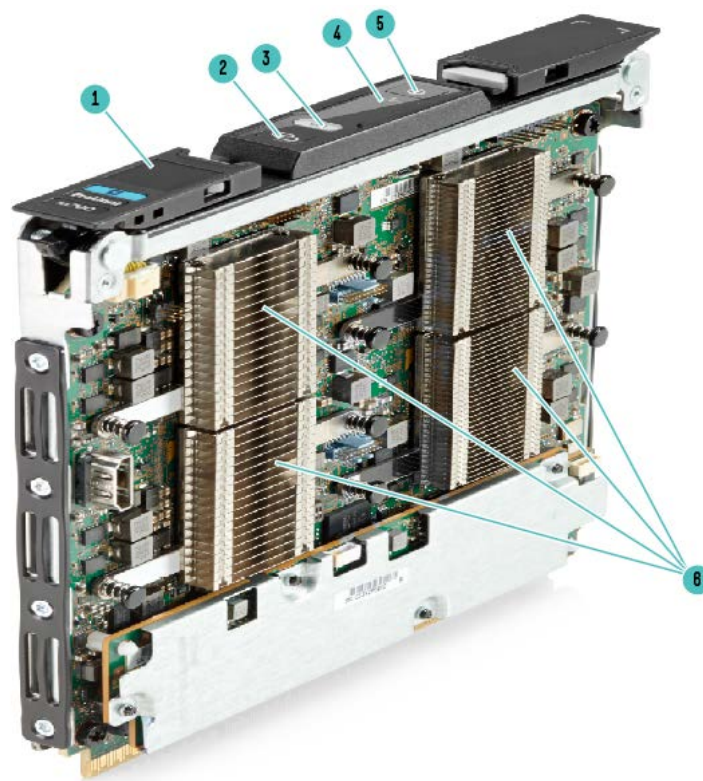


Overview

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.

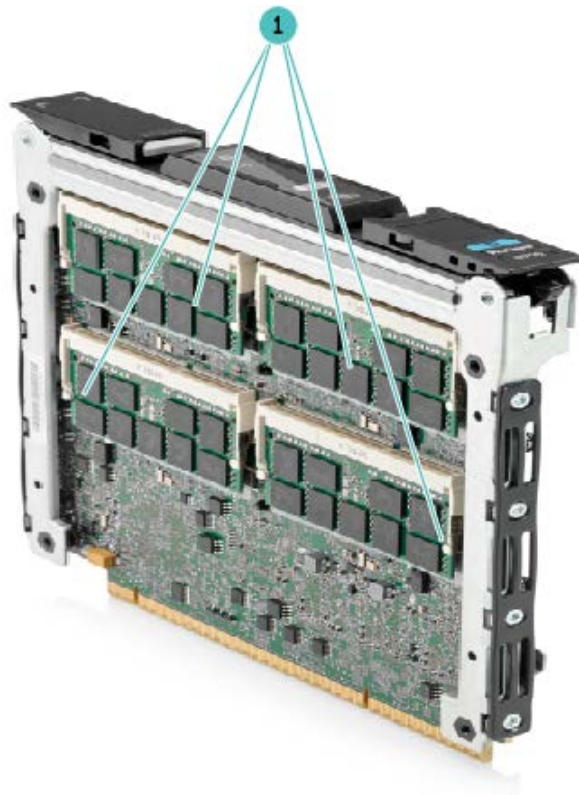
HPE Moonshot System uses an innovative new architecture that results from one simple design tenet: to align purpose-built modules with the right workload to provide optimal results for your environment. Traditional servers rely on dedicated components, including management, networking, storage, power 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

Models

HPE ProLiant m700 4x1P X2150 APU 4x8GB Configure-to-order Server Cartridge

733747-B21

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™ X2150 APU, 1.5Ghz	
Cache Memory	2MB L2 cache	
Chipset	N/A	
Memory Protection	ECC	
Graphics	128 Radeon HD 8000 Cores (up to 500Mhz)	
Memory	Type	DDR3 PC3-12800 SDRAM (1600 MHz)
	DIMM Slots Available	Four (4) ECC SODIMM Slots (One per SoC)
	Maximum Configuration	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	One per server cartridge
	UID for node	One per server cartridge
	Drive health LED/button	N/A
	Cartridge health LED	One per server cartridge

Industry Standard Compliance	ACPI 2.0 and 3.0a Compliant
	SMBIOS 2.6+
	PXE Support

Operating Systems	<u>Microsoft Windows 7 Enterprise SP1</u> NOTE: Both 32 and 64-bit versions of this operating system are supported.
	<u>Microsoft Windows 8.1 64-bit</u>
	<u>Microsoft Windows 10 64-bit</u>

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.
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Service and Support

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.hp.com/hpsc/wc/public/home>

HPE Insight Cluster Management Utility

HPE Insight Cluster Management Utility (CMU) is an Hewlett Packard Enterprise-licensed 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 Portfolio for Servers and Storage

HPE Factory Express offers configuration, customization, integration and deployment services for Hewlett Packard Enterprise servers and storage products. Customers can choose how their factory solutions are built, tested, integrated, 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 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: <http://www.hp.com/go/factory-express>.

Service and Support

To see recommended HPE Services for your HPE product

See HPE Moonshot 1500 Chassis Quick Specs.

<http://www.hp.com/info/moonshot>

NOTE: 4 and 5 year Service offerings are also available

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	HPE Moonshot Server Multipack NOTE: Up to 15 cartridges of any kind fit in this multipack NOTE: Mixed Server Cartridge configuration is supported	814659-B21
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Step 2: Pick ProLiant Server Cartridge

HPE ProLiant Server Cartridge	HPE ProLiant m700 4x1P X2150 APU 4x8GB Configure-to-order Server Cartridge 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.	733747-B21
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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 NOTE: This kit includes a M.2 mezzanine along with Four (4) M.2 2242 SSDs. Mixing of different types of M.2 kits is not supported NOTE: Each node on the server cartridge is connected to one M.2 SSD (64 or 120 GB). The M.2 SSD storage is not shared between nodes.	830163-B21

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	Dimensions (H x W x D)	6.57 in x 7.23 in x 0.78 in (16.71 cm x 18.37 cm x 1.98cm)
	Idle Power	20W
	Max Power	78W
	Typical Power	49W
System Inlet Temperature	Operating	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	10 to 90% relative humidity (Rh), 28°C (82.4°F) maximum wet bulb temperature, non-condensing.
	Non-operating	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	<p>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.</p> <p>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.</p>

Summary of Changes

Date	Version History	Action	Description of Change
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.



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



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