



## Introduction

This is the *PXNplus CPU Board Release Notes (460634001B)* for the following GE Security documents:

- *Micro/5 Installation Guide (460130002D)*
- *Micro/PX-2000, Micro/PXN-2000, and Micro2000PXNplus Installation Guide (460419001K)*
- *Micro/PX-2000, Micro/PXN-2000, and Micro2000PXNplus Quick Installation Guide (460435001M)*
- *M3000 Installation Guide (460630001A)*

This document includes late-breaking information on this product that did not make it into the manual. Where information differs between the two documents, this document supersedes the manual.

## What's new

The following sections contain new or updated information:

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## Known issues resolved in 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.

**To check the build of your PXNplus firmware:**

1. In the browser Address field, enter the IP address of the micro.
2. At the Integrated Configuration Tool password screen, log in.
3. Select **Micro Info**. If the latest build is installed, the following displays:
  - Build version: PXNP\_DIST\_R106
  - PP version: PP\_VER\_114
  - SP version: SP\_VER\_6114

## Micro configuration notes

- Micros configured for the first time require a manual reset after clicking **Apply Changes** within the Integrated Configuration Tool. After clicking **Apply Changes**, wait a minimum of 30 seconds before resetting the micro (shorting JP6 on the PXNplus CPU board).
- To restore the factory defaults, short JP4 on the PXNplus CPU board for a minimum of five seconds.

## Minimum supported board revision levels

The following table lists the minimum board revision levels required when using the PXNplus CPU board.

Table 1. Minimum revision board level required for use with the PXNplus CPU board

Board	Part number	Minimum revision level required
Power/Communications	110064001	J
2RP	110063001	E
2SRP	110101001	A
8RP	110100001	G
20DI	110072001	B
	110072003	
16DO	110071001	D
	110071101	
16DOR	110078001	A
Backplane	110061001	A

## LED indications

### Manual correction

The following statement can be found in the section *Removing the PXNplus board* in the *Micro/5 Installation Guide* and the *M3000 Installation Guide*:

1. To safely shut down the micro operating system, short JP3 for approximately 5 seconds until DS8 turns On. DS2 and DS3 then alternate On.

The statement should read:

1. To safely shut down the micro operating system, short JP3 for approximately 5 seconds until DS7 turns On. DS2 and DS3 then alternate On.

### Additional LED indications

Four additional LED indications have been included:

- **eFlash image save:** indicates that the newly loaded image from the eFlash transfer is being saved into the FLASH. This is an activity indicator only.
- **Persistence:** indicates that the micro is operating without a host. In this mode, the micro is operating standalone until communication is re-established with the host.
- **Flash write:** indicates that the micro is storing database records into the Flash file system. This is an activity indicator only.
- **Watchdog failure mode:** indicates that an internal thread has failed.

See [Table 2](#) and [Table 3](#) for the LED states.

Table 2. PXNplus CPU board LED state transitions

	DS1	DS2	DS3	DS4	DS5	DS6	DS7	DS8
eFlash image save							Alternates ON with DS8	Alternates ON with DS7
Persistence								ON
Flash Write						Flashing		

Table 3. PXNplus CPU board LED fault conditions

	DS1	DS2	DS3	DS4	DS5	DS6	DS7	DS8	Resolution or definition
<b>Operation state</b>									
Watchdog failure mode					ON		ON		This failure is logged according to the log settings. The micro performs a complete reboot after this failure.

## Persistent mode of operation

When the PXNplus is in persistent mode of operation:

- Anti-passback, Time and Attendance tracking, and Temporary Categories functions are localized to the individual controllers. Upon restoration of communications with the host, the host automatically sets badge status for Anti-passback and Time and Attendance to neutral for all badges on the controller.
- Unknown badges cannot be learned because the controller is not online with the host. The Unknown badge transactions are mislabeled in the history upload as transaction type *Learn Timeout* instead of *Unknown Badge*.

## 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.

