



Cornelis Omni-Path Express Fabric Unified Extensible Firmware Interface (UEFI)

Release Notes for 1.12.0

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1. Overview of the Release

This document provides a brief overview of the changes introduced into the Cornelis Omni-Path Express Fabric Unified Extensible Firmware Interface (UEFI) by this release. Cornelis Omni-Path Express UEFI is used for the hardware listed in [Section 1.6 "Supported Hardware"](#).

The information contained in this document is intended as supplemental information only; it should be used in conjunction with the documentation provided for each component.

These Release Notes list the features supported in this release, open issues, and issues that were resolved during release development.

1.1. Audience

The information provided in this document is intended for installers, software support engineers, service personnel, and system administrators.

1.2. Software License Agreement

The software provided is under license agreements and may contain third-party software under separate third-party licensing. Please refer to the license files provided with the software for specific details.

1.3. If You Need Help

Technical support for OPX products is available 24 hours a day, 365 days a year.

For additional details:

- Visit the Cornelis Support page at <http://www.cornelisnetworks.com/support>
- Contact [Cornelis Networks Customer Support](mailto:support@cornelisnetworks.com) at support@cornelisnetworks.com

1.4. Supported Features

- The list of supported hardware is in [Section 1.6 "Supported Hardware"](#).

1.5. Firmware Files

This release contains the firmware files listed in the table below.

Table 1. Firmware Files

Description	File Name	Version
HF11 UEFI RPM	hfi1-uefi-1.12.0.0-0.x86_64.rpm	1.12.0.0.0

Description	File Name	Version
UEFI Firmware	HfiPcieGen3Loader_1.12.0.0.0.rom HfiPcieGen3_1.12.0.0.0.efi	1.12.0.0.0

1.6. Supported Hardware

The following table lists the hardware supported in this release. The table does not include OEM-specific hardware, such as custom switches.

Table 2. Supported Hardware

Hardware	Description
Cornelis Omni-Path Express Host Fabric Interface Adapter 100HFA016LSN	Single Port Host Fabric Interface (HFI) PCIe Adapter
Cornelis Omni-Path Express Accelerated Open Compute Project (OCP) 3.0 Host Fabric Interface Adapter 100HFP016KS	Single Port Host Fabric Interface (HFI) OCP 3.0 Adapter

1.7. Installation Requirements

This section provides installation requirements for this release.

1.7.1. Best Practices

Note the following Cornelis recommendations:

- Update to the latest versions of OPX firmware and software to obtain the most recent functional and security updates.
- To improve security:
 - administrators should log out users and disable multi-user logins prior to performing provisioning and similar tasks.
 - update the default HTTPS certificate (refer to the *Cornelis Omni-Path Express Fabric Switches GUI User Guide*, “Updating the Certificate” for details).

1.7.2. Installation Instructions

For installation details, refer to the *Cornelis Omni-Path Express Fabric Software Installation Guide*.

1.7.2.1. Download the Software

Download the software using the following procedures.

1. Using a web browser, go to the [Cornelis Customer Center](#).
2. Select the **Release Library**.

3. Use the search box above the table to enter your search criteria.
The results are displayed.
4. Select your target firmware and click the **Download** icon.
5. Review the Software License Agreement.
6. Click **Accept**.
The firmware is saved to your computer.

1.7.2.2. Installing and Upgrading rpms

This section provides information for installing or upgrading firmware rpms.

- To install the rpms, use `rpm -ivh <rpm name>`.
- To upgrade the rpms, use `rpm -Uvh <rpm name>`.



IMPORTANT

When updating the UEFI driver to 1.11, it is recommended to also update the EPROM format to version 2. Once the format has been updated, it will remain in that format.

In `hfil_eprom` tool 10.11.1, the `-N` option was required to update the EPROM format. Starting with the 10.11.2 release of the `hfil_eprom` tool, the update is performed automatically and no longer requires or supports the use of `-N` to convert from version format 1 to format 2.

Example:

```
hfil_eprom -d all -u /usr/share/opa/bios_images/*
```

1.8. Product Constraints

- UEFI 1.9.0.0 or later is required for Boot over Fabric to work properly with multicast MTU sizes above 4096.
- The Secure boot feature in 10.9.2 requires a minimum UEFI version of 1.9.2.

1.9. Product Limitations

This release has the following product limitations:

- Enabling UEFI Optimized Boot on some platforms can prevent the HFI UEFI driver from loading during boot. To avoid this, do not enable UEFI Optimized Boot.

2. Issues

This section lists the resolved and open issues in the Firmware Tools.

2.1. Resolved Issues

2.1.1. Issues Resolved in this Release

The following table lists issues that are resolved in this release.

Table 3. Issues Resolved in this Release

ID	Description	Resolved in Release
STL-63151	Fix race condition between BIOS checking link status and LNI completing which resulted in PXE boot failures.	1.12.0

2.2. Open Issues

The following table lists the open issues for this release.

Table 4. Open Issues

ID	Description	Workaround
STL-49733	In KNL-F EFI shell, the command <code>ifconfig -l</code> does not correctly display the IP address after being assigned via DHCP.	Launch a newer version of the EFI shell from the embedded shell.
STL-49732	The Subsystem Vendor and Subsystem Device ID in the PCI configuration space of OPX discrete HFI cards may not indicate the correct OEM vendor and device. As a result, the <code>lspci</code> command may show incorrect Subsystem Vendor and Device ID information. This issue affects Intel server boards for Intel Xeon Processor v3 and v4 Product Family configured in Legacy OS boot mode.	Reconfigure the system from Legacy OS boot mode to UEFI boot mode.