



Dolphin PXH84x Transparent Adapter Firmware Release Note

10th October 2020

Version 1.6

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1 Introduction

This release note covers the Transparent PXH842, PXH845, PXH846, PXH847, and PXH848 PCIe Gen3 x16-xx Adapter card firmware. The firmware consists of PLX EEPROM configuration data and Management processor firmware (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 PXH84x STM firmware changes. The firmware can be upgraded using the upgrade_eeprom utility bundled with eXpressWare.

Firmware version	Release date	Note
8.6		Initial product release
8.10	October 31 st 2019	Fixes: <ul style="list-style-type: none">• Improve stability during Host reboot. With some servers, transparent IO devices may be undetected.• Fixed issue reading onboard temperature sensor. Incorrect values may be reported• Fixed wrong Port LED control. LEDs may become dark. New features: <ul style="list-style-type: none">• Support for Hot Add operations. Enable DIP-6 for Link Down reset. Details found in PXH842 Adapter users guide version 1.1 or newer.
8.11	February 21 st , 2020	New unified firmware release for PXH84x cards <ul style="list-style-type: none">• No changes for transparent use cases.

1.2 EEPROM Versions

The EEPROM version is tracking the PXH84x PLX EEPROM configuration changes. The firmware can be upgraded using the `upgrade_eeprom` utility bundled with eXpressWare.

EEPROM version	Release date	Note
5	March 6 th 2018	Initial product release
6	August 18 th 2018	Identical to version 5, no changes. Version bumped to have a unified version across all PXH84x cards.
7	March 25 th 2020	Fixes: <ul style="list-style-type: none">• Removed capability information set by BIOS (no influence on systems)• Added support for BD version FireFly assignments.• Added support for all variants of PXH84x transparent cards
8	June 11 th , 2020	Fixes: <ul style="list-style-type: none">• Added LnkCap register definition to control surprise down error handling using eXpressWare. No changes to functionality.

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 5.6.0 (Mon Mar 19 16:44:17 CET 2018)
=====

dis_diag compiled in 64 bit mode
Driver : Dolphin IRM (GX) 5.6.0 Jan 24th 2018 (rev 33fff3a)
Date   : Thu Mar 22 12:59:28 CET 2018
System : Linux somenode 3.10.0-514.21.1.el7.x86_64 #1 SMP Thu May 25 17:04:51 UTC 2017
x86_64 x86_64 x86_64 GNU/Linux

Number of configured local adapters found: 1

Adapter 0 > Type           : PXH842
           Mode            : NTB
           NodeId          : 8
           Serial number   : PXH842-BD-021467
           PXH chip family : PLX_DRACO_2
           PXH chip vendorId : 0x10b5
           PXH chip device  : 0x8733
           PXH chip revision : 0xCA
           > EEPROM version : 7
           EEPROM vendor info : 0x0000
           > Firmware version : 8.11
           > Card revision : BD
```

2.2 How to contact Dolphin Support

Please contact Dolphin support at pci-support@dolphinics.com if you have any questions or issue.