



# Dolphin PXH832 Adapter Firmware Release Note

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April 29<sup>th</sup>, 2021

Version 1.5

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# 1 Introduction

This release note covers the Transparent PXH832 PCIe Gen3 x16 Adapter card firmware. The firmware consists of PLX EEPROM configuration data and Management processor firmware (BMC / STM config). This release note contains a summary of the changes made. Please contact Dolphin for details.

## 1.1 Firmware versions

The Firmware version is covering the PXH832 STM firmware changes. The firmware can be upgraded using the upgrade\_eeprom utility bundled with eXpressWare. Firmware version 8.12 is current and recommended.

Firmware version	Release date	Note
8.4 - 8.9		Not recommended for use, please upgrade the latest available firmware.
8.9	September 23 <sup>rd</sup> 2019	Known problems: <ul style="list-style-type: none"><li>• STM stability during Host reboot.</li><li>• Temperature sensor may give false values.</li><li>• Incompliance issues related to the CMI specification.</li></ul> Impact: This version is not recommended as devices may not be detected after a reboot.  3 <sup>rd</sup> party devices supporting the CMI protocol may not be reset. The link may not be properly trained to x16  Please upgrade to the latest firmware.
8.10	October 31 <sup>st</sup> 2019	Fixes: <ul style="list-style-type: none"><li>• Fixes noncompliance issues related to the CMI specification.</li><li>• Improve stability during Host reboot. With some servers, transparent IO devices may be undetected.</li><li>• Fixed issue reading onboard temperature sensor. Incorrect values may be reported.</li></ul> Known problems: <ul style="list-style-type: none"><li>• Target cards connected with a single CMI cable may not be reset.</li></ul> Impact: A reboot may be required to detect all devices when using a single CMI cable.
8.11	February 20 <sup>th</sup> 2020	Fixes: Improved CMI reset handling with one cable
8.12	June 2 <sup>nd</sup> 2020	Fixes: <ul style="list-style-type: none"><li>• Fixed reboot problem that could cause host lookup using x8/x16 CMI cables</li><li>• Fixed BMC stability issue that could cause target device not being detected during boot.</li></ul> Bundled with eXpressWare 5.18

## 1.2 EEPROM Versions

The EEPROM version is tracking the PXH832 PLX EEPROM configuration changes. The firmware can be upgraded using the upgrade\_eeprom utility bundled with eXpressWare. EEPROM version 12 is current and recommended.

EEPROM version	Release date	Note
10	March 29 <sup>th</sup> 2019	Added improved SerDes tuning for dual x8 links
11	April 10 <sup>th</sup> 2019	No changes for PXH832
12	May 14 <sup>th</sup> 2019	No changes for PXH832 Bundled with eXpressWare 5.18

## 2 Appendix

### 2.1 How to check Firmware and EEPROM version

The version of the firmware components can be retrieved using the **dis\_diag** tool. This tool is available by installing eXpressWare available from Dolphin. Please see options using **-h** option. This software is available for both Windows and Linux.

#### 2.1.1 Linux platforms

```
# cd /opt/DIS/sbin
# ./dis_diag
```

#### 2.1.2 Windows platforms

```
> cd %ProgramFiles%\Dolphin Express PX\Util
> .\dis_diag
```

#### 2.1.3 Example output

```
# dis_diag
=====
Dolphin diagnostic tool -- dis_diag version 5.18.0 (Mon Mar 19 16:44:17 CET 2021)
=====

dis_diag compiled in 64 bit mode
Driver : Dolphin IRM (GX) 5.18.0 Jan 24th 2021 (rev 33fff3a)
Date   : Thu Mar 22 12:59:28 CET 2021
System : Linux somenode 3.10.0-514.21.1.el7.x86_64 #1 SMP Thu Jan 25 17:04:51 UTC 2021
x86_64 x86_64 x86_64 GNU/Linux

Number of configured local adapters found: 1

Adapter 0 > Type           : PXH832
           Mode           : NTB
           NodeId         : 8
           Serial number   : PXH832-CF-021467
           PXH chip family : PLX_DRACO_2
           PXH chip vendorId : 0x10b5
           PXH chip device  : 0x8733
           PXH chip revision : 0xCA
           > EEPROM version : 12
           EEPROM vendor info : 0x0000
           > Firmware version : 8.12
           > Card revision : CG
```

### 2.2 How to upgrade the firmware

To upgrade the firmware, please install the eXpressWare Board Management Software and follow the instructions for Firmware Upgrade. The software for PXH832 adapters can be found at [www.dolphinics.com/px](http://www.dolphinics.com/px)

### 2.3 How to contact Dolphin Support

Please contact Dolphin support at [pci-support@dolphinics.com](mailto:pci-support@dolphinics.com) if you have any questions or issue.