Data sheet

HP ProLiant m700 Server Cartridge

Workload-specific server cartridges for the HP Moonshot System

HP Moonshot System: the first software-defined server

The foundation you need to compete in a new era of computing

The growth of Social Media, mobile computing, e-commerce, and Big Data is actually being restricted by the very thing that is supposed to enable it: infrastructure. HP Moonshot System addresses modern IT workloads with a new class of software-defined servers. These workload-optimized servers provide maximum scalability, efficiency, density, and simplicity while requiring less power, space, and environmental cooling, and fewer system management resources than traditional servers.

Customize HP Moonshot System for specific workloads

HP Moonshot System uses energy-efficient CPUs that balance performance and cost to match the needs of specific applications through the use of workload-specific server cartridges. The HP ProLiant m700 Server Cartridge has four AMD processor-based servers. The AMD Opteron X2150 accelerated processing unit has the CPU, and GPU integrated into a single Accelerated Processing Unit (APU) for increased graphics processing, power efficiency, and faster response times. It offers higher single-threaded performance than competing processors, and the highest density, most power-efficient small-core x86 processors ever built.[2]

Massive power meets unparalleled efficiency

HP Moonshot System delivers maximum density with unparalleled power efficiency—requiring less energy, space, and cost than traditional servers.[1] The key is the way HP ProLiant Moonshot System Server Cartridges deliver workload specialization—efficiently and easily aligning just the right amount of compute, memory, and storage delivered at scale.

This makes it ideal for hosted desktop infrastructure (HDI), offering:

- Improved security and compliance by centralizing desktops, data, and applications in the data center
- Enhanced worker productivity with anywhere, anytime, any device, secure mobility
- Streamlined desktop support to maintain the desktop environment without business interruption
- Improved business agility by scaling and adapting to changes quickly without disruption

HP Moonshot Concierge Services

HP provides the consulting services and infrastructure support these extremely scalable, highly dense environments require through the HP Moonshot Concierge Services program. It includes educational tools and services to help you effectively implement your HP Moonshot system, including HP Technology Services, HP Foundation Care, and HP Datacenter Care.

See an HP Moonshot System in action at an HP Discovery Lab

The new HP Moonshot Concierge Services program also offers select customers and partners direct access to technology, industry experts, and peers through the HP Discovery Labs. These collaborative facilities allow for experimenting, testing, and benchmarking of applications on HP Moonshot development systems, as well as traditional servers.

HP Discovery Labs offer access to all HP Moonshot servers and options, offering great value to the solution preproduction phase to determine how they will perform. In addition, on-site testing of future HP Moonshot infrastructure allows you to confidentially gauge application suitability on current and evolving HP server technology. HP Discovery Labs are now open in Singapore, Purdue University, Houston, Texas, and Grenoble, France, with plans to add more locations around the world.

[1] HP engineering internal research.
[2] amd.com/us/press-releases/Pages/amd-launches-the-2013may29.aspx

System-on-chip	AMD Opteron X2150 APU, 1.5 GHz
Cache memory	2 MB L2 cache
Graphics	128 Radeon Cores (up to 500 MHz)
Memory protection	Advanced ECC
Memory Type DIMM slots available Maximum configuration	 DDR3 PC3-12800 SDRAM (1,600 MHz) 4 SODIMM slots (One per server) 32 GB (4 x 8 GB)
Network controller	Broadcom BCM5720 Ethernet Controller
Storage controller	Integrated into the SOC
Maximum internal storage	32 GB iSSD per SOC via Mezzanine Storage Kit
Interfaces	• Cartridge link LED/button • Cartridge UID LED/button • Cartridge health LED
Industry standard compliance	• ACPI 2.0 • PXE Support • PCIe 3.0
Operating system support for HP ProLiant servers	Microsoft® Windows® 7 Note: For more information on HP's certified and supported HP ProLiant servers for OS and virtualization software, and the latest listing of software drivers available for your server—including how to purchase from HP—please visit our OS Support site at hp.com/go/ossupport and our driver download page at hp.com/go/servers/Moonshot/download

Customize your IT lifecycle management, from acquisition of new IT, management of existing assets, and removal of unneeded equipment.
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