.
2. Quit the terminal (Splot) to free the serial port.
3. Open DOS prompt by typing the following:

   C:\th2\tools\bload f=filename.bin p=8 i=Ica

   File name: **mcelca0137.bin**, or **mcelca.bin**

   Wait until it finishes loading successfully.
4. Start Splot.
5. Type Boot>**reset**

Head Firmware

1. Quantum>**set head type 3**

   Ignore any warning messages.
2. Quantum >**head program**

   Wait for the message `Datalink exposure head coming online`, Ignore any warning messages.
3. Quantum >**head boot**

   Wait for the message: `EH boot command (3) completed successfully`

   Ignore any error messages.
4. Quit the terminal (Splot) to free the serial port.

5. Open DOS prompt, load it by typing the following:

   C:\th2\tools\tehload p=8 filename.bin

   File name: **th2h101e.bin, or th2firmware.bin**

   Wait until it finishes loading successfully.

6. Define the dongle, by typing the following:
   Quantum>>**access dev**
   Quantum>>**stg delete flash 2405**
   Quantum>>**reset**