



General-Purpose Rack Server EC-R610 G40

Product Description

The EC-R610 G40 is a high-density rack server powered by Intel® Xeon® Scalable processors, achieving a perfect balance of performance, density, and scalability. It enhances deployment density and space utilization in data centers, reducing operational and maintenance (O&M) costs. The server is widely applicable to industries with high deployment density requirements, such as internet services, telecommunications, and cloud computing.

Key Features and Highlights

Supports 3rd Generation Intel® Xeon® Scalable Processors

- Powerful computing performance with a new 3-UPI interconnect architecture, offering a bus bandwidth of up to 11.2 GT/s
- Supports DDR4 memory at 3200MHz, delivering a 45% increase in memory bandwidth compared to the previous generation
- Fully supports PCIe 4.0, doubling the data transfer rate by 100%

Ultra-High-Density Flexible Scalability

- Optimized 1U chassis design, providing more compute cores in the same space.
- Supports up to 4*3.5-inch or 12*2.5-inch drives, including NVMe SSDs, enabling flexible storage options.
- Flexible expansion with OCP network cards and PCI-E add-on cards, allowing on-demand network resource allocation.

Intelligent Management & Green Energy Efficiency

- Designed for large-scale data center deployment, offering an open management platform compatible with Redfish, IPMI, and SNMP management protocols.
- Enhanced O&M efficiency with real-time hardware health monitoring and reporting, ensuring full lifecycle intelligent maintenance.
- Green energy efficiency considerations, including an intelligent dynamic fan speed control system, optimizing thermal dissipation based on real-time load and environmental conditions while reducing overall power consumption without compromising performance.



Product Specifications

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| Chassis Size | 1U Rack Server |
| Processor | Supports up to 2*3rd Gen Intel® Xeon® Scalable processors, up to 250W per CPU |
| Chipset | Intel C621A Series |
| Memory | 32*DDR4 DIMM slots, up to 3200MHz, supports ECC, memory mirroring, and memory hot spare for enhanced reliability. Supports up to 16 DCPMM modules (maximum 3200MHz). |
| Storage Controller | Supports RAID 0, 1, 10, 5, 50, 6, 60, passthrough mode. RAID controllers support cache supercapacitor protection, RAID level migration, disk roaming, self-diagnostics, and web-based remote configuration. |
| Storage Options | Front: Up to 4*3.5-inch or 10*2.5-inch drives, supporting up to 8*NVMe SSDs. Rear: Up to 2*2.5-inch drives. Internal: 2*SATA/PCIe M.2 slots, 1*onboard eMMC chip. |
| Network Interfaces | OCP 3.0 slot supporting NCSI functionality. Configurable with 2*1GbE, 2*10GbE, 2*25GbE, 2*100GbE, or 2*200GbE options. |
| PCIe Expansion | Supports up to 5*PCIe slots, including 1*dedicated RAID controller slot and 1*OCP slot, along with 3*PCIe 4.0 standard slots. |
| I/O Interfaces | Rear: 1*RJ-45 management port, 4*USB 3.0 ports (2*front, 2*rear), 1*VGA port (optional front VGA support), 1*optional serial port. |
| Power Supply | 550W/800W/1200W CRPS hot-plug platinum-rated power supply, supporting 1+1 redundancy, 100-240V AC input (refer to the server nameplate for actual input voltage requirements). |
| Cooling | 8 hot-swappable cooling fans, N+1 redundancy supported.。 |
| Management & Monitoring | Integrated BMC controller, 1Gbps RJ45 management port, supports Redfish, SNMP, IPMI 2.0. IKVM/HTML5-based remote management, providing comprehensive fault diagnostics, automation, and remote management capabilities. |
| Graphics | Integrated graphics controller, resolution up to 1920x1080. |
| Supported Operating Systems | Windows Server, RHEL, SLES, CentOS, Ubuntu, VMware ESXi, Kylin, RedFlag, etc. |
| Operating Temperature | 5°C ~ 45°C |
| Chassis Dimensions | 43.7mm (H)*483.6mm (W)*804.5mm (D) |