IBM Flex System x240 M5 Compute Node

Bringing new security, efficiency, and reliability features to handle business-critical workloads

Highlights

- Reduce operating costs with new energy-efficient Intel Xeon E5-2600v3 processors and 50 percent more cores and cache than the previous generation
- Industry-leading two-socket memory capacity, featuring TruDDR4 memory with up to 1.5 TB allowing for more VDI users or VMs per node
- Deploy new power for virtualization, performance and industry-leading networking flexibility
- Ideal platform for those migrating from IBM® BladeCenter® HS23 and competitive blade systems

As organizations face continued pressure to consolidate data center infrastructure, they also wrestle with the need to handle more compute-intensive workloads which are analyzing more data faster than ever before. With all these challenges to meet, there's never been a better time to choose the IBM Flex System® x240 M5 Compute Node to work within your IBM Flex System® or IBM PureSystems environment.

Security, efficiency, reliability

The x240 M5 is part of the newly announced M5 portfolio of enterprise rack and tower servers, dense systems, and blade and integrated systems. Combining balanced reliability, efficient performance and flexibility, the M5 portfolio is an excellent fit for small and medium businesses and large enterprises. It provides outstanding uptime to keep business-critical applications and cloud deployments running securely. Every M5 family member is designed to help:

- Provide power savings using improved thermal and cooling design and more efficient components
- Boost cloud performance with greater VM density and low latency flash storage
- Reduce unplanned downtime by delivering industry-leading uptime
- Safeguard enterprise data with built-in System x® Trusted Platform Assurance to mitigate attacks against boot firmware and management controllers

Versatile power for a wide variety of business-critical workloads

The new 2-socket IBM Flex System x240 M5 Compute Node delivers major advances in performance, capacity, management simplicity, and networking flexibility to help you keep operating costs down without sacrificing efficiency, reliability or security. For workloads that require a balance of memory, processor and I/O bandwidth, the variety of Flex System x240 M5 models gives you the flexibility to optimize each resource to adapt to meet your workload's price/performance ratio target.

Benefit from next-generation technology today

The Flex System x240 M5 supports up to two Intel E5-2600 v3 series processors, available with as many as 18 cores, each running at up to 2133 MHz designed to deliver improved performance without sacrificing energy efficiency. This family of processors features up to 45 MB L3 cache per socket, integrated PCIe 3.0, Intel Turbo Boost Technology 2.0, Hyper-Threading Technology and two QuickPath interconnects. Also new is TruDDR4 Memory support that requires only 1.2 V of power each, compared to 1.35 V and 1.5 V for previous modules. In fact, each x240 M5 will be able to support up to 1.5 TB of memory[1] in 24 DIMM slots running at up to 2133 MHz. The TruDDR4 Memory portfolio includes RDIMMs with advanced error correction for reliability, performance and maximum memory capacity. In addition, TruDDR4 Memory will support memory performance that exceeds industry standards. The x240 M5 also offers versatile high-performance storage options such as dual 2.5-inch PCIe flash storage and mirrored SD card for hypervisor.

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Networking flexibility—choose protocols and speeds you need

To deliver the maximum choice of networking options, the x240 M5 allows you to select and use the two included mezzanine card slots to meet your specific connectivity requirements. Depending on the model and number of processor sockets populated, you can choose from optional Gigabit Ethernet (GbE), 10 GbE, 40 GbE, Fibre Channel over Ethernet and iSCSI cards to network your way.

IBM Flex System x240 M5 Compute Node at a glance	
Form factor	Flex System standard node
Processor	2 Intel Xeon E5-2600 v3 Series Processor. up to 36 cores per node
Cache per socket	Up to 45 MB, 2.5 MB per core
Memory	24 DDR4 LP, 1.5 TB maximum with 64 GB LRDIMM
Internal storage	2 x hot-swap 2.5-inch (SAS/SATA/SSD/PCIe)
Internal RAID	LSI 3004, RAID-0/-1, optional ServeRAID M5210/RAID-0, -1, -5 with LSI3108 Controller
Internal SD Flash/USB	2 x dual-slotted SD card +1 x Front Access USB Key
Network connectivity	2 x 10 Gb (standard) 2-port, 4-port and 6-port x 10 Gb adapters (optional) 2-port and 4-port x 8/16Gb Fibre Channel adapters (optional) 2 port x QDR/FDR InfiniBand adapters (optional)
Power management	AEM, Active Energy Management, xSmart Energy Control (xSEC)
Management	IMM 2.1, RTMM KVM Dongle
Operating systems	Microsoft Windows Server, SUSE, RedHat Enterprise Linux, VMware
RAS features	Chassis redundant/hot-plug power and cooling Front panel and FRU/CRU LEDs
Warranty	3-year customer replaceable unit and onsite limited warranty, next business day 9x5, service upgrades available

Why IBM?

IBM offers a vast portfolio of hardware, software and services that help organizations of any size address their information infrastructure requirements in a comprehensive and integrated way. With IBM, organizations can create a more flexible, robust and resilient IT infrastructure that can support critical business operations.

For more information

To learn more about the IBM Flex System x240 M5 compute node, please contact your IBM representative or IBM Business Partner, or visit the following website: **ibm.com**/pureflex

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[1] Future maximum; 768 GB will be available at general availability date

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