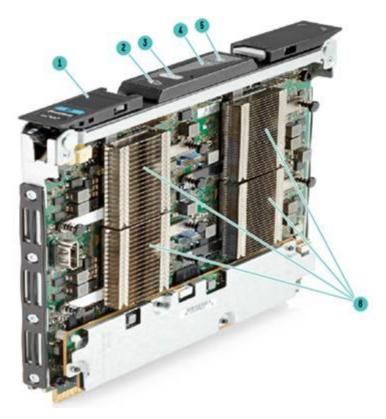
Overview

HPE ProLiant m700 Server Cartridge

HPE Moonshot System with the HPE ProLiant m700 server cartridge was created for cost-effective Hosted Desktop Infrastructure (HDI) and other graphics enabled applications. The ProLiant m700 server cartridge has four AMD Opteron[™] X2150 APU System on a Chip (SoC), each having up to four x86 cores with integrated Graphics Processing Unit (GPU), supporting up to 8GB of memory and 120GB SATA M.2 storage.

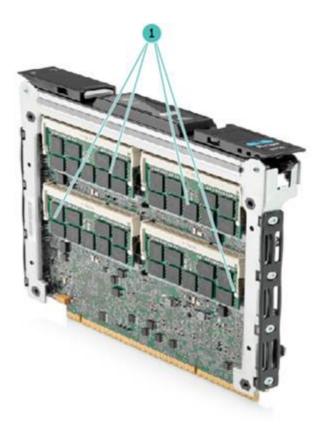
HPE Moonshot System uses an innovative new architecture that results from one simple design tenet: to align purpose-built modules with the right workload to provide optimal results for your environment. Traditional servers rely on dedicated components, including management, networking, storage, power cords and cooling fans in a single chassis. In contrast, the Moonshot system shares these chassis components and is capable of supporting 45 cartridges per 4.3U chassis.



Front View:

- 1. QR Code label
- 2. Cartridge link LED/button
- 3. Cartridge UID LED/button
- 4. Cartridge health LED
- 5. Cartridge power LED/button
- 6. Four (4) AMD Opteron[™] X2150 APU Processors

Overview



Back View

1. Four (4) DDR3 ECC SODIMM memory slots

What's New

- HPE ProLiant m700 4x120GB M.2 SSD Mezz FIO Kit
- HPE ProLiant m700 4x64GB M.2 SSD Mezz Kit

Service and Support

IVI	odels	

HP ProLiant m700 4x1P X2150 APU 4x8GB Configure-to-order Server Cartidge 733747-B21 NOTE:NOTE: For ordering the HPE ProLiant m700 Server Cartridge, please see Step 1 of the Configuration to Order section of this QuickSpecs.				
Processor	AMD Opteron [™] X215	AMD Opteron [™] X2150 APU, 1.5Ghz		
Cache Memory	2MB L2 cache	2MB L2 cache		
Chipset	N/A			
Memory Protection Graphics	ECC 128 Radeon HD 8000 Cores (up to 500Mhz)			
Memory	Type DIMM Slots Available Maximum Configuration	DDR3 PC3-12800 SDRAM (1600 MHz) Four (4) ECC SODIMM Slots (One per SoC) 32GB (1x8GB per SoC)		
Network Controller	Broadcom BCM5720 Ethernet Controller			
Storage Controller	Integrated SATA controller on the System on a Chip (SoC)			
Maximum Internal Storage	Up to 120 GB per SoC (using M.2 SSD mezzanine card)			
Interfaces	Power LED/button UID for node	One per server cartridge		
	Drive health	One per server cartridge N/A		
	LED/button			
	Cartridge health LED	One per server cartridge		
Industry Standard Compliance	ACPI 2.0 and 3.0a Co SMBIOS 2.6+ PXE Support	mpliant		

Service and Support

Service and Support		
Operating Systems		
	NOTE: Both 32 and 64-bit versions of this operating system are supported.	
	Microsoft Windows 8.1 64-bit	
	Microsoft Windows 10 64-bit	
	NOTE: For more information on Hewlett Packard Enterprise's Certified and	
	Supported ProLiant Servers for OS and Virtualization Software and latest listing of	
	software drivers available for your server including how to purchase from Hewlett	
	Packard Enterprise, please visit our OS Support Site at: http://www8.hp.com/us/en/products/servers/management/operating-	
	environments/os-support-matrix.html and access the Moonshot supporting	
	software/driver download page via: http://www.hpe.com/info/moonshot	
Form Factor	HPE ProLiant m700 server cartridge plugs only into the HPE Moonshot 1500	
	Chassis.	
Warranty	This product is covered by a global limited warranty and supported by Hewlett Packard Enterprise Services and a worldwide network of Hewlett Packard Enterprise	
	Authorized Partner Ready Resellers. Hardware diagnostic support and repair is	
	available for three years from date of purchase. Support for software and initial	
	setup is available for 90 days from date of purchase. Enhancements to the warranty	
	services are available through HPE services or customized service agreements.	
	Hard drives have either a one year or three-year warranty; refer to the specific hard	
	drive QuickSpecs for details.	
	NOTE: Server Cartridge Warranty includes 3-Year Parts, 0-Year Labor, 0-Year	
	Onsite support.	
	Warranty terms may vary by region. Additional information regarding worldwide	
	limited warranty and technical support is available at:	
	http://h20564.www2.hpe.com/hpsc/wc/public/home	
HPE Insight Cluster		
Management Utility	licended and Hewlett Packard Enterprise-supported suite of tools that are used to	
	manage large-scale systems. Insight CMU includes software for the centralized provisioning, management and monitoring of nodes. Insight CMU makes the	
	administration of clusters more user friendly, efficient, and error free than if they	
	were being managed by scripts, or on a node-by-node basis. For more information	
	on Hewlett Packard Enterprise Insight Cluster Management Utility, please contact	
	your sales representative or go to: http://www8.hp.com/us/en/products/server-	
	software/product-detail.html?oid=3296361	
Factory Express	HPE Factory Express offers configuration, customization, integration and	
	s deployment services for Hewlett Packard Enterprise servers and storage products. Customers can choose how their factory solutions are built, tested, integrated,	
and Storage	shipped and deployed.	
	Factory Express offers service packages for simple configuration, racking,	
	installation, complex configuration and design services as well as individual factory	
	services, such as image loading, asset tagging, and custom packaging. Hewlett	
	Packard Enterprise products supported through Factory Express include a wide array of servers and storage: HPE Integrity, HPE ProLiant, HPE ProLiant Server	
	andy of servers and storage. HE LINEGIN, HE E FIDEIdIN, HE E FIDEIdIN SERVER	

Service and Support

Blades, HPE BladeSystem, HPE 9000 servers as well as the MSAxxxx, VA7xxx, EVA, XP, rackable tape libraries and configurable network switches.

For more information on Factory Express services for your specific server model please contact your sales representative or go to: <u>http://www.hp.com/go/factory-</u>express.

Service and Support To see recommended HPE Services for your HPE product

See HPE Moonshot 1500 Chassis Quick Specs. http://www.hpe.com/info/moonshot NOTE: 4 and 5 year Service offerings are also available

814659-B21

Configuration Information

NOTE: This section lists some of the steps required to configure a Factory Integrated Model. To ensure only valid configurations are ordered, Hewlett Packard Enterprise recommends the use of a Hewlett Packard Enterprise approved configurator. Contact your local sales representative for information on configurable product offerings and requirements.

NOTE: If you want to configure the HPE Moonshot 1500 Chassis with cartridges, proceed to the HPE Moonshot 1500 Chassis Quick Specs: http://www.hpe.com/info/moonshot

NOTE: If you want to configure a cartridge only, proceed to Step 1

Step 1: Base Configuration (Choose upgrade kit)

HPE ProLiant Server Cartridge Upgrade Kit	HP Moonshot Server Multipack NOTE:NOTE: Up to 15 cartridges of any kind fit in this multipack NOTE:NOTE: Mixed Server Cartridge configuration is
	supported

Step 2: Pick ProLiant Server Cartridge

HPE ProLiant Server	HP ProLiant m700 4x1P X2150 APU 4x8GB Configure-to-	733747-B21
Cartridge	order Server Cartidge	

NOTE: The ProLiant m700 server cartridge is pre-configured with Four (4) independent AMD Opteron X2150 APUs, each connected to One (1) 8 GB ECC SODIMM. These are the only APU and memory types available and cannot be changed after ordering.

Step 3: Configure ProLiant Server Cartridge (Choose appropriate Option)

HPE Solid State Drives	HPE ProLiant m700 4x64GB M.2 SSD Mezzanine Kit	838736-B21
(Min:1, Max:1)	HPE ProLiant m700 4x120GB M.2 SSD Mezzanine FIO Kit	830163-B21
	 NOTE: This kit includes a M.2 mezzanine along with Four (4) M.2 2 Mixing of different types of M.2 kits is not supported NOTE: Each node on the server cartridge is connected to one M.2 120 GB). The M.2 SSD storage is not shared between nodes. 	

Step 4: To Select a different cartridge see details:

http://www.hpe.com/info/moonshot

Other Infrastructure Components

NOTE: For information on Hewlett Packard Enterprise Moonshot Chassis, Switch and Uplink Modules, please see the following:

Chassis: HPE Moonshot 1500 Chassis

http://www.hpe.com/info/moonshot

Switch:

Fast PATH

HPE Moonshot-180G Switch Module http://www8.hpe.com/h20195/v2/GetHTML.aspx?docname=c04111290

Comware

HPE Moonshot-180XGc Switch Module https://www.hpe.com/h20195/v2/gethtml.aspx?docname=c04923651

Uplink:

HPE Moonshot-16SFP+ Uplink Module http://www8.hpe.com/h20195/v2/gethtml.aspx?docname=c04499458

HPE Moonshot-4QSFP+ Uplink Module http://www8.hpe.com/h20195/v2/GetHTML.aspx?docname=c04111291

Technical Specifications

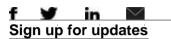
HPE Moonshot m700 Server Cartridge System Inlet Temperature	Dimensions (H x W x D) Idle Power Max Power Typical Power Operating	 6.57 in x 7.23 in x 0.78 in (16.71 cm x 18.37 cm x 1.98cm) 20W 78W 49W 50° to 95° F (10° to 35° C) at sea level with an altitude derating of 1.8°F per every 1000 ft (1.0°C per every 304.8 m) above sea level to a maximum of 10,000 ft (3048 m), no direct sustained sunlight. Maximum rate of change is 18°F/hr (10°C/hr). The upper limit may be limited by the type and number of options installed.
	Non-operating	System performance may be reduced if operating with a fan fault or above 86°F (30°C). -22° to 140° F (-30° to 60° C) Maximum rate of change is 36°F/hr (20°C/hr).
Relative Humidity (non-condensing)	Operating Non-operating	10 to 90% relative humidity (Rh), 28°C (82.4°F) maximum wet bulb temperature, non-condensing. 5 to 95% relative humidity (Rh), 38.7°C (101.7°F) maximum wet bulb temperature, non-condensing.
Altitude	Operating	10,000 ft. (3048 m). This value may be limited by the type and number of options installed. Maximum allowable altitude change rate is 1500 ft./min (457 m/min).
	Non-operating	30,000 ft. (9144 m). Maximum allowable altitude change rate is 1500 ft./min (457 m/min).
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: <u>http://www.hp.com/go/green</u> . To recycle your product, please go to: <u>http://www.hp.com/go/green</u> 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: <u>http://www.hp.com/go/green</u> . 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 19	Changed	Care Pack naming and Service and Support- Parts and Materials updated.
14-Oct-2016	From version 17 to 18	Updated	Refreshed configuration information for M.2 mezzanine option
16-Feb-2016	From version 16 to 17	Updated	Update the configuration Section and the Overview sections
28-Sept-2015	From version 15 to 16	Updated	Update the configuration Moonshot Server Information
17-Ago-2015	From version 14 to 15	Updated	Update several sections throughout the QuickSpecs.
17-Jul-2015	From version 13 to 14	Updated	Update additional options
1-Jun-2015	From version 12 to 13	Changed	Update the Configuration section
5-May-2015	From version 11 to 12	Changed	Add Chassis Information
9-Abr-2015	From version 10 to 11	Updated	Add power supply
30-Feb-2015	From version 9 to 10	Updated	Update several sections throughout the QuickSpecs.
21-Jan-2015	From Version 8 to 9	Updated	Update Configuration Information.
1-Dec-2014	From version 7 to 8	Changed	Update Technical specifications
5-Nov-2014	From version 6 to 7	Changed	Review Images and Wording
18-Aug-2014	From Version 5 to 6	Changed	The QuickSpecs was completely revised.
10-Jun-2014	From Version 3 to 4	Changed	Maximum internal storage was revised.
31-Mar-2014	From Version 2 to 3	Changed	The QuickSpecs was completely revised.
18-Feb-2014	From Version 1 to 2	Changed	Added the What's New and the Pre- Configured Models sections. Changes made in the Configuration Information section.

Summary of Changes

QuickSpecs



© Copyright 2017 Hewlett Packard Enterprise Development LP. The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.

Microsoft and Windows NT are US registered trademarks of Microsoft Corporation.

Intel, the Intel logo, Xeon and Xeon Inside are trademarks of Intel Corporation in the U.S. and other countries.

For hard drives, 1GB = 1 billion bytes. Actual formatted capacity is less.



Hewlett Packard Enterprise

c04111350 - 14737 - Worldwide - V19 - 23-October-2017