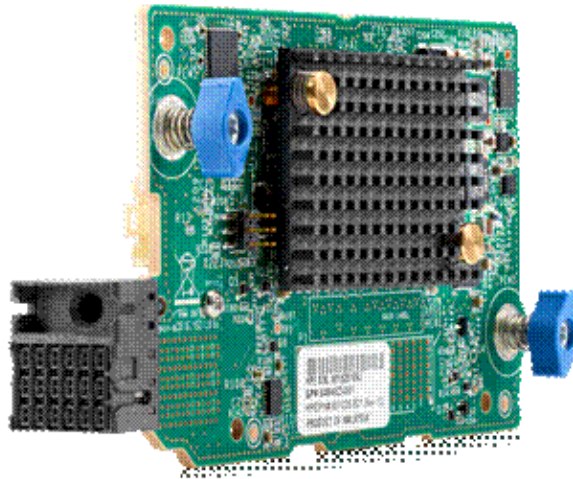


Overview

HPE Apollo 100Gb 1-port Intel Omni-Path Architecture 860z Mezzanine FIO Adapter

HPE Apollo 100Gb 1-port Intel Omni-Path Architecture 860z Mezzanine FIO Adapter is designed to provide a high-performance and scalable fabric for High Performance Computing (HPC) systems built with HPE ProLiant XL260a server. Intel Omni-Path Adapters, an element of the Intel Omni-Path Architecture, use an advanced "on-load" design that scales fabric performance with rising server core counts, making these adapters ideal for today's increasingly demanding workloads.

Combined with Intel Omni-Path Switches, Intel Omni-Path Adapters deliver low latency and up to 100Gbps bandwidth, ideal for performance driven server and storage clustering applications in HPC data centers.



Models

HPE Apollo 100Gb 1p OPA 860z FIO Adapter

851226-B21

Kit Contents

- HPE Apollo 100Gb 1p OPA 860z Mezzanine FIO Adapter

Compatibility

Servers supported

HPE ProLiant XL Servers:

- HPE ProLiant XL260a Gen9 for Apollo 6000

Standard Features

Product Features

- Up to 100 Gbps in each direction
- Optimized for scalable MPI message rate and latency
- Supports MSI-X interrupt handling optimized for multi-core compute nodes
- Operates without external memory
- Improved thermal control with HPE iLO technology
- Boot over Omni-Path
- Linux server operating system support
- PCIe Gen3 x16 Mezzanine form factor
- HPE Standard warranty, support, services

Congestion Management

Medium grained adaptive routing and dispersive routing, Explicit congestion backward notification.

Protocol Control Libraries	HPC application focused protocol control libraries that include Performance Scale Messaging (PSM) and OFED Verbs.
MTU sizes	Maximum Transfer Unit (MTU) sizes can be set to 2048 bytes, 4096 bytes, 8192 bytes, or 10240 bytes.
MSI-X	Message Signaled Interrupt provides performance benefits for multi-core servers by load balancing interrupts between CPUs/cores.
Management Support	The HPE Apollo 100Gb 1p OPA 860z FIO Adapter is supported by Hewlett Packard Enterprise Integrated Lights-Out (iLO).
Server Integration	The HPE Apollo 100Gb 1p OPA 860z FIO Adapter is validated, tested, and qualified server options for the supported HPE ProLiant XL260a servers. This approach provides a more robust and reliable networking solution than offerings from other vendors and provides users with a single point of contact for both their servers and their network adapters.
Configuration Utilities	The HPE Apollo 100Gb 1p OPA 860z FIO Adapter is configurable for PXE boot through UEFI mode only.
HPE Sea of Sensors 3D	Support for the HPE Sea of Sensors technology for improved thermal control and energy efficiency.
Warranty	1 year warranty, parts exchange.
For more information	To learn more on services for HPE Options, please contact your Hewlett Packard Enterprise sales representative or Hewlett Packard Enterprise Authorized Channel Partner. Or visit: http://www.hpe.com/services/proliant

Related Options

Fabric connectivity	For single Mezz connectivity, please order HPE InfiniBand EDR/Intel Omni-Path Architecture Single Fabric	863662-B21
	For dual Mezz cards connectivity, please order HPE InfiniBand EDR/Intel Omni-Path Architecture Dual Fabric	867280-B21
	NOTE: The above XL260a IO module SKUs include 2m copper cable(s) in the kit.	

Technical Specifications

General Specifications	Network Processor	Intel OP HFI ASIC
	Data Rate	100Gbps
	Bus Type	PCIe Gen3 x16
	Form Factor	Mezzanine form factor
Power and Environmental Specifications	Power	Single port card 7.4W (typical), 11.7W (max)
	EMC (Emissions)	US/Canada
		- FCC Part 15, Subpart B, Class A - CAN ICES-3 (A)/NMB-3(A)
		Europe/International
		- CISPR22 - CISPR32/EN55032 - EN55024 - EN61000-3-2 - EN61000-3-3
		Japan
		VCCI, Class A
		Australia/New Zealand

- AS/NZS CISPR 22, Class A

Korea

- RRA/KC (KN32, KN35), Class A

Taiwan

- BSMI (CNS 13438), Class A

Customs Union: Russian Federation, Belarus and Kazakhstan

RoHS/REACH

- TR CU 020/2011 "Electromagnetic compatibility of technical equipment" ♦
- Complies with RoHS II Directive 2011/65/EU of the European Parliament
- Complies with REACH Regulation (EC) No 1907/2006

Safety

US/Canada

- TUV NRTL: UL 60950-1, CSA 22.1.No. 60950-1

Europe

- TUV: EN60950-1

International

- CB Scheme: IEC 60950-1

Customs Union: Russian Federation, Belarus and Kazakhstan

- TR CU 004/2011 "On Safety of Low-Voltage Equipment"

Operating System Support

The HPE Apollo 100Gb 1p OPA 860z FIO Adapter is supported on the following 64-bit Linux operating systems:

- RHEL: 7.2U5
- SLES: 12.1

Please refer to the firmware/software download page of the device and HPE ProLiant XL260a server for the latest update.

Environment-friendly Products and Approach

End-of-life Management and Recycling

Hewlett Packard Enterprise offers end-of-life Hewlett Packard Enterprise product return, trade-in, and recycling programs in many geographic areas. For trade-in information, please go to: <http://www.hp.com/go/green> To recycle your product, please go to: <http://www.hp.com/go/green> or contact your nearest Hewlett Packard Enterprise sales office. Products returned to Hewlett Packard Enterprise will be recycled, recovered or disposed of in a responsible manner.

The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard Enterprise web site at: <http://www.hp.com/go/green> These instructions may be used by recyclers and other WEEE treatment facilities as well as Hewlett Packard Enterprise OEM customers who integrate and re-sell Hewlett Packard Enterprise equipment.

Summary of Changes

Date	Version History	Action	Description of Change
16-Dec-2016	From version 1 to 2	Changed	Update info on technical specifications and fonts.

26-Sept-2016	Version 1	Created	Initial Version of the QuickSpecs of the HPE Apollo 100Gb 1-port Intel Omni-Path Architecture 860z Mezzanine FIO Adapter
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