

Forge R630

PRODUCT OVERVIEW

The NEBS and ETSI compliant Forge R630 server is versatile and highly configurable for a variety of solutions, delivering the latest Intel® Xeon® processor E5-2600 v3 product family, 24 DIMMs of high-performance DDR4 memory and a broad range of local storage options. With computing capability previously only seen in 2U servers, the ultra-dense Forge R630 two-socket 1U rack server delivers an impressive solution for virtualization environments, large business applications or transactional databases. With carrier grade components and both AC and DC power options, the R630 is ideal for rugged environments.

Perfect for NFV (network function virtualization), the Forge R630 offers full support for VMware®, OpenStack, and other leading virtualization platforms, providing a foundation for SDN and the network of the future. Forge R630 supports the Intel® Open Network Platform Server software stack, including:

- **OpenStack**—Manages and orchestrates applications running on network nodes
- **OpenDaylight**—Enables programmability of networks of any size and scale
- **DPDK**—Accelerates packet processing on general-purpose processors
- **Open vSwitch**—Performs virtual, multilayer network switching
- **Linux/KVM**—Provides operating system and hypervisor support

The Forge R630 has global availability and is designed to deliver high performance, maximum scalability, and safe and reliable service:

- **Open standard systems.**
 - Improved compatibility based on industry-leading products
 - Rapidly scalable and easily expandable
- **Industry standards solutions.**
 - NEBS Level 3 and ETSI compliant
 - AC and DC power options
 - Fresh-air cooling systems enable servers to operate in warmer environments than traditional data centers
 - Designed for extreme conditions such as high humidity, earthquakes and dust
- **Global regulatory support and availability.**



Deliver peak performance

Build a blazingly fast transactional database with the R630 24 all-flash drive configuration. Combine the density, scalability and performance of 24 1.8" SSDs with dual-PERC capability to deliver a superior solution that can boost performance by storing an entire database. When combined with the SanDisk® DAS Cache solution, the R630 can help increase OLTP transactions and concurrent usage for latency-sensitive applications, such as e-commerce or financial trading.

Maximize operational efficiency

Quickly and securely monitor or modify critical server settings "at the box" with the iDRAC Quick Sync bezel with embedded near field communication (NFC) capability. Use a handheld device with the bezel to quickly check system health details, and use iDRAC Direct to easily deploy or modify settings across multiple servers with a USB key or laptop, eliminating the potential for configuration errors.

Product Highlights

- Latest Intel® Xeon® E5-2600 v3 processors — up to 18 cores
- Up to 24 DIMMs high-capacity DDR4 memory
- Up to 24 1.8" SSDs (23TB)
- Up to 3 PCIe 3.0 expansion slots and 4 Express Flash NVMe PCIe SSDs
- Perfect for NFV and SDN. Supports VMware®, OpenStack, and other leading virtualization platforms

TECHNICAL SPECIFICATIONS

Feature	Forge R630 - NEBS/ETSI Compliant Components
Form Factor	1U rack
Processor	2x up to 120W Intel® Xeon® E5-2600 v3 processors: <ul style="list-style-type: none"> • Intel Xeon E5-2695 v3 processor • Intel Xeon E5-2680 v3 processor • Intel Xeon E5-2658 v3 processor • Intel Xeon E5-2650 v3 processor • Intel Xeon E5-2640 v3 processor • Intel Xeon E5-2620 v3 processor • Intel Xeon E5-2609 v3 processor
Dimensions	8 x 2.5" drive configuration: H: 4.28 cm (1.68 in.) W: 48.23 cm (18.98 in.) D: 70.05 cm (27.57 in.)
Cache	2.5MB per core; core options: 6, 8, 10, 12, 14
Chipset	Intel® C610 series chipset
Memory*	Up to 768GB (24 DIMM slots); 4GB/8GB/16/32GB DDR4 RDIMM LV up to 2133MT/s
I/O Slots	Up to 2 PCIe 3.0 plus dedicated PERC slot
RAID Controller	Internal controllers: PERC S130 (SW RAID), PERC H330, PERC H730, PERC H730p
Drive Bays	Internal hard drive bay and hot-plug backplane: Up to 8 x 2.5" HDD: SAS, nearline SAS; SSD: SAS, SATA
Internal storage options*	<p>2.5" drive options:</p> <ul style="list-style-type: none"> • 15K RPM SAS drives (300GB, 600GB) • 10K RPM SAS drives (300GB, 600GB, 1.2TB) <p>SAS SSD:</p> <ul style="list-style-type: none"> • Mixed use (200GB, 400GB, 800GB, 1.6TB) • Read intensive (800GB, 1TB) • Write intensive (200GB, 400GB, 800GB) <p>SATA SSD:</p> <ul style="list-style-type: none"> • Mixed use (200GB, 400GB, 800GB) • Read intensive (480GB) • Boot (120GB)
Embedded NIC options	Intel Ethernet i350 4x1Gb Intel X540 DP 10Gb Base-T + I350 DP 1Gb Intel X710 DP 10Gb DA/SFP+, + I350 DP 1Gb
I/O adapter options	Intel Ethernet I350 2x1Gb Intel Ethernet I350 4x1Gb Intel Ethernet X520 2x10Gb DA/SFP+ Intel Ethernet X540 2x10Gb Base-T Mellanox ConnectX-3 DP 40G DA/QSFP
Power Supplies	Efficient redundant hot swap 1100W DC or 1100W AC power supplies
Remote Management	iDRAC8 with Lifecycle Controller iDRAC8 Express (default), iDRAC8 Enterprise (upgrade option) 8GB vFlash media (upgrade option), 16GB vFlash media (upgrade option)
Rack support	ReadyRails™ Sliding Rails or 2/4-Post Static Rails

* 1GB means 1 billion bytes and TB equals 1 trillion bytes; actual capacity varies with preloaded material and operating environment and will be less.