



Intel® Omni-Path Fabric Unified Extensible Firmware Interface (UEFI)

Release Notes for 1.7.2.0.0

Rev. 1.0

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1.0 Overview of the Release

This document provides a brief overview of the changes introduced into the Intel® Omni-Path Unified Extensible Firmware Interface (UEFI) by this release. Intel® Omni-Path UEFI is used for the hardware listed in [Table 3](#) on page 7.

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 Document Versions

The following table lists the end user document versions supported by this release.

Table 1. Supported Document Versions

Title	Doc. Number	Revision
Intel® Omni-Path Fabric Quick Start Guide	J57479	4.0
Intel® Omni-Path Fabric Setup Guide (Old title: Intel® Omni-Path Fabric Staging Guide)	J27600	8.0
Intel® Omni-Path Fabric Switches Hardware Installation Guide	H76456	7.0
Intel® Omni-Path Host Fabric Interface Installation Guide	H76466	5.0
Intel® Omni-Path Fabric Software Installation Guide	H76467	9.0
Intel® Omni-Path Fabric Switches GUI User Guide	H76457	9.0
Intel® Omni-Path Fabric Switches Command Line Interface Reference Guide	H76458	9.0
Intel® Omni-Path Fabric Suite FastFabric User Guide (Merged with: Intel® Omni-Path Fabric Suite FastFabric Command Line Interface Reference Guide)	H76469	9.0
Intel® Omni-Path Fabric Suite Fabric Manager User Guide	H76468	9.0
Intel® Omni-Path Fabric Suite Fabric Manager GUI User Guide	H76471	9.0
Intel® Omni-Path Fabric Host Software User Guide	H76470	9.0
Intel® Performance Scaled Messaging 2 (PSM2) Programmer's Guide	H76473	9.0
Intel® Omni-Path Fabric Performance Tuning User Guide	H93143	11.0
Intel® Omni-Path IP and LNet Router Design Guide	H99668	6.0
continued...		



Title	Doc. Number	Revision
(Old title: Intel® Omni-Path IP and Storage Router Design Guide)		
Building Containers for Intel® Omni-Path Fabrics using Docker* and Singularity* Application Note	J57474	4.0
Intel® Omni-Path Management API Programmer's Guide	J68876	3.0
Configuring Non-Volatile Memory Express* (NVMe*) over Fabrics on Intel® Omni-Path Architecture Application Note	J78967	1.0
Intel® Omni-Path Fabric Software Release Notes	J95967	1.0
Intel® Omni-Path Fabric Manager GUI Release Notes	J95968	1.0
Intel® Omni-Path Fabric Switches Release Notes (includes managed and externally-managed switches)	J95964	1.0
Intel® Omni-Path Fabric Unified Extensible Firmware Interface (UEFI) Release Notes	J98868	1.0
Intel® Omni-Path Fabric Thermal Management Microchip (TMM) Release Notes	J98871	1.0
Intel® Omni-Path Fabric Firmware Tools Release Notes	J98870	1.0

1.3 Software License Agreement

This software is provided 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.

1.4 If You Need Help

Technical support for Intel® Omni-Path products is available 24 hours a day, 365 days a year. Please contact Intel Customer Support or visit <http://www.intel.com/omnipath/support> for additional detail.

1.5 Supported Features

- The list of supported hardware is in [Table 3](#) on page 7.

1.6 Firmware Files

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

Table 2. Firmware Files

Description	File Name	Version
HFI1 UEFI Option RPM	hfi1-uefi-1.7.2.0-rc0.0x86_64.rpm	1.7.2.0
UEFI UNDI		1.7.2.0

1.7 Intel Hardware

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

Note: The Intel® PSM2 implementation has a limit of four (4) HFIs.

**Table 3. Supported Intel Hardware**

Hardware	Description
Intel® Xeon® Processor E5-2600 v3 product family	Haswell CPU-based servers
Intel® Xeon® Processor E5-2600 v4 product family	Broadwell CPU-based servers
Intel® Xeon® Scalable Processors	Skylake CPU-based servers
Intel® Xeon Phi™ x200 Product Family	Knights Landing CPU-based servers
Intel® Xeon Phi™ Processor x205 Product Family	Knights Mill CPU-based servers
Intel® Omni-Path Host Fabric Interface 100HFA016 (x16)	Single Port Host Fabric Interface (HFI)
Intel® Omni-Path Host Fabric Interface 100HFA018 (x8)	Single Port Host Fabric Interface (HFI)

1.8 Installation Requirements

1.8.1 Installation Instructions

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

Or we can include the instructions here too.

1.8.1.1 Download the Standalone Firmware

Download the standalone firmware rpms from an Intel web page or other Intel secured location using the following procedures.

- Using a web browser, go to <https://downloadcenter.intel.com/search?keyword=Omni-Path>.

Notes: You can manually navigate to the software using the following steps:

- Using a web browser, type `downloadcenter.intel.com` in the address field and press **Enter**.
 - In the "Search downloads" field, type `Omni-Path` and press **Enter**.
- In the Description list, select the "Intel® Omni-Path Host Fabric Interface Platform Firmware" for the version you want to install.
Note: The latest version of each type of each download type is showing in the list. To show previous versions, select "Show more" at the bottom of the list.
 - In the "Available Downloads" list, select the files you need.
 - Review the Intel Software License Agreement.
 - Click "I accept the terms in the license agreement."
 - Save the download to your hard drive.

1.8.1.2 Installing and Upgrading rpms

This section provides information for installing or upgrading standalone firmware rpms.

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



1.9 Product Constraints

None.

1.10 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 prevent this, do not enable UEFI Optimized Boot.



2.0 Issues

This section lists the resolved and open issues in the Intel® Omni-Path UEFI.

2.1 Resolved Issues

2.1.1 Issues Resolved in this Release

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

Table 4. Issues Resolved in this Release

ID	Description	Resolved in Release
134471	The HFI UEFI driver cannot boot via PXE using Grub 2.	10.7
137951	In the HFI BIOS screen for Advanced NIC Configuration, a warning message about incorrect custom P_Key value is not completely displayed.	10.7

2.2 Open Issues

The following table lists the open issues for this release.

Table 5. Open Issues

ID	Description	Workaround
134819	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.
139613	The Subsystem Vendor and Subsystem Device ID in the PCI configuration space of Intel® Omni-Path 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.
143311	During UEFI pre-boot with the connected switch running 10.7.0.0.134, the OPA link may not complete initialization if the link is bounced or restarted. This behavior is limited to the pre-boot period. There is no exposure once Linux boot has completed	Avoid link bounce or switch reboots during server reboot periods. If the OPA link fails to come up during UEFI pre-boot, a host reboot is required to recover.