



## Military Rugged RX12 Series 2U Rackmount Server



Dual Socket LGA 2011 R3 support Intel Xeon processor E5-2600 v3 series  
Supports DDR4 2133/1866/1600 LR DIMM, Registered, ECC DIMM and NV DIMM, 8 x DIMM  
Supports 10 x SATA3 6.0 Gb/s by INTEL C612, 2 x miniSAS HD connectors by LSI3008  
Supports 2 PCIe3.0x 16, 1 PCIe 3.0 x8  
Integrated IPMI 2.0 and KVM with Dedicated LAN  
Support 2x 10GLAN by Intel X540  
Shock&Vibration: MIL-STD-810G Compliant  
EMC : MIL-STD-461F Compliant  
MIL-DTL-38999 Type Connectors

Spill-proof bezel with Lock  
1.6mm SGCC heavy-duty cold-rolled steel  
Anti-vibration drive cage design  
Removable air filter  
Front access USB 2.0 x2  
Redundant power supply compatible  
Built-in 3x 3.5"/2.5" HDD/SSD hotswap



# Specifications

| MB Physical Status                             |                                                                                                                                                                                                                                                    |
|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Form Factor                                    | - ATX                                                                                                                                                                                                                                              |
| Processor System                               |                                                                                                                                                                                                                                                    |
| CPU                                            | -Single Intel® Xeon® Processor E5-2648L v3  12x Core ,TDP 75W<br>***(Support Dual CPU mount)                                                                                                                                                       |
| Socket                                         | - Dual Socket LGA 2011 R3                                                                                                                                                                                                                          |
| Chipset                                        | - Intel® C612                                                                                                                                                                                                                                      |
| System Memory                                  |                                                                                                                                                                                                                                                    |
| Capacity                                       | DDR4-2133MHz  16GB ECC/REG CL15 Server Memory                                                                                                                                                                                                      |
| Type                                           | - Quad Channel memory technology,<br>- 8 DIMM slots (support NVDIMM)<br>- Support DDR4 2133/1866/1600 RDIMM and LRDIMM                                                                                                                             |
| DIMM Size Support                              | - RDIMM: 32GB, 16GB, 8GB, 4GB<br>- LRDIMM: 64GB, 32GB                                                                                                                                                                                              |
| Voltage                                        | - 1.2V                                                                                                                                                                                                                                             |
| Expansion Slot                                 |                                                                                                                                                                                                                                                    |
| PCIe 3.0 x 16                                  | - 2 slot LP                                                                                                                                                                                                                                        |
| PCIe 3.0 x 8                                   | - 1 slot LP                                                                                                                                                                                                                                        |
| Storage                                        |                                                                                                                                                                                                                                                    |
| SATA Controller                                | - Intel® C612 : 6 x SATA3 6.0Gb/s; 4 x sSATA3 6.0Gb/s; support RAID 0, 1, 5, 10                                                                                                                                                                    |
| Additional Storage Controller                  | - LSI3008 support 8 x SAS3 12Gbps by mini SAS HD connector                                                                                                                                                                                         |
| Ethernet                                       |                                                                                                                                                                                                                                                    |
| Interface                                      | - 10000/1000 /100 Mbps by Intel® X540                                                                                                                                                                                                              |
| LAN Controller                                 | - 2 x 10GLAN by IntelX540 (10000/1000 /100 Mbps)<br>- 1 x Dedicated IPMI LAN port<br>- Supports Wake-On-LAN<br>- Supports Energy Efficient Ethernet 802.3az<br>- Supports Dual LAN with Teaming function<br>- Supports PXE<br>- LAN1 Supports NCSI |
| Management                                     |                                                                                                                                                                                                                                                    |
| BMC Controller                                 | - ASPEED AST2400                                                                                                                                                                                                                                   |
| IPMI Dedicated LAN                             | - 1 x Realtek RTL8211E for dedicated management GLAN                                                                                                                                                                                               |
| Features                                       | - Watch Dog<br>- NMI                                                                                                                                                                                                                               |
| Graphics                                       |                                                                                                                                                                                                                                                    |
| Controller                                     | - ASPEED AST2400<br>- DDR3 16MB                                                                                                                                                                                                                    |
| Rear Panel I/O (MIL-DTL-38999 Type Connectors) |                                                                                                                                                                                                                                                    |
| VGA Port                                       | - 1 x VGA                                                                                                                                                                                                                                          |
| USB 2.0 Port                                   | - 2x Port USB 2.0  (Option to 4 USB ports)                                                                                                                                                                                                         |
| USB 3.0 Port                                   | - 2 x USB 3.0 (Optional)                                                                                                                                                                                                                           |
| Lan Port                                       | - 2 + 1 (IPMI) LAN  ports                                                                                                                                                                                                                          |
| Serial Port                                    | - 2 (COM RS232)                                                                                                                                                                                                                                    |
| Storage                                        |                                                                                                                                                                                                                                                    |
| Capacity                                       | -Support up to 8 x 2.5” Rugged 2TB SSD Drives  (16TB capacity in systems)                                                                                                                                                                          |
| Hotswap bay support                            | - 8x 2.5" SSD Hotswap Anti-vibration drive cage                                                                                                                                                                                                    |

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Optical Drive</b>    |                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Optical Drive           | -Optional Super-Multi DVD±RW Drive<br>(Optional Blu-rayDrive)                                                                                                                                                                                                                                                                                                                                                        |
| <b>Power Supply</b>     |                                                                                                                                                                                                                                                                                                                                                                                                                      |
| P.S.                    | 700W Power Supply AC 110~230V ±10% Input, 50/60Hz ± 3Hz<br>(Optional to DC input Power Supply)                                                                                                                                                                                                                                                                                                                       |
| <b>Dimensions</b>       |                                                                                                                                                                                                                                                                                                                                                                                                                      |
| (WxHxD)                 | 19.00" x 3.50" x 26.00"<br>482.6 mm x 88.9 mm x 660.4 mm                                                                                                                                                                                                                                                                                                                                                             |
| Housing Material        | 1.6mm SGCC heavy-duty cold-rolled steel                                                                                                                                                                                                                                                                                                                                                                              |
| Weight                  | 18kg                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Cooling                 | -1x 120mm .2x 80mm Air cooling Low Noise Vent                                                                                                                                                                                                                                                                                                                                                                        |
| <b>System BIOS</b>      |                                                                                                                                                                                                                                                                                                                                                                                                                      |
| BIOS Type               | - 128Mb AMI UEFI Legal BIOS                                                                                                                                                                                                                                                                                                                                                                                          |
| BIOS Features           | - Plug and Play (PnP)<br>- ACPI 2.0 Compliance Wake Up Events<br>- SMBIOS 2.8 Support                                                                                                                                                                                                                                                                                                                                |
| <b>Hardware Monitor</b> |                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Temperature             | - CPU Temperature Sensing<br>- System Temperature Sensing                                                                                                                                                                                                                                                                                                                                                            |
| Fan                     | - CPU/Rear/Front Fan Tachometer<br>- CPU Quiet Fan (Allow Chassis Fan Speed Auto-Adjust by CPU Temperature)<br>- CPU/Rear/Front Fan Multi-Speed Control                                                                                                                                                                                                                                                              |
| Voltage                 | - Voltage Monitoring: +12V, +5V, +3.3V, CPU Vcore, DRAM, 1.05V_PCH, +BAT, 3VSB, 5VSB                                                                                                                                                                                                                                                                                                                                 |
| <b>Support OS</b>       |                                                                                                                                                                                                                                                                                                                                                                                                                      |
| OS                      | Microsot Windows®<br>- Server 2008 R2 SP1 (64 bit)<br>- Server 2012 (64 bit)<br>- Server 2012 R2 (64 bit)<br>Linux<br>- RedHat Enterprise Linux Server 5.10/6.5 (32 / 64 bit)<br>- CentOS 5.10 / 6.5 (32 / 64 bit)<br>- SUSE Enterprise Linux Server 11 SP3 (32 / 64 bit)<br>- FreeBSD 9.2 (32 / 64 bit)<br>- Fedora core 19 (64 bit)<br>- Ubuntu 12.04.2 (64 bit) / 12.10 (64 bit)<br>Virtual<br>- VMWare® ESXi 5.5 |
| <b>Environment</b>      |                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Temperature             | - Operation temperature: -15°C ~ 55°C / Non operation temperature: -30°C ~ 70°C                                                                                                                                                                                                                                                                                                                                      |
| Humidity                | - 5 to 95% non-condensing                                                                                                                                                                                                                                                                                                                                                                                            |
| Dust & Water Proof      | IP43 enclosure, anti-bactiria, -salt, -fog and -chemical acid surface                                                                                                                                                                                                                                                                                                                                                |
| Vibration               | Compliant with MIL-STD-810G                                                                                                                                                                                                                                                                                                                                                                                          |
| Shock                   | 20G, 11ms duration/3Axis                                                                                                                                                                                                                                                                                                                                                                                             |
| EMC                     | Compliant with MIL-STD-461E                                                                                                                                                                                                                                                                                                                                                                                          |
| MTBF                    | Compliant with MIL-HDBK-217                                                                                                                                                                                                                                                                                                                                                                                          |
| Noise                   | <45dB measured in 1 meter @ 35C                                                                                                                                                                                                                                                                                                                                                                                      |

