GOMA
RUGGED SOLUTIONS



GEN6 XRS

EXTREME RUGGED SERVERS

www.gomarugged.com

GEN6 XRS

EXTREME RUGGED SERVERS

XRS is a product line of Extreme Rugged Servers combining superior robustness with high performance computing technology, designed for applications that require a MIL-grade qualified equipment, suitable for operations in very critical environments.

GEN6 XRS series features single or dual socket 2nd Gen Intel® Xeon® Scalable Processors ideal for highly intensive workloads and supporting a generous number of PCIe 3.0 lanes. The integrated IPMI services support monitoring, control, and management functions sending alarm notifications in case of critical events.

XRS Extreme Rugged Servers are suitable for 19" rack mounting. They have a 4U milled aluminum chassis design to provide superior resistance and are equipped with a MIL grade power input connector. XRS can host up to six full size PCIe boards including GPU, FPGA modules and any other powerful PCI Express board. The front panel includes an elapse timer, and a drive bay for up to three removable SSDs.

XRS Extreme Rugged Servers are qualified to meet MIL-STD-810G for temperature, shocks and vibrations, and conforms to MIL-STD-461 for EMI/EMC.
Specific customer's configurations can be delivered fully tested according to the selected MIL specs.



Product Features

- High performance dual Xeon® architecture
- IPMI based management
- Extreme rugged aluminum chassis
- Optional D38999 circular connectors
- Optional conformal coating
- MIL grade qualifications

Technical Specifications

System

CPU	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors, Dual Socket LGA-3647 (Socket P) supported, CPU TDP support up to 140W TDP
Memory	Up to 2TB 3DS ECC RDIMM, DDR4-2933MHz; DDR4-2933MHz, in 8 DIMM slots
Chipset	Intel® C621
Network Connectivity	2x RJ45 Gigabit Ethernet LAN ports 1x RJ45 Dedicated IPMI LAN port
Serial	1x COM port (1 header)
USB	4x USB 2.0 ports (2 rear + 2 via headers) 3x USB 3.2 Gen1 ports (2 via headers + 1 Type A)
Storage	10 SATA3 (6Gbps) port
TPM	TPM Header
I/O connectors	2x USB 2.0, 2x LAN, 1x IPMI, 1x VGA
Expansion slots	2x PCIe 3.0 x16, 3x PCIe 3.0 x8, 1x PCIe 3.0 x4 (in x8 slot) M.2 Interface: 1 SATA/PCIe 3.0 x4, Form Factor: 2260, 2280; Key: M-Key
Operative Systems	Windows® 10 IoT Enterprise 2016, Windows® Server 2016, Linux, Vmware
IPMI	IPMI2.0, SPM, Watchdog; SNMP and e-mail alarms and notifications
Remote Monitoring	Monitoring, control and management functions (fan speed, temperature, voltage, redundant power failure, power consumption, disk health, raid health, and memory health)

Power Section

Power Input	AC or DC input single power supply with EMC Filter and MIL D38999 connector Optional AC or DC input redundant power supply

Mechanical Features

Dimensions (W x D x H)	Width 483 mm Height 177.8 mm - 4U rack Depth 546 mm (chassis body)
Material	Aluminum with surface passivation treatment
Weight	25 Kg (depending on configuration)
Colour	Silver / other on request
Mounting	4U 19" rackmount chassis with bridge handles Optional telescopic slides
Front Panel / Leds / Buttons / Connectors	Power ON Switch and led for power fail 2x USB 3.0, Elapsed Time Indicator
Rear Panel / Leds / Buttons / Connectors	Power Input connector, fuses, ground; 6x Full size slots
Drive Bay	1x 3.5" drive bay hosting up to 3x 2.5" SSD

Environmental Features

Operating Temperature	Standard: -5°C to +55°C according to MIL-STD-810G Change 1 (501.6 & 502.6) Extended: -20°C to +60°C (depending on configuration)
Storage Temperature	-40°C to +71°C according to MIL-STD-810G Change 1 (501.6 & 502.6)
Humidity	5% to 95% non-condensed according to MIL-STD-810G Change 1 (506.7 Procedure II)
Fungus	Conformal coating on request
IP Protection	On request
Shock	20g, 11ms functional shock on each direction, according to MIL-STD-810G Change 1 (516.7 Procedure I) 40g, 11ms crash hazard shock on each direction, according to MIL-STD-810G Change 1 (516.7 Procedure V)
Vibrations	Functional: MIL-STD-810G Change 1 (528.1, Procedure I - Surface Ship)
EMC / Electromagnetic Compatibility	According to MIL-STD-461G

RUGGED SOLUTIONS

GOMA ELETTRONICA SpA
Strada Antica di Collegno, 225
10146 Torino - Italia

Tel: +39 011 7725024

www.gomarugged.com

All trademarks are the property of their respective owners
GOMA ELETTRONICA SpA • G6XRS1223

Designed by GOMA ELETTRONICA SpA

KEEP IN TOUCH