

GALLEON XSR HALF RACK SERVER

Removable Storage – High Performance

The XSR Half Rack Server is a high-performance system for the most demanding deployed applications. It is designed to meet the most severe environmental conditions without compromising on functionality and performance. The high performance allows server virtualization in size constrained applications. The 3U half size 19" form factor makes it ideal for installation in space constrained applications typically found in C5ISR applications in land and naval installations.

Intel Xeon E3 six core CPUs with up to 96GB SDRAM supporting ECC. The flexible I/O architecture allows easy integration with existing infrastructure. Dual 100 Gigabit, dual 40 Gigabit or up to eight 10 Gigabit Ethernet ports are supported, which makes the unit ideal for network-attached storage (NAS) applications. The high number of Ethernet ports can eliminate the need for external switches, but the system can also be supplied with an 8-port internal Gigabit Ethernet switch.

The removable storage subsystem offers up to 80TB of Industrial grade MLC storage or 40TB Military grade SLC storage. RAID modes 0, 1 and 5 are supported. Docking stations and 19" rack-mount servers allow for easy data exchange between the deployed servers and benign C5ISR infrastructure. The encrypted RDM allows easy transport of data between the deployed unit and the command station or lab where the data is used.

Optional FIPS 140-2 and AES-256 hardware encryption provides a high level of data security with flexible key management options, including physical key tokens through front panel key loading port and remote loading over a secure network connection.

The servers can be configured with most standard operating systems, including RedHat Enterprise Linux, Debian or Windows Server.

Galleon Embedded Computing's quality management system is certified to Aerospace Standard AS/EN 9100 and ISO 9001.

POWERFUL RUGGED SERVER WITH XEON E3 CPU



FIPS 140-2 Inside

KEY FEATURES

- Intel Xeon CPU options
- Up to 96GB SDRAM with ECC
- Up to 2 100GbE ports
- Up to 2 40GbE ports
- Up to 8 10GbE ports
- Up to 13 GbE port
- Optional 8-port GbE Switch
- Up to 80TB of removable SSD
- Optional hardware AES-256 encryption
- Embedded GPS
- XMC/PMC sites for flexible I/O Expansions
- MIL-STD-810, MIL-STD-461, MIL-STD-704, MIL-STD-1275
- TEMPEST level A

APPLICATIONS

- Mission data server
- Application server
- Data recorder
- NAS
- AI and machine learning

BENEFITS

- High performance
- High bandwidth
- Rugged conduction and air cooled designs

TECHNICAL SPECIFICATION



Processor

- Intel® Xeon® E3, 6 Core
- Up to 96GB SDRAM with ECC

Network

- Up to 13 GbE Controllers
- Up to 8 10GbE Controllers
- Up to 2 40GbE Controllers
- Up to 2 100GbE Controllers
- Up to 8 sFPDP channels
- Optional 8-port Gigabit Ethernet switch

Storage

- 1 x SLC FLASH OS system disk (up to 256GB)
- Up to 80TB removable MLC FLASH
- Up to 40TB removable SLC FLASH

I/O Expansion

- Dual XMC/PMC with x8 PCI Express Gen 3 interface
- MiniPCI Express expansion site

Rear Panel Interfaces

- 5x 1000BASE-T
- 8x 1000BASE-SX/LX (opt.)
- 8x 10GBASE-SR/LR (opt.)
- 2x 40GBASE-SR4/LR4 (opt.)
- 2x 100GBASE-SR4 (MPO-12) (opt.)
- 1 x HDMI (opt.)
- 1x VGA, 3x USB 2.0, 2x RS232/422
- 1x Power, 1x GPS antenna
- MIL-STD-1553 (opt.)

Operating Temperature

- 0°C to +50°C standard temperature
- -40°C to +71/75°C extended temperature (AC/CC)

Shock and Vibration

- Tested to MIL-STD-810

Altitude

- -1500 to 40 000 ft (AC)*
- -1500 to 60 000 ft (CC)*

Security

- TEMPEST level A
- AES-256 bit FIPS 140-2 HW Encryption

EMI/RFI

- Tested to MIL-STD-461

Humidity

- Up to 100%, condensing

Size & Weight

- Half rack
- Size: 152' x 88' x 51'
- Weight: TBD

Power Supply

- 16-40V DC wide input
- Tested to MIL-STD-704, MIL-STD-1275

* Contact factory for high altitude options

ABOUT GALLEON

Galleon Embedded Computing is an innovative leader in development of high-performance, high-quality storage solutions and small rugged data recorder systems, servers and NAS devices.

Galleon's offerings span from commercial grade products for benign environments to ruggedized conduction-cooled products for deployed systems in severe environments.

RELATED PRODUCTS

- G1 microServer
- Offload Systems
- XSR RDM
- Titan XMC Family



SPECTRA AEROSPACE & DEFENSE

Galleon Embedded Computing

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