The GMCE firmware installer fails to install the head firmware. You now need to perform a manual download.

To obtain the appropriate binary file:

1. Obtain the head firmware binary from the appropriate output device Controlled Release or from the TechPlanet TH2 firmware page: http:\\techplanet.creo.com\firmware\CTP\Head\thermal2\versions.htm

To find the IP address of the GMCE board connected to the head:

2. Perform one of the following methods:

Method 1

- In service shell diagnostic prompt, type: `TS>> net status`

  The following results appear:

```
Net Interface Port Information:
Port Type: FIBER
Protocol: ETHERNET
IP Address: 192.168.100.193 → This is the GMCE IP Address
Net Mask: 255.255.255.128
MAC Address: 00:06:CD:00:19:3F
Protocol Link: Running
Net Interface Port Information:
Port Type: COPPER
Protocol: ETHERNET
IP Address: 192.168.100.193 → This is the GMCE IP Address
Net Mask: 255.255.255.192
MAC Address: 00:06:CD:00:19:3F
Protocol Link: Running
Default Gateway:192.168.100.209
*** Command Complete
```

Method 2

- Go to **SystemDrive\Creo\Firmware** folder and open **CreoBootp.ini**.
- Find the GMCE that is connected to the head that you want to update.

  The following results should be visible:

```
[GMCE0]
; Indicate whether this logic unit is active. Values: Yes/No,
True/False, or 0/1.
ACTIVE        = Yes
;             GMCE copper port IP Address:
IPADDR_CO     = 192.168.100.193 → This is the GMCE IP Address
```

To manually download the firmware:

3. Type `TS>> list version` in Service Shell to verify that the GMCE board is operational and running a controlled release firmware.

   The following results appear:

```
TS>> list version
Version Information:
-----------------------------------------------------
FW: Trendsetter 800 III Quantum X
   Version: 1.46.21 Production
   Build: 16675
   Date: Feb 06 2007 15:05:27
   Baseline: 3811 Feb 06 2007
   Xilinx: 2.02 Backup 1.99 Logic 00.44.02
HW: GMCE 3.02
```

4. Open a command window in the folder where the firmware binary file is located.

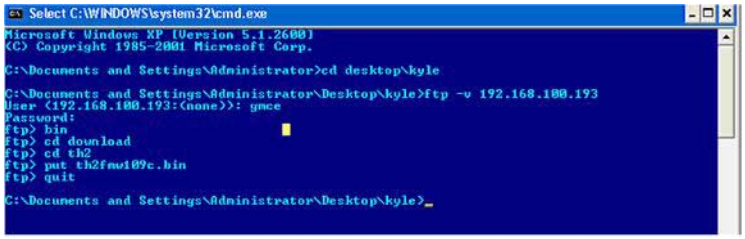


   Figure 3: FTP prompt

5. Type `ftp –v 192.168.100.193` to FTP the firmware binary to the download folder on the GMCE.

   This is the GMCE IP address as found in step 2.

6. For user, type *gmce*

7. For password, type *creo*

8. Type `> bin`

9. Type `> cd download`

10. Type `> cd TH2`

11. Type `> put th2firmware.bin`

    Change this to the filename of the bin file for the firmware version you are loading. For example, `th2fmw109c.bin`

12. Type `> quit`

13. Open Service Shell.

    Wait until the download operation finishes. The following results appear:

```
S HIM:  FTP file path and name: /download/TH2/th2fmw109c.bin
S HIM:  FTP head download: 'verifying FTP file'
S HIM:  Head firmware bytes downloaded = 59392, 5% done
```

```
S HIM:  Head firmware bytes downloaded = 118784, 10% done
<snip></snip>
S HIM:  Head firmware bytes downloaded = 534272, 45% done
S HIM:  FTP head download: 'head program'
S HIM:  Head state changed: mode=Disable, state=Disable, type=N/A
Datalink: exposure head going offline
S HIM:  Head state changed: mode=Program, state=Program, type=TH2
Datalink: exposure head coming online (programming mode)
S HIM:  FTP head download: 'head boot'
S HIM:  Head firmware bytes downloaded = 593664, 50% done
*** State message: EH Boot command (3) Complete
S HIM:   FTP head download: 'fload binary head bundle'
File format = Binary
Begin binary transfer now ...
S HIM:  FTP head download: 'transferring file...'
<snip></snip>
S HIM:  Head firmware bytes downloaded = 1068410, 90% done
S HIM:  Head firmware bytes downloaded = 1127802, 95% done
S HIM:  FTP head download: 'head end'
S HIM:  FTP head download: 'head reset'
S HIM:  Head state changed: mode=Disable, state=Disable, type=N/A
Datalink: exposure head going offline
S HIM:  Head state changed: mode=Binary, state=Offline, type=Unknown
E EHI:   The exposure head is starting to initialize
S HIM:  Head state changed: mode=Binary, state=Initialize,
type=Unknown
C HIM:  Head initialized successfully
E EHI:   The exposure head has completed initialization
E EHI:   Exposure head firmware version is supported
E EHI:   Using media data block version 6
E EHI:   Initializing exposure head NVS parameters
E EHI:   Exposure head type 3 is supported
E EHI:   The product model has been configured
S HIM:  Head state changed: mode=Binary, state=Initialize, type=TH2
E EHI:   Stroke parameters in HDM
E EHI:   Image mode parameter is supported
E EHI:   SCORR table accessible by slot
E EHI:   A baud rate of 115200 has been negotiated
E EHI:   The exposure head has switched to the negotiated baud rate
E EHI:   Switching to the negotiated baud rate of 115200
E EHI:   Begin negotiating the application protocol
E EHI:   An application protocol of 10 has been negotiated
E EHI:   The exposure head has switched to the negotiated
application protocol
E EHI:   Switching to the negotiated application protocol of 10
E EHI:   Begin host initialization
S EHI:  The exposure head is online
S HIM:  Head state changed: mode=Binary, state=Online, type=TH2
Datalink: exposure head coming online (binary mode)
C HIM:  TH2 version 1.09c Release is ready for plotting
```

14. Reset the GMCE.