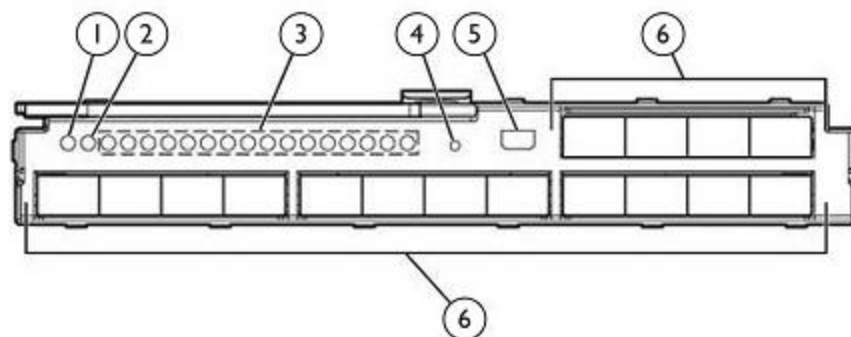


Overview

HPE 10GbE Pass-Thru Module

The HPE 10GbE Pass-Thru Module is designed for c-Class BladeSystem customers requiring a non-blocking, one-to-one connection between each server and the network. The pass-thru module provides 16 uplink ports that accept both SFP and SFP+ transceivers.

The HPE 10GbE Pass-Thru Module can support 1Gb and 10Gb connections on a port by port basis. Optical as well as Direct Attach Copper (DAC) cables are also supported. Both standard Ethernet as well as Converged Enhanced Ethernet (CEE) traffic to an FCoE capable switch is possible when using the appropriate NIC or adapter module.



HPE 10GbE Pass-Thru Module

- | | |
|---|--|
| 1. UID LED | 4. Reset Button |
| 2. Health LED | 5. Mini USB RS-232 (reserved) |
| 3. Ethernet port link status and speed LEDs | 6. Uplinks ports that accept SFP and SFP+ transceiver modules and Direct Attach Cables (DAC) |

What's New

- Substitute product for HPE 10GbE Pass-Thru Module (part number 538113-B21)
- New command line interface
- Support for 10GBase-T transceiver

At A Glance

Performance:

- 16 direct server to network connections
- Auto-sense 1Gb or 10Gb operation on a port by port basis
- Supports standard Ethernet as well as Converged Enhanced Ethernet
- Supports all NICs and mezzanine adapters including Flex Adapters

Management:

- No management required
- Module performance monitored by the On-Board Administrator

Models and Options

Models

HPE 10GbE Ethernet Pass-Thru Module II for c-Class BladeSystem	854194-B21
HPE 10GbE Ethernet Pass-Thru TAA-compliant Module II for c-Class BladeSystem	854194-B22

Compatibility

ProLiant BL c-Class Server Blade Enclosures

- HPE BladeSystem c3000 Enclosure
- HPE BladeSystem c7000 Enclosure

HPE c-Class Mezzanine Adapters

- HPE FlexFabric 20Gb 2-port 630FLB Adapter
- HPE FlexFabric 20Gb 2P 630M Adapter
- HPE FlexFabric 20Gb 2-port 650FLB Adapter
- HPE FlexFabric 20Gb 2P 650M Adapter
- HPE FlexFabric 10Gb 2-port 536FLB Adapter
- HPE FlexFabric 10Gb 2-port 556FLB Adapter
- HPE Flex-10 10Gb 2-port 530FLB Adapter
- HPE Ethernet 10Gb 2-port 560FLB Adapter
- HPE Ethernet 1Gb 4-port 366M Adapter
- HPE Ethernet 10Gb 2-port 560M Adapter
- HPE FlexFabric 10Gb 2P 534M Adapter
- HPE NC532m Dual Port Flex-10 10GbE BLc Adapter

NOTE: Some adapters listed above may be discontinued.

Cabling and Transceivers

SFP+ Direct attached cables:

- HPE 10-GbE SFP+-SFP+ 1m Direct Attach Cable
- HPE 10-GbE SFP+-SFP+ 3m Direct Attach Cable
- HPE 10-GbE SFP+-SFP+ 5m Direct Attach Cable
- HPE 10-GbE SFP+-SFP+ 7m Direct Attach Cable

NOTE: The above cables have been tested and verified to work with the HPE 10GbE Pass-Thru Module. However, the module will accept cables from any vendor. Hewlett Packard Enterprise does not guarantee the performance of non HPE cables and users may receive a warning message via the CLI when a non-verified cable has been inserted.

Transceivers:

- HPE BladeSystem 10Gb SR SFP+
- HPE BladeSystem 10Gb LR SFP+
- HPE BladeSystem 10Gb LRM SFP+
- HPE 10GBase-T SFP+
- HPE BladeSystem 1Gb SX SFP Opt Kit
- HPE BladeSystem 1Gb RJ-45 SFP Opt Kit

NOTE: Only HPE transceivers listed above may be used in the HPE 10GbE Pass-Thru Module.

Service and Support

Service and Support

HPE Technology Services

When you buy HPE BladeSystem Options for your HPE BladeSystem, it is also good time to think about services. HPE Technology Services offers you technical consultants and support expertise to solve your most complex infrastructure problems, giving you one call to make, fast answers, and global reach. We help keep your business running, boost availability, and avoid downtime.

Protect your business beyond warranty with HPE Pointnext operational services

HPE Pointnext operational services provide total care and support expertise with committed response choices designed to meet your IT and business needs.

HPE Foundation Care services offer scalable, reactive support-packages for Hewlett Packard Enterprise industry-standard servers and software. You can choose the type and level of service that is most suitable for your IT and business needs. HPE Collaborative Support offers hardware and basic software support with enhanced call management. If you are running business critical environments, Hewlett Packard Enterprise offers Proactive Care. This service

helps you deliver high levels of system availability through proactive service management and advanced technical response.

Recommended HPE Pointnext operational services for your HPE product

Optimized Care 3- Year HPE Foundation Care CTR

HPE Foundation Care Call-To-Repair Service connects you to HPE around the clock for assistance on resolving issues -this includes our commitment to repair hardware within six hours after opening your case and response to software questions within two hours.

<https://www.hpe.com/h20195/V2/GetDocument.aspx?docname=4AA4-8876ENW>

HPE Installation of ProLiant Add On Options Service

This easy-to-buy, easy-to-use HPE Care Pack service helps ensure that your new Hewlett Packard Enterprise hardware is installed smoothly, efficiently, and with minimal disruption of your IT and business operations

Standard Care 3-Year HPE Foundation Care 24x7

HPE Foundation Care 24x7 connects you to HPE around the clock for assistance on resolving issues - hardware onsite response within four hours and software call back within two hours after opening your case. <https://www.hpe.com/h20195/V2/GetDocument.aspx?docname=4AA4-8876ENW>

HPE Installation of ProLiant Add On Options Service

This easy-to-buy, easy-to-use HPE Care Pack service helps ensure that your new Hewlett Packard Enterprise hardware is installed smoothly, efficiently, and with minimal disruption of your IT and business operations.

Related Services

HPE Installation and Startup Service for HPE BladeSystem c-Class Enhanced Network

Hewlett Packard Enterprise provides for the configuration and testing of BladeSystem Ethernet interconnect switches to facilitate proper implementation of network protocols and access to advanced features. <https://www.hpe.com/h20195/V2/GetPDF.aspx/4aa0-5969ENW.pdf>

HPE Proactive Select Service

Provides a flexible way to purchase HPE best-in-class consultancy and technical services. You can buy Proactive Select Service Credits when you purchase your hardware and then use the credits over the next 12 months.

<https://www.hpe.com/h20195/V2/GetPDF.aspx/4AA2-3842ENN.pdf>

NOTE: Additional HPE Pointnext operational services can be found at: <https://ssc.hpe.com>

Insight Remote Support

HPE Insight Remote Support provides 24 X 7 remote monitoring, proactive notifications, and problem resolution. This comes at no additional cost with your HPE solution. Learn more about [Insight Remote Support](#) and [Insight Online](#).

NOTE: Insight Remote Support is a prerequisite for HPE Proactive Care

Parts and materials

Hewlett Packard Enterprise will provide HPE-supported replacement parts and materials necessary to maintain the covered hardware product in operating condition, including parts and materials for available and recommended engineering improvements.

Parts and components that have reached their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual, product quick-specs, or the technical product data sheet will not be provided, repaired, or replaced as part of these services.

The defective media retention service feature option applies only to Disk or eligible SSD/Flash Drives replaced by Hewlett Packard Enterprise due to malfunction.

For more information

To learn more about HPE BladeSystem services, please contact your Hewlett Packard Enterprise sales representative or Hewlett Packard Enterprise Authorized ServiceONE Channel Partner. Or visit: <http://www.hpe.com/services/bladeSystem>

Related Options

Cabling and Transceivers

SFP+ Direct attached cables

HPE BladeSystem c-Class 10GbE SFP+ to SFP+ 1m Direct Attach Copper Cable

487652-B21

HPE BladeSystem c-Class 10GbE SFP+ to SFP+ 3m Direct Attach Copper Cable	487655-B21
HPE BladeSystem c-Class 10GbE SFP+ to SFP+ 5m Direct Attach Copper Cable	537963-B21
HPE BladeSystem c-Class 10GbE SFP+ to SFP+ 7m Direct Attach Copper Cable	487658-B21

Transceivers

HPE BladeSystem c-Class 10Gb SFP+ SR Transceiver	455883-B21
HPE BladeSystem c-Class 10Gb SFP+ LR Transceiver	455886-B21
HPE BladeSystem c-Class 10Gb SFP+ LRM Transceiver	455889-B21
HPE 10GBase-T SFP+ Transceiver	813874-B21
HPE BladeSystem c-Class Virtual Connect 1G SFP SX Transceiver	453151-B21
HPE BladeSystem c-Class Virtual Connect 1G SFP RJ-45 Transceiver	453154-B21

Service and Support Offerings

(HPE Pointnext operational services)

NOTE: HPE Pointnext operational services for the c7000 and c3000 Enclosure cover the enclosure, power supplies and fans. HPE qualified rack options are covered by these services when installed within the same rack. Hewlett Packard Enterprise supported c-Class enclosure devices including pass thru, Ethernet interconnect and virtual connect modules are also covered by the c7000 and c3000 enclosure Care Pack services.

Hardware Support Services On-site Service

HPE 3 year Next business day c7000 Enclosure Hardware Support	UE477E
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NOTE: Uplifts the Ethernet devices to the same level of warranty as the c-class enclosure.

HPE 3 year 4-Hour 24x7 c7000 Enclosure Hardware Support	UE479E
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Installation & Start-up Services

HPE BladeSystem c7000 Infrastructure Startup Service	UE602E
HPE BladSys c7000 Encd Network Startup Service	UE603E
HPE Install c-Class Server Blade Service	UE493E
HPE Hardware Install c-Class Enclosure and Server Blade Service	UE494E

NOTE: For more information, customer/resellers can contact:

<https://www.hpe.com/us/en/integrated-systems/bladeSystem.html>

Technical Specifications

Shipping Dimensions	Length	21.7 in (551 mm)	
	Width	17.0 in (432 mm)	
	Height	5.5 in. (140 mm)	
Shipping Weight		4.47 kg (9.85 lbs)	
Product Specifications Hardware	Performance	320 Gbps external port bandwidth per module Measured latency under 536nS per port @ 10Gb Line rate 10Gb full-wire speed performance Auto-negotiation and auto-sensing with full-duplex support	
	Connectors and Cabling	Uplink Ports Management	16 SFP/SFP+ Modules Mini-USB Management
	Network Transfer Rate	1 Gbps Port (2,000 Mbps full duplex) 10 Gbps port (20,000 Mbps full duplex)	
	LED Indicators	UID LED	Blue light on module is activated. Blue light off module is deactivated.

	Health LED	Off: The pass-thru module is powered off. Green: The pass-thru module is powered up, and all ports match. Amber: An issue exists, such as a port mismatch.
	Ethernet port	Green Link is 10G Flashing green 10G link activity is detected Amber Link is 1G Flashing amber 1G link activity is detected. Flashing alternately green and amber A link mismatch condition exists.
Product Dimensions	Length	10.54 in (267.7 mm)
	Width	7.59 in (192.8 mm)
	Height	1.1 in (27.9mm)
Product Weight	3.65 kg (8.04 lbs)	
Environmental Ranges	Operating Temperature	50° to 95° F (10° to 35° C)
	Non-operating Temperature	-40° to 158° F (-40° to 70° C)
	Relative Humidity (non-condensing)	Operating 5% to 95%
Power Specification	Power Requirements	12VDC: 5A, 60W maximum
	Safety and Compliance	TUV to UL 60950-1, and CAN/CSA C22.2 No. 60950-1 and to EN 60950-1
	Safety	CE Marking
	Certifications	RoHS 6/6 compliant
Electromagnetic Emissions	FCC Part 15 Class A	
	EN 55022: 1998 (CISPR22)	
	EN 55024: 1998 (CISPR24)	
	VCCI Class A	
	AS/NZS 3548 Class A CE	
	CNS 13438 Class A MIC	
Certifications FCC Part 15 Class A	MIC	

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.hpe.com/info/recycle. To recycle your product, please go to: http://www.hpe.com/info/recycle 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.hpe.com/info/recycle. 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
23-Oct-2017	Version 3	Changed	Care Pack naming and Service and Support- Parts and Materials updated.
05-Jun-2017	From Version 1 to 2	Added	SKU added in Models and Options section: 854194-B22.
8-May-2017	Version 1	Created	New QuickSpecs






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