



PXNplus CPU Board Firmware Upgrade Instructions

Build information

Note: Builds PXNP_DIST_R107, PXNP_DIST_R108, and PXNP_DIST_R109 were internal releases only.

Build PXNP_DIST_R110

Enhancements

Build PXNP_DIST_R110 provides the following enhancements to the Integrated Configuration Tool:

- Ability to disable the Integrated Configuration Tool once configuration is complete to provide increased security. Use the **Parameters/Other Parameters** tab.
- Web server updated from version 2.04 to version 2.25b.
- Ability to select several options at the same time on the *Log Control* tab.

Known issues resolved

Build PXNP_DIST_R110 resolves the following issues:

- Access to the Main (main_ie.html) page of the Integrated Configuration Tool is provided only when the user is logged into the Integrated Configuration Tool.
- On Picture Perfect installations, this build adds the capability to configure UBF using the Integrated Configuration Tool. On Secure Perfect installations, the Secure Perfect host is used to configure UBF.
- On occasion, the micro fails to obtain the host name when configured for DHCP and DDNS operation. This prevents the micro from establishing a connection with the host. This has now been corrected for both Secure Perfect and Picture Perfect hosts.
- Updates the Integrated Configuration Tool to properly notify the user when downloading .efl images of type PXNPK6xxx.efl.
- Updates Picture Perfect to detect slow or intermittent hosts that may cause the micro to hang in an undetermined configured state never receiving the base configuration database. The micro allows a total of three attempts to

download the base configuration database from the host. Upon failure to download the base configuration database from the host, the micro enters the persisted mode of operation. Upon entering the persisted mode of operation, the micro attempts to communicate with the host again after a period of ten minutes has elapsed.

Build PXNP_DIST_R106

Build PXNP_DIST_R106 resolves the following issues:

- Micro crashes when loading badges with multiple unique categories. This is often exposed when loading the database from persistent memory. The micro may reboot once every hour when it is getting the database from the host.
- On occasion, the micro does not go into the normal mode when coming out of holiday mode.
- Broadcast state changes do not take effect until the micro is reset.
- When the Picture Perfect host is shut down with the micro online, the micro does not detect that it is offline with the host.
- On occasion, time synchronization of the micro with the Picture Perfect host was off by about a minute.

Verify your PXNplus firmware build

1. In the browser Address field, enter the IP address of the micro.
2. At the Integrated Configuration Tool password screen, log on.
3. Select **Micro Info**. Use the following table:

If this build is installed...	The following displays...
R110	Build version: PXNP_DIST_R110
	PP version: PP_VER_118
	SP version: SP_VER_6118
R106	Build version: PXNP_DIST_R106
	PP version: PP_VER_114
	SP version: SP_VER_6114
R105	Build version: PXNP_DIST_R105
	PP version: PP_VER_113
	SP version: SP_VER_6113

Upgrade from

PXNP_DIST_R106/PXNP6114 to PXNP_DIST_R110/PXNP6118

Using the Integrated Configuration Tool:

Allocate about 5 to 7 minutes for upgrading each micro. Refer to your micro installation manual for more information about the Integrated Configuration Tool.

1. In the browser Address field, enter the IP address of the micro.
2. At the Integrated Configuration Tool password screen, log on.
3. Click **Flash Micro** and browse to the PXNP6118.efl file.
4. Wait for the file to load. The message `Updated file processed correctly` displays.
5. Click **Flash Micro** and browse to the PXNPK6118.efl file.
The status bar on the browser should say `Done`.
6. Reboot the micro manually by shorting JP6 on the PXNplus CPU board.
7. Log into the Integrated Configuration Tool again.
8. Click **Flash Micro** and browse to the PXNPH6118.efl file.
9. Wait for the file to load. The message `Updated file processed correctly` displays. The micro reboots automatically.
10. Clear the cache of your Internet Browser. If using Microsoft Internet Explorer, select **Tools**, and **Internet Options**.
 - In the *Temporary Internet files* section, click **Delete Cookies**, then **OK** to confirm.
 - In the same section, click **Delete Files**. At the *Delete Files* dialog, select **Delete all offline content**, then click **OK**.
 - In the *History* section, click **Clear History**, then **Yes** to confirm.
 - Click **OK** to close the *Internet Options* dialog box.
11. To verify the build upgrade, refer to [Verify your PXNplus firmware build](#) on page 2.

Using the eFlash through the Secure Perfect or Picture Perfect host:

Allocate about 20 to 25 minutes for upgrading each micro. Refer to [eFlash instructions](#) on page 5 and your host user manual for more information on eFlash.

1. eFlash the PXNP6118.efl file.
2. The application restarts automatically after the file is flashed successfully.
3. eFlash the PXNPK6118.efl file.
4. Reboot the micro manually by shorting JP6 on the PXNplus CPU board.
5. eFlash the PXNPH6118.efl file.
6. The micro reboots automatically after the file is flashed successfully.
7. To verify the build upgrade, refer to [Verify your PXNplus firmware build](#) on page 2.

PXNP_DIST_R105/PXNP6113 to PXNP_DIST_R106/PXNP6114

Using the Integrated Configuration Tool:

Allocate about 5 to 7 minutes for upgrading each micro. Refer to your micro installation manual for more information about the Integrated Configuration Tool.

1. In the browser Address field, enter the IP address of the micro.
2. At the Integrated Configuration Tool password screen, log on.
3. Click **Flash Micro** and browse to the PXNPK6114.efl file.
The status bar on the browser should say Done and the micro should reboot automatically.
4. Log onto the Integrated Configuration Tool again.
5. Click **Flash Micro** and browse to the PXNPH6114.efl file.
6. Wait for the file to load. The message Updated file processed correctly displays.
7. Reboot the micro manually by shorting JP6 on the PXNplus CPU board.
8. Log onto the Integrated Configuration Tool again.
9. Click **Flash Micro** and browse to the PXNP6114.efl file.
10. Wait for the file to load. The message Updated file processed correctly displays.
11. To verify the build upgrade, refer to [Verify your PXNplus firmware build](#) on page 2.

Using the eFlash through the Secure Perfect or Picture Perfect host:

Allocate about 20 to 25 minutes for upgrading each micro. Refer to [eFlash instructions](#) on page 5 and your host user manual for more information on eFlash.

1. eFlash the PXNPK6114.efl file.
2. The micro reboots automatically after the file is flashed successfully.
3. eFlash the PXNPH6114.efl file.
4. Reboot the micro manually by shorting JP6 on the PXNplus CPU board.
5. eFlash the PXNP6114.efl file.
6. To verify the build upgrade, refer to [Verify your PXNplus firmware build](#) on page 2.

eFlash instructions

For Picture Perfect users

- When selecting the firmware `.efl` file to update a PXNplus-based micro, select both **Direct Micro File** and **Network Micro File** regardless of the actual physical communications being used. To clarify, select both **Direct Micro File** and **Network Micro File** whether you have a direct-connect, dial-up or network-based PXNplus micro.
- Because of the existing filter on the file name, the file name `PXNP6xxx.efl` does not display on the selection list. Manually enter the path to the file on Picture Perfect 2.0 and later versions.
- In order to prevent a Flash Timeout Failure (indicated by a red icon), the system administrator needs to edit the `/cas/log/.eflashrc` file and enter a minimum of these values:

```
timeout = 60
```

```
flashwait = 1440
```

Some networks may require a higher parameter value.

- When the line of micros has a combination of PXNplus and PX CPU boards, the whole line cannot be flashed at one time. When flashing PXNplus boards, select `PXNP6xxx.efl` as the **Direct Micro File**. When flashing PX boards, select `m5nxxx.hex` as the **Direct Micro File**.

For Secure Perfect users

When flashing a line of micros with a PXNplus micro as the head-of-the-line micro, only two downstream micros can be selected at a time.

