# QuickSpecs

### Overview

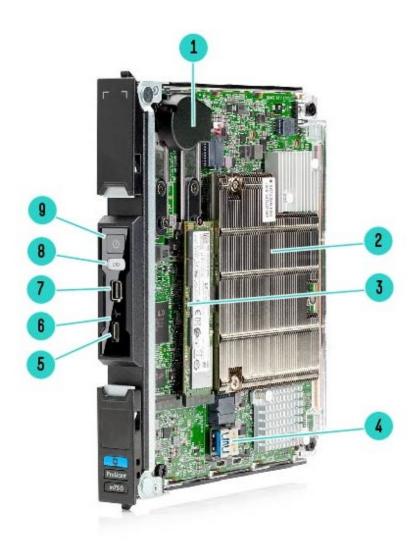
### HPE ProLiant m750 Server Blade

HPE ProLiant m750 Server Blade is designed to reduce the cost of operating hosted application and desktop publishing workloads (VDI), while maximizing security and manageability. The ProLiant m750 Server Blade is purpose-built with one Intel® Xeon® E-2286M eight-core processor and an integrated Intel® UHD P630 GPU, up to 128GB of ECC protected memory, dual 10Gb Ethernet along with up to Four (4) 3.84TB NVMe M.2 SSD storage modules, and up to One (1) 240GB M.2 SSD for local OS booting.

HPE Moonshot uses an innovative architecture that results from one simple design tenet: to align purpose-built server blades 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, HPE Moonshot shares these chassis components and is capable of supporting 45 server blades per 4.3U chassis. This gives you the ability to generate greater revenue from a smaller footprint while driving down your operational costs.



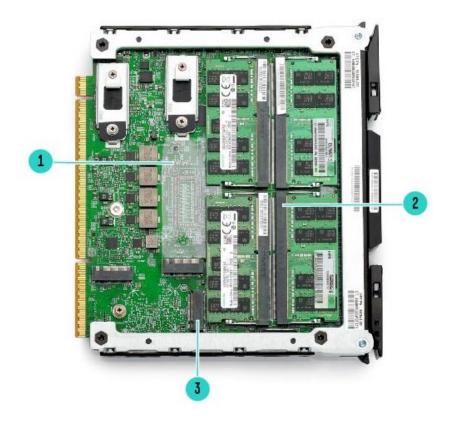
# Overview



### Front View

| 1. | Battery                                                 | 6.   | Server Blade Health LED       |
|----|---------------------------------------------------------|------|-------------------------------|
| 2. | Intel® Xeon® E-2286M Processor and Heat Sink            | 7.   | Mini-DisplayPort Connector    |
| 3. | Two (2) 2280 or 22110 M.2 SSDs (NVMe).                  | 8.   | Server Blade UID LED/Button   |
|    | <b>NOTE:</b> NVME slot#3 is on the left. NVME slot#4 is | s on |                               |
|    | the right.                                              |      |                               |
| 4. | Standard USB Connector                                  | 9.   | Server Blade Power LED/Button |
| 5. | Micro USB Connector                                     |      |                               |

### Overview



### **Rear View**

- 1. Two (2) 2280 or 22110 M.2 SSDs (NVMe).

  NOTE: NVME slot #1 is on the left side. NVME #2 is on the right
- 2. Four (4) DDR4 SODIMMs

3. 2242 M.2 SSD (SATA)

#### Processor

| Intel® Xeon® E<br>Model | SoC<br>Frequency | Turbo<br>Frequency | Cores  | L3 Cache | Power | DDR4 MHz |
|-------------------------|------------------|--------------------|--------|----------|-------|----------|
| E-2286M                 | 2.4GHz           | 5.0GHz             | 8-core | 16MB     | 45W   | 2666     |

**NOTE:** For more information regarding Intel® Xeon® E, please see the following URL: https://www.intel.com/content/www/us/en/products/processors/xeon/e-processors.html

### Chipset

Intel® CM246 Chipset

NOTE: For more information regarding chipset, please see the following URL:

https://ark.intel.com/content/www/us/en/ark/products/135100/mobile-intel-cm246-chipset.html

### **Graphics**

Intel® UHD Graphics P630 GPU and iLO remote console (2D). Refer to the chassis documentation for details.

### **On System Management Chipset**

HPE iLO (Firmware HPE iLO5) 4GB NAND

**NOTE:** 1GB USB user space configurable via UEFI and accessible via iLO. Read and learn more in the iLO QuickSpecs: <a href="http://www.hpe.com/info/ilo">http://www.hpe.com/info/ilo</a>

### Memory

| Туре                      | HPE SmartMemory                                      |                                                                             |
|---------------------------|------------------------------------------------------|-----------------------------------------------------------------------------|
| Supported DIMMs           | DDR4 ECC Unbuffered Small Outline (SODIMM) DDR4-2666 |                                                                             |
| Supported Dilativis       | 8GB (1R x 8), 16GB (2R x 8), 32GB (2R x 8)           |                                                                             |
| DIMM Slots Available      | 4                                                    | (4 DIMM slots per processor, 2 channels per processor, 2 DIMMs per channel) |
| Maximum Capacity (SODIMM) | 128GB                                                | (4 x 32GB SODIMM)                                                           |

### **NOTES:**

- Rules under "Memory" section must be followed for Configuring and Mixing of DIMMs.
- Registered DIMMs (RDIMMs), Load Reduced DIMMs (LRDIMMs) and Non-Volatile DIMMs (NVDIMMs) are not supported

### **Memory Protection**

- Advanced ECC
- Advanced ECC uses single device data correction to detect and correct single and all multibit error that occurs within a single DRAM chip.
- Patrol/Demand scrubbing
- Patrol and Demand scrubbing detect and correct memory errors by periodically inspecting the entire memory space or when the data is accessed during normal operation.

### **Network Controller**

- Mellanox Connect-X4 Pro
- Dual 10GbE NIC. Supports RDMA over Converged Ethernet (RoCE)

### **Storage Controller and Devices**

SATA and PCIe controllers are Integrated in the Intel® Xeon® E-2286M SoC and Intel® CM246 Chipset

| SSD Slot # | Technology | Bus Width | Connector<br>Width | Form Factor          | Supported Sizes                                        |
|------------|------------|-----------|--------------------|----------------------|--------------------------------------------------------|
| SATA #1    | SATA-3     | x1        | x1                 | M.2 2242             | 120GB<br>240GB                                         |
| NVMe #1    | PCle 3.0   | x2        | ×4                 | M.2 2280 or<br>22110 | 256GB, 512GB,<br>960GB, 1TB,<br>1.92TB, 2TB,<br>3.84TB |
| NVMe #2    | PCle 3.0   | ×2        | x4                 | M.2 2280 or<br>22110 | 256GB, 512GB,<br>960GB, 1TB,<br>1.92TB, 2TB,<br>3.84TB |
| NVMe #3    | PCle 3.0   | x4        | ×4                 | M.2 2280 or<br>22110 | 256GB, 512GB,<br>960GB, 1TB,<br>1.92TB, 2TB,<br>3.84TB |
| NVMe #4    | PCle 3.0   | x4        | ×4                 | M.2 2280 or<br>22110 | 256GB, 512GB,<br>960GB, 1TB,<br>1.92TB, 2TB,<br>3.84TB |

NOTE: The HPE m750 server blade may be purchased with zero M.2 storage (i.e. network/diskless boot).

NOTE: SATA and NVMe M.2 SSDs can both be used as an OS boot drive

**NOTE:** SATA M.2 2242 or 2280 SSDs are designed for "Read Intensive" environments. For "Mixed Use" applications, M.2 22110

SSDs are recommended (256GB, 512GB, 960GB, 1TB, 1.92TB, 2TB, 3.84TB).

| Maximum Internal Storage                  |          |             |
|-------------------------------------------|----------|-------------|
| M.2 2242 SATA solid state device          | 240 GB   | 1 x 240 GB  |
| M.2 2280 / 22110 NVMe solid state devices | 15.36 TB | 4 x 3.84 TB |

#### Interfaces

- Server Blade Link LED/button
- Server Blade UID LED/button
- Drive LED
- Server Blade Health LED
- Micro-USB 2.0 connector

**NOTE:** To connect a standard USB device to the server blade, connect a Micro-USB to USB Type-A adapter (from the orderable m710x cable kit) to the blade Micro-USB connector, and then connect the USB device to the adapter.

### Mini-DisplayPort connector

NOTE: To connect a monitor, use one of the following adapters from the orderable m710x cable kit:

- Mini Displayport (DP) to Displayport (DP) Female Adapter
- Mini Displayport (DP) to HDMI Adapter

### **Operating Systems and Virtualization Software**

For information on certified OS and Virtualization Software for HPE Moonshot visit the **Supported Operating Systems for Edgeline, Moonshot, and IoT Gateway Systems** 

### **Industry Standard Compliance**

- PXE Support
- PCle 3.0 Compliant
- WOL Support
- Microsoft® Logo certifications
- USB 2.0 and 3.0 Support
- ACPI 2.0 Compliant

### **HPE Server UEFI ROM**

Unified Extensible Firmware Interface (UEFI) is an industry standard that provides better manageability and more secured configuration than the legacy ROM while interacting with your server at boot time. The HPE ProLiant m750 Server defaults to UEFI

**NOTE:** The UEFI System Utilities function is analogous to the HPE ROM-Based Setup Utility (RBSU) of legacy BIOS. For more information, please visit <a href="http://www.hpe.com/servers/uefi">http://www.hpe.com/servers/uefi</a>

UEFI enables numerous new capabilities specific to HPE ProLiant servers such as:

- Secure Boot
- Operating system specific functionality
- Support for > 2.2 TB (using GPT) boot drives
- USB 3.0 Stack
- Embedded UEFI Shell
- Mass Configuration Deployment Tool using RESTful API for iLO 5
- PXE boot support for IPv6 networks
- Boot support for option cards that only support a UEFI option ROM (only used in HPE Edgeline System)
- Network Stack configurations

NOTE: For UEFI Boot Mode, boot environment and OS image installations should be configured properly to support UEFI.

### Form Factor

HPE ProLiant m750 Server Blade plugs into HPE Moonshot 1500 Chassis.

### **Embedded Management**

### **HPE Integrated Lights-Out (HPE iLO)**

Monitor your servers for ongoing management, service alerting, reporting and remote management with HPE iLO. Learn more at <a href="http://www.hpe.com/info/ilo">http://www.hpe.com/info/ilo</a>

### **UEFI**

Configure and boot your servers securely with industry standard Unified Extensible Firmware Interface (UEFI). Learn more at <a href="http://www.hpe.com/servers/uefi">http://www.hpe.com/servers/uefi</a>.

#### **RESTful API**

RESTful API for iLO 5 is Redfish 1.0 conformance for simplified server management such as configuration and maintenance tasks based on modern industry standards. Learn more at: <a href="http://www.hpe.com/info/restfulapi">http://www.hpe.com/info/restfulapi</a>

### **Intelligent Provisioning**

Hassle free server and OS provisioning for 1 or few servers with Intelligent Provisioning. Learn more at http://www.hpe.com/servers/intelligentprovisioning

### **HPE iLO Amplifier Pack**

Designed for large enterprise and service provider environments with hundreds of HPE servers, the iLO Amplifier Pack is a free, downloadable open virtual application (OVA) that delivers the power to discover, inventory and update the HPE ProLiant m750 Server Blade at unmatched speed and scale. Use with an iLO Advanced License to unlock full capabilities.

Learn more at <a href="http://www.hpe.com/servers/iLOamplifierpack">http://www.hpe.com/servers/iLOamplifierpack</a>.

### **HPE InfoSight for Servers**

HPE InfoSight for Servers combines the cloud-based machine learning of InfoSight with the health and performance monitoring of Active Health System (AHS) and iLO to optimize performance and predict and prevent problems. The end result is an intelligent environment that modernizes IT operations and enhances the support experience by predicting and preventing the infrastructure issues that lead to application disruptions, wasted IT staff time and missed business opportunities.

Learn more at https://www.hpe.com/servers/infosight

### Server Utilities

### **Moonshot Component Pack**

The HPE Moonshot Component Pack is a comprehensive firmware solution tested on the HPE Moonshot System and delivered as a compressed file. The compressed file includes all the component files needed to update a Moonshot System. Users deploy the firmware updates contained in the Moonshot Component Pack via the iLO Chassis Manager CLI This can be accomplished using HPE Smart Update Manager, which is included with the files, or manually.

Access the Moonshot supporting software/driver download page via: <a href="https://www.hpe.com/us/en/servers/moonshot.html">https://www.hpe.com/us/en/servers/moonshot.html</a>
<a href="NOTE">NOTE: The Moonshot Component Pack is only supported when the server is installed in a HPE Moonshot 1500 System.</a>

### Scripting Tool Kit and Windows PowerShell

Provision 1 to many servers using your own scripts to discover and deploy them with Scripting Tool Kit (STK) for Windows and Linux or Scripting Tools for Windows PowerShell. Learn more at <a href="http://www.hpe.com/servers/powershell">http://www.hpe.com/servers/powershell</a>.

### **RESTful Interface Tool**

RESTful Interface tool is a scripting tool to provision using RESTful API for iLO5 to discover and deploy servers at scale. Learn more at <a href="http://www.hpe.com/info/resttool">http://www.hpe.com/info/resttool</a>

### **HPE Insight Online**

HPE Insight Online, available at no additional cost as part of your Hewlett Packard Enterprise warranty or contractual support agreement with Hewlett Packard Enterprise, is a personalized dashboard for simplified tracking of IT operations and support information from anywhere, anytime. Learn more at: <a href="http://www.hpe.com/info/insightonline/explore">http://www.hpe.com/info/insightonline/explore</a>.

### Security

- Serial interface control
- Administrator's password
- Power-on password
- TPM2.0
- UEFI
- iLO 5 (Integrated Lights-Out 5) has 12 customizable user accounts and SSL encryption <sup>1</sup>
- iLO 5 can be disabled via a Global Setting<sup>2</sup>
- iLO Advanced supports directory services integration <sup>3</sup>

#### **HPE Trusted Platform Module**

HPE Trusted Platform Module 2.0 is embedded on the Server Blade, and can be enabled and disabled using the BIOS.

The TPM (Trusted Platform Module) is a microcontroller chip that can securely store artifacts used to authenticate the server platform. These artifacts can include passwords, certificates and encryption keys. Windows® BitLocker™ Drive Encryption (BitLocker) is a data protection feature available in Windows Server® 2012/2012 R2, 2016. BitLocker leverages the enhanced security capabilities of a Trusted Platform Module (TPM) version 2.0. The TPM works with BitLocker to help protect user data and to ensure that a server running Windows Server has not been tampered with while the system was offline. For more information about TPM, including a white paper, go to:

### https://www.hpe.com/h20195/v2/gethtml.aspx?docname=c04939549

**NOTE:** ProLiant OS pre-installed units will come with the partition required for TPM deployment.

**NOTE:** The TPM key is unique to every TPM deployed server and must be retained. Misplacing or losing the key could result in data loss.

### Warranty

This product is covered by a global limited warranty and supported by HPE Services and a worldwide network of Hewlett Packard Enterprise Authorized Channel Partners 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 warranty services are available through HPE Pointnext operational 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 Warranty includes 3-Year Parts, 0-Year Labor, 0-Year Onsite support with next business day response. Warranty repairs may be accomplished through the use of Customer Self Repair (CSR) parts. These parts fall into two categories: 1) Optional CSR parts are designed for easy replacement but may involve added complexity. Customers may choose to have Hewlett Packard Enterprise replace Optional CSR parts at no charge. 2) No CSR parts are also designed for requiring a Hewlett Packard Enterprise authorized service provider replace the part. Additional information regarding worldwide limited warranty and technical support is available at: <a href="http://h20564.www2.hpe.com/hpsc/wc/public/home">http://h20564.www2.hpe.com/hpsc/wc/public/home</a>

### **Optional Features**

### 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 asset tagging, and custom packaging. For more information on Factory Express services for your specific server model please contact your sales representative or go to: <a href="http://www.hp.com/go/factory-express">http://www.hp.com/go/factory-express</a>

### **Service and Support**

To see recommended HPE Support Services for your HPE product (4 and 5 year Service offerings are also available) **See HPE Moonshot 1500 System** 

### For more information

To learn more on HPE Moonshot please contact your Hewlett Packard Enterprise sales representative.

#### **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.

### **Configuration Information**

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

#### **NOTES:**

- If you want to configure the HPE Moonshot 1500 System with server blades, proceed to the HPE Moonshot 1500 System Quick Specs: <a href="https://www.hpe.com/us/en/servers/moonshot.html">https://www.hpe.com/us/en/servers/moonshot.html</a>
- If you want to configure a server blade only, proceed to Step 1

### Step 1: Base Configuration (Choose upgrade kit)

### **HPE ProLiant Server Mulitpack Kit**

HPE Moonshot Server Multipack

814659-B21

NOTE: Up to 15 ProLiant Server Blades of any kind fit in this multipack carton for shipping when a chassis is not ordered

### **Step 2: Pick ProLiant Server Blade**

#### HPE ProLiant m750 Server Blade

HPE ProLiant m750 E-2286M 5.0GHz 8-core 45W Configure-to-order Blade Server

P17342-B21

**NOTE:** Each ProLiant m750 server blade is pre-configured with a single Intel® Xeon® E-2286M (x86-64) eight-core processor running at 2.4-5.0GHz.

Each of these processor packages also contains an integrated Intel® UHD P630 Graphics processor with 128MB of embedded DRAM. This processor contains 16MB of shared L3 cache, and memory capacity up to 128GB.

NOTES:

- The processor on each server is fixed and cannot be changed after ordering. DIMMs and SSDs are configurable.
- •

### **Step 3: Configure ProLiant Server Blade** (Choose appropriate Option)

**NOTE:** Additional options are not configurable for server upgrade kits.

**NOTE:** Must order identical quantity on all configured ProLiant server blades.

NOTE: Part numbers provided below can be used to order upgrades as well

### **HPE Memory**

### Select 1 to 4 of the following:

| HPE 8GB (1x8GB) ECC Single Rank x8 DDR4-2933 CAS-21-21 Unbuffered SO-DIMM Field Upgrade Kit    | P22154-B21 |
|------------------------------------------------------------------------------------------------|------------|
| HPE 16GB (1x16GB) ECC Dual Rank x8 DDR4-2933 CAS-21-21-21 Unbuffered SO-DIMM Field Upgrade Kit | P22155-B21 |
| HPE 32GB (1x32GB) ECC Dual Rank x8 DDR4-2933 CAS-21-21-21 Unbuffered SO-DIMM Field Upgrade Kit | P22156-B21 |

### **HPE Solid State Drives**

### Select 0 to 1 of the following:

| HPE 120GB SATA M.2 2242 Solid State Drive Field Upgradable Kit | 866842-B21 |
|----------------------------------------------------------------|------------|
| HPE 240GB SATA M.2 2242 Solid State Drive Field Upgradable Kit | 866844-B21 |

# **Configuration Information**

### Select 0 to 4 of the following:

| HPE 256GB PCIe M.2 2280 Solid State Drive Field Upgradable Kit                         | 862159-B21 |
|----------------------------------------------------------------------------------------|------------|
| HPE 256GB NVMe x4 Lanes Read Intensive M.2 2280 1yr Wty Extended Temperature SSD       | 880262-B21 |
| HPE 512GB NVMe x4 Lanes Read Intensive M.2 2280 1yr Wty Extended Temperature SSD       | 880264-B21 |
| HPE 1TB NVMe x4 Lanes Read Intensive M.2 2280 1yr Wty Extended Temperature SSD         | 880266-B21 |
| HPE 2.48TB NVMe x4 Lanes Read Intensive M.2 2280 1yr Wty Extended Temperature SSD      | P00375-B21 |
| HPE Edgeline 960GB NVMe x4 Lanes Mixed Use M.2 22110 3yr Wty Extended Temperature SSD  | P05892-B21 |
| HPE Edgeline 1.92TB NVMe x4 Lanes Mixed Use M.2 22110 3yr Wty Extended Temperature SSD | P05896-B21 |
| HPE Edgeline 3.84TB NVMe x4 Lanes Mixed Use M.2 22110 3yr Wty Extended Temperature SSD | P05900-B21 |

NOTE: Mixing of 2280/22110 M.2 SSD types in a server is allowed

NOTE: SATA and NVMe M.2 SSDs can both be used as an OS boot drive

**NOTE:** The ProLiant m750 can support up to Qty of 4 of the XTemp M.2 SSD models up to 55c

NOTE: For additional M.2 SSD information please visit the Edgeline M.2 SSD QuickSpecs.

### Step 4: To Select a different server blade see details:

HPE Moonshot 1500 System: <a href="https://www.hpe.com/us/en/servers/moonshot.html">https://www.hpe.com/us/en/servers/moonshot.html</a>

### **Additional Options**

### **Step 5: Choose Additional Options**

**NOTE:** Some options may not be integrated at the factory. 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 additional information.

#### **Cable Kits**

HPE m710x Front I/O Cable Kit 867893-B21

#### NOTE:

- 1. This optional kit provides the following cables for connecting the HPE ProLiant m710x/m750 Server Blade directly to a monitor, keyboard, mouse or other accessories.
  - Mini Displayport (DP) to Displayport (DP) Female Adapter
  - Mini Displayport (DP) to HDMI Adapter
  - Micro-USB to USB Type-A Female Adapter
- 2. These cables will require removal of the top cover when the server is installed in a Moonshot 1500 (top access)

### **HPE Embedded Management**

HPE Integrated Lights Out (iLO) Advanced

| HPE iLO Advanced Electronic License with 1yr Support on iLO Licensed Features        | E6U59ABE   |
|--------------------------------------------------------------------------------------|------------|
| HPE iLO Advanced Electronic License with 3yr Support on iLO Licensed Features        | E6U64ABE   |
| HPE iLO Advanced 1-server License with 1yr Support on iLO Licensed Features          | 512485-B21 |
| HPE iLO Advanced Flexible Quantity License with 1yr Support on iLO Licensed Features | 512486-B21 |
| HPE iLO Advanced AKA Tracking License with 1yr Support on iLO Licensed Features      | 512487-B21 |
| HPE iLO Advanced 1-server License with 3yr Support on iLO Licensed Features          | BD505A     |
| HPE iLO Advanced Flexible Quantity License with 3yr Support on iLO Licensed Features | BD506A     |
| HPE iLO Advanced AKA Tracking License with 3yr Support on iLO Licensed Features      | BD507A     |

**NOTE:** If an m750 server blade will be installed in a Moonshot 1500 2.0 chassis (P18680-B21), then an iLO Advanced license for each blade is required in order to enable the enhanced iLO 5 Advanced capabilities.

For more details on iLO Advanced, refer to: http://www.hpe.com/info/ilo

### Memory

### DIMM Population Order for the HPE ProLiant m750 Server Blade

| Total Memory |             | Slo         | † <i>#</i>  |             |
|--------------|-------------|-------------|-------------|-------------|
|              | DIMM 1 (GB) | DIMM 2 (GB) | DIMM 3 (GB) | DIMM 4 (GB) |
| 8 GB         |             | 8           |             |             |
| 16 GB        |             | 8           |             | 8           |
| 24 GB        |             | 16          |             | 8           |
| 32 GB        |             | 16          |             | 16          |
| 40 GB        | 16          | 16          |             | 8           |
| 48 GB        | 16          | 16          | 8           | 8           |
| 64 GB        | 16          | 16          | 16          | 16          |
| 128GB        | 32          | 32          | 32          | 32          |

NOTE: Table shows recommended HPE ProLiant m750 server memory configurations that have been optimized by HPE.

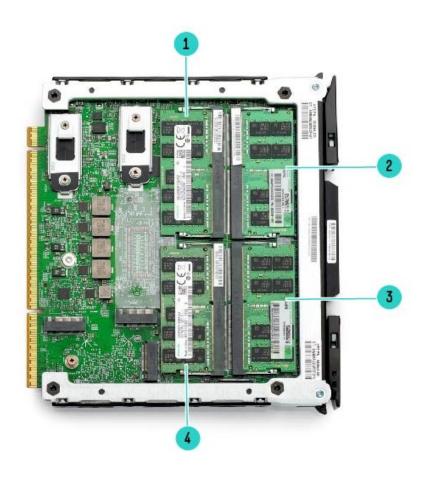
**NOTE:** DIMM slots are not color coded on this server. Refer to the picture below for the locations.

NOTE: Do not use Registered DIMMs (RDIMMs). Load Reduced DIMMs (LRDIMMs) and Non-Volatile DIMMs (NVDIMMs)

### **General Memory Population Rules and Guidelines:**

- There are two (2) Memory channels per processor. This server only has 1 processor.
- There are two (2) DIMM slots for each memory channel; four (4) total slots per processor.
- A minimum of one DIMM is required per processor.
- DIMM 1 and DIMM 2 belong to CPU Channel A. DIMM 3 and DIMM 4 belong to Channel B. Recommended configurations are designed to optimize performance.
- When mixing DIMMs of different sizes, load the heaviest load (DIMM with most ranks) DIMM first.
- Load DIMMS in this sequence: DIMM 2 -> DIMM 4 -> DIMM 1 -> DIMM 3. See the diagram above.
- The maximum memory speed is a function of the memory type, memory configuration, and processor model.
- Use only HPE memory specified in this document.

# Memory



DIMM Locations on the HPE ProLiant m750 Server Blade

| Item | DIMM 3 / DIMM 4 = Channel B | Item | DIMM 1 / DIMM 2 = Channel A |
|------|-----------------------------|------|-----------------------------|
| 1.   | DIMM 3                      | 3.   | DIMM 2                      |
| 2.   | DIMM 4                      | 4.   | DIMM 1                      |

# Memory

Intel Supported Memory Bandwidth for HPE ProLiant m750 Intel® Xeon® E-2286M Processor Family

| Memory Bandwidth a          | nd Capacity                  |                            |                            |
|-----------------------------|------------------------------|----------------------------|----------------------------|
| [DIMM Type]                 | ECC Unbuffered Small Ou      | tline DIMMs (SODIMMs)      |                            |
| HPE P/N                     | HPE 8GB (1x8GB) ECC Single   | HPE 16GB (1x16GB) ECC Dual | HPE 32GB (1x32GB) ECC Dual |
|                             | Rank x8 DDR4-2666 CAS-21-21- | Rank x8 DDR4-2666 CAS-21-  | Rank x8 DDR4-2666 CAS-21-  |
|                             | 21 Unbuffered SO-DIMM Field  | 21-21 Unbuffered SO-DIMM   | 21-21 Unbuffered SO-DIMM   |
|                             | Upgrade Kit                  | Field Upgrade Kit          | Field Upgrade Kit          |
|                             | P22154-B21                   | P22155-B21                 | P22156-B21                 |
| DIMM Rank                   | Single Rank                  | Dual Rank                  | Dual Rank                  |
| DIMM Capacity               | 8GB                          | 16GB                       | 32GB                       |
| Voltage                     | Std Voltage 1.2V             | Std Voltage 1.2V           | Std Voltage 1.2V           |
| DRAM Depth [bit]            | 1G                           | 2G                         | 2G                         |
| DRAM Width [bit]            | x8                           | X8                         | X8                         |
| DRAM Density                | 8Gb                          | 8Gb                        | 16Gb                       |
| CAS Latency                 | 21-21-21                     | 21-21-21                   | 21-21-21                   |
| DIMM Native Speed (MT/s)    | 2666                         | 2666                       | 2666                       |
| Slots that can be populated | 4                            | 4                          | 4                          |
| Maximum Capacity<br>(GB)    | 32                           | 64                         | 128                        |
|                             | POPULATED I                  | DIMM SPEED (MT/s)          |                            |
| 1 DIMM Per Channel          | 2666                         | 2666                       | 2666                       |
| 2 DIMM Per Channel          | 2400                         | 2400                       | 2400                       |

| Memory Speed by | Processor Model | Supported Memory Speeds |  |
|-----------------|-----------------|-------------------------|--|
| Processor Model | E-2286M         | 2666 MT/s               |  |

# Storage

### SSD Options on the HPE ProLiant m750 Server Blade

| SSD Numbering | Supported Module  | Connection Type |  |
|---------------|-------------------|-----------------|--|
| SATA#1        | M.2 2242          | SATA-3 x1       |  |
| NVMe # 1      | M.2 2280 or 22110 | PCIe 3.0 x2     |  |
| NVMe # 2      | M.2 2280 or 22110 | PCIe 3.0 x2     |  |
| NVMe # 3      | M.2 2280 or 22110 | PCIe 3.0 x4     |  |
| NVMe # 4      | M.2 2280 or 22110 | PCIe 3.0 x4     |  |

### **Technical Specifications**

**Server Blade** HPE ProLiant m750 Server Blade

**Dimensions (H x W x D)** 6.57 x 7.23 x 0.78in (16.71 x 18.37 x 1.98cm)

**Typical Power** 70W **Max Power** 85W

System Inlet Temperature

**Standard Operating** HPE Moonshot 1500 Systems:

Fully supported. Typical range is 10° to 35°C (50° to 95°F) with altitude

derating.

Refer to the HPE Moonshot 1500 System documentation for details.

**Extended Operating** HPE Moonshot 1500 System:

NOT supported.

**Non-operating** Refer to the HPE Moonshot 1500 System documentation for details.

Altitude Operating Refer to the HPE Moonshot 1500 System documentation for details.

**Non-operating** Refer to the HPE Moonshot 1500 System documentation for details.

**Acoustic Noise** Listed are the declared A-Weighted sound power levels (LWAd) and declared average bystander position

A-Weighted sound pressure levels (LpAm) when the product is operating in a 23°C ambient environment. Noise emissions were measured in accordance with ISO 7779 (ECMA 74) and declared in accordance

with ISO 9296 (ECMA 109).

Refer to the HPE Moonshot 1500 System documentation for details.

Emissions Classification (EMC)

FCC Rating Class A

**Normative Standards** CISPR 22; EN55022; EN55024; FCC CFR 47, Pt 15; ICES-003; CNS13438;

K22;K24; EN 61000-3-2; EN 61000-3-3; EN 60950-1; IEC 60950-1

**NOTE:** Product conformance to cited product specifications is based on sample (type) testing, evaluation, or assessment. This product or family of products is eligible to bear the appropriate

compliance logos and statements.

### Environment-friendly Products and Approach - End-of-life Management and Recycling

Hewlett Packard Enterprise offers end-of-life **product return, trade-in, and recycling programs**, in many geographic areas, for our products. Products returned to Hewlett Packard Enterprise will be recycled, recovered or disposed of in a responsible manner.

The EU WEEE Directive (2012/19/EU) 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**. 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.

#### **Other Infrastructure Components**

**NOTE:** For information on supported Chassis, Switch and Uplink Modules, please see the following:

**System Types** HPE Moonshot

**HPE Moonshot 1500 System** 

# **Technical Specifications**

Switch (Moonshot 1500 Only)

### Comware

• HPE Moonshot-45XGc Switch Module

**Uplink Module** (Moonshot 1500 Only)

- HPE Moonshot-16SFP+ Uplink Module
- HPE Moonshot-4QSFP+ Uplink Module

# **Summary of Changes**

| Date        | Version History | Action  | Description of Change                                                                                                                          |  |
|-------------|-----------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 20-Apr-2020 | Version 5       | Changed | Standard Features section was updated.                                                                                                         |  |
| 06-Apr-2020 | Version 4       | Changed | Overview, Standards Features, Optional Features, Configuration Information, Additional Options and Memory sections were updated                |  |
| 16-Mar-2020 | Version 3       | Changed | Overview, Standard Features, Configuration Information, Additional Options, Memory, Storage and Technical Specifications sections were updated |  |
| 17-Feb-2020 | Version 2       | Changed | Overview, Standard Features, Configuration Information, Memory, Storage and Technical Specifications sections were updated                     |  |
| 03-Feb-2020 | Version 1       | New     | New QuickSpecs                                                                                                                                 |  |



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

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