Dolphin MXP921 PXIe System Switch Firmware Release Note

July 8th, 2026

Version 1

Table of Contents

1 Introduction 3

1.1 Supported topologies 3

1.2 BMC Firmware versions 3

1.3 PFX FLASH Versions 3

2 Appendix 4

2.1 How to determine the Firmware versions 4

2.1.1 Linux platforms 4

2.1.2 Windows platforms 4

2.1.3 Example output 4

2.2 How to upgrade the firmware 5

2.2.1 Linux platforms 5

2.2.2 Windows platforms 5

2.3 How to contact Dolphin Support 5

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1 Introduction

This release note covers the MXP921 PXIe System Switch firmware. The firmware consists of Microchip PFX runtime executables and configuration data, and Board Management Controller firmware (BMC fw). This note contains a summary of the changes made. Please contact Dolphin for details.

1.1 Supported topologies

The latest released firmware supports the following transparent configurations

Cable Configuration:

- Single PCIe 4.0 x4 Upstream

Backplane Configuration:

- PCIe 1.0-3.0 x16 + x8
- PCIe 1.0-3.0 x4+x4+x4+x4

1.2 BMC Firmware versions

The Board Management Controller (BMC) handles resets, CMI communication, monitoring, and recovery. The table below lists the BMC versions released for MXP924. The table below lists the BMC versions released for the MXP921.

Firmware version	Release date	Note
3.10-rc1	June 8th, 2026	• Initial firmware release for MXP921 Introduced in eXpressWare 5.26.0

1.3 PFX FLASH Versions

The PFX FLASH version changelog. Please note that the Dolphin software tools report the PFX FLASH version as the EEPROM version.

FLASH version	Release date	Note
1	June 8th, 2026	Initial version using Microchip firmware release MR6 Introduced in eXpressWare 5.26.0

2 Appendix

2.1 How to determine the Firmware versions

The firmware component versions can be retrieved using the **dis_diag** tool. Please see the options using the –h option. This tool is available by installing eXpressWare Board Management Software 5.19.2 or newer. The software is available for both Windows and Linux and can be downloaded from www.dolphinics.com/mx.

2.1.1 Linux platforms

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

2.1.2 Windows platforms

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

2.1.3 Example output

```
# dis_diag
================================================================================
  Dolphin diagnostic tool -- dis_diag version 5.26.0 (Mon Oct 12 16:44:17 CET 2021)
================================================================================

Adapter 1 > Type                      : MXP921
            Mode                      : TRANSPARENT
            NodeId                    : 4
            Serial number             : MXP921-CD-000048
            MXH chip family           : MICROSEMI - PFX PCIe 4.0
            MXH chip vendorId         : 0x11f8
            MXH chip device           : 0x4052
            MXH chip revision         : ZB
            EEPROM version            : 1
            EEPROM vendor info        : 0x0000
            Firmware version          : 3.10-rc1
            Card revision             : CD
            Topology type             : Not determined
            Topology Autodetect       : No
            Number of enabled links   : 2
            Max payload size (MPS)    : 128
            Multicast group size      : 2 MB
            Multicast groups          : 1
            Clock mode slot           : Port
            Clock mode link           : Global
            BDF                       : 03:00.0
            PCIe slot hwport          : P 8
            PCIe slot state           : x4, PCIe 4.0 (8 GT/s)
            PCIe slot capabilities    : x4, PCIe 3.0 (8 GT/s)
```

2.2 How to upgrade the firmware

The firmware can be upgraded using the upgrade_eeprom utility bundled with eXpressWare version 5.18 or newer.

2.2.1 Linux platforms

```
# cd /opt/DIS/sbin
# ./upgrade_eeprom.sh --upgrade
```

2.2.2 Windows platforms

Start PowerShell with administrative capabilities (Press Windows+X, select Windows PowerShell (Admin))

```
PS > cd "${env:ProgramFiles}\Dolphin Express MX\Util"
PS > Set-ExecutionPolicy AllSigned -Scope Process
PS > .\upgrade_eeprom.ps1 --upgrade
```

Please carefully review the output from the upgrade utility.

A complete power cycle of the system (including removal of AuxPower) is required. Please verify that the firmware upgrade was successful after the system is powered on again, following the steps found in section 2.1 How to determine the Firmware version above.

2.3 How to contact Dolphin Support

For general support questions, please contact Dolphin via the Jira Service Management portal: www.dolphinics.com/csp.