IBM

IBM Flex System x222 Compute Node

Maximize compute and VM density

Highlights

- Optimized for virtual desktop and virtualization density

- Double-dense design that can support the equivalent of 28 nodes per IBM® Flex System™ Enterprise Chassis

- Designed to reduce operational costs

Today, only 1 in 5 organizations spend more than half of their IT budget on new hardware. That is because management and administrative costs have escalated to almost 70 percent of the average organization's current IT budget.[1]

Even with that shift, business requirements continue to multiply—more virtual desktop users along with increased demand for virtualized resources such as cloud and test environments. As a result, IT executives must find new ways to satisfy user demand.

Density optimized solution

Successfully meeting this challenge means you must increase data center capacity without growing operating costs. The IBM Flex System x222 compute node has been designed to cost-effectively supply the compute and virtualized resources you need now, in a platform designed to support your future needs.

Each Flex System x222 compute node features two independent twin compute nodes, enabling the equivalent of up to 28 independent compute nodes in a 10U Flex System Enterprise Chassis. There is no need for additional switching hardware or connectivity options—simply enable additional ports to the existing networking hardware via Feature on Demand offerings. This helps reduce the cost of the overall solution. Finally, clients can still benefit from using the Flex System x222 along with other Flex System compute nodes to create a flexible and optimized chassis solution for their diverse workloads.

A building block of the IBM PureSystems™ family, the Flex System x222 achieves these design goals by increasing your available compute capacity while retaining your current physical footprint and operational infrastructure.

Optimized for virtual desktop and virtualization density

Virtualization is quickly becoming the standard for IT projects and this creates increased compute demands that must be satisfied by hardware budgets that are declining as a percentage of overall IT spending.

The Flex System x222 is specifically intended to resolve these business challenges. By maximizing the number of virtualization or virtual desktop users at a chassis or at a rack-level, the Flex System x222 can fundamentally change IT economics in these workloads. Using two Intel Xeon processors and up to 384 GB of memory per twin compute node, the Flex System x222 can support up to 2x the number of processors compared to the traditional approach in the same rack space. This helps maximize the utilization for workloads such as virtual desktops and virtualization, allowing you to save cost of the solution.

Created for space-constrained environments

The Flex System x222 was created to meet the demand for more compute capability within your existing physical footprint. It does this by doubling the density of a standard Flex System node, providing two twin nodes per standard compute bay in the IBM Flex System Enterprise Chassis for the equivalent of up to 28 nodes per chassis.

For clients looking to maximize their VM density, the Flex System x222, can meet increased compute needs using your existing IT footprint. In a real-world deployment example, the Flex System x222 was able to reduce 56U of 2- socket rack servers into 10U of standard rack space required by just one Flex System Enterprise chassis. In addition to saving the physical space, the solution helped save costs on networking switches, power and cooling in the data center while also reducing the number of managed devices, enabling a significantly more efficient solution for a constrained environment.

The Flex System x222 compute node helps increase your compute capacity while retaining your physical footprint and operational infrastructure.

Designed to reduce operational costs

Reducing the ongoing costs of operating and maintaining your infrastructure can positively impact your bottom line. The Flex System x222 double-dense compute node design allows you to reduce power and cooling costs by reducing number of chassis and networking components required for your workload. In addition, the Flex System Enterprise Chassis offers two power supply options so you can more closely align your power usage to only what you need.

For managing physical and virtual resources from a single interface, the Flex System x222 supports IBM Flex System Manager™. And with swappable components and built-in redundancy, the Flex System x222 reduces downtime and minimizes administrative overhead.

IBM Flex System x222 Compute Node at a glance

Processor/cores	Up to two, Intel Xeon E5-2400 Series Processor per twin node; 16 cores per twin node
Level 2 (L2) cache	256 KB per core
Level 3 (L3) cache	2C – 5 MB, 4C – 10 MB, 6C – 15 MB, 8C – 20 MB
Chipset	Intel C600
Form factor	Flex System standard node with two 2-socket twin nodes
Dimensions Inches/ Millimeters	Width: 8.6 in./217 mm, Height: 2.2 in./57 mm, Depth: 19.4 in./492 mm
Memory	12 DDR3/DDR3L LP, 384 GB max with 32 GB LRDIMMs per twin node
Internal Storage	1 x 2.5-inch (SATA/SSD), or 2 x hot-swap 1.8-inch SSD per twin node
Internal USB	2 x standard USB Flash Key +, 1 x front access USB Key per twin node
Ethernet	IBM Virtual Fabric 2 x 10 GbE LOM per twin node
Chassis support	Flex System Enterprise Chassis
I/O expansion	1 x Mezzanine cards (2 ports 8 Gb/16 Gb Fibre Channel, or 1-port QDR/FDR InfiniBand) per twin node
Warranty	3-year customer replaceable unit and onsite limited warranty, next business day 9x5, service upgrades available
Management	IMM2, RTMM KVM Dongle
Operating systems	Microsoft Windows Server, SUSE, Red Hat Enterprise Linux, VMware

The double-density of the Flex System x222 compute node allows you to reduce your power and cooling requirements and streamline your IT management. And the Flex System x222 provides this in a platform that is designed to fit within your existing storage and networking infrastructure while supporting your future needs.
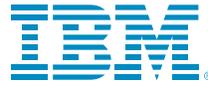
Why IBM?

The IBM name is synonymous with high-performance, high-quality IT hardware—backed by a company with decades of experience supporting that hardware. This gives you the confidence of knowing your purchases will be supported now as well as throughout the product's lifecycle by a company and a team of experts who are all committed to your success.

For more information

To learn more about how the Flex System x222 can help satisfy your needs visit: **ibm.com**/flex/ or contact your IBM representative or IBM Business Partner.

Additionally, IBM Global Financing can help you acquire the IT solutions that your business needs in the most cost-effective and strategic way possible. We'll partner with credit-qualified clients to customize an IT financing solution to suit your business goals, enable effective cash management, and improve your total cost of ownership. IBM Global Financing is your smartest choice to fund critical IT investments and propel your business forward. For more information, visit: **ibm.com**/financing