

GALLEON XSR PRODUCT FAMILY

Removable Storage – High Performance

The Galleon XSR product family provides superior rugged computing performance in a very small form factor. Removable storage ensures short ground times for airborne applications. Industry standard solid-state drives are used to benefit from the ever-increasing storage densities and cost reductions as the technology evolves.

The XSR NAS/Server is capable of handling a high number of simultaneous connections without compromising system performance. The XSR supports a variety of Ethernet connections with options of 1Gb, 10Gb, 25Gb, 40Gb, and 100Gb providing increased connectivity and throughput for demanding applications. Intel Xeon-E and Xeon-D processor options, including the latest 9th generation, are supported with up to 96GB SDRAM supporting ECC.

The XSR Mission Computer is a high-performance processing platform designed on the use of Open Architecture COTS modules, allowing the user to have flexibility in the choice of embedded processor and I/O configuration. The host module provides a standard I/O configuration including Ethernet, serial comms, GPIO, USB, and graphics.

The XSR Recorder is capable of capturing the recording of critical mission data from a wide range of inputs such as video, Ethernet, serial SFDP, and other customer-specific input requirements. Removable Data Modules (XSR RDMs) enables instant access to recorded data in the ground access system without the need to download the recorded data over a slow drain interface.

Optional Hardware Full Disk Encryption (HWFDE) and Software Full Disk Encryption (SWFDE) can be added to any of the G1 systems to provide a dual layer protection based on the NSA's Commercial Solutions for Classified Program. These encryption capabilities are currently undergoing Common Criteria certification and certification is expected to be completed in Q2 2022. The dual layer approach provides critical data protection to the removable storage allowing for quick and easy deployment of these systems in the most sensitive of applications and environments.

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

XSR RUGGED COMPUTING SOLUTIONS



XSR NAS/SERVER



XSR MISSION COMPUTER



XSR RECORDER



KEY FEATURES

- Up to 13 1Gb Ethernet ports
- Up to 8 10Gb Ethernet ports
- Up to 4 25Gb Ethernet ports
- Up to 2 40Gb Ethernet ports
- Up to 1 100Gb Ethernet port
- SMB/CIFS, NFS, AFP, FTP, HTTP and rsync
- RAID 0, 1 and 5 support
- Optional hardware AES-256 encryption
- GPS unit for date and time synchronization
- Up to 80TB removable SSD

APPLICATIONS

- UAVs, UGVs
- Surveillance
- Flight management
- Map systems
- Cockpit information systems

BENEFITS

- SWaP optimized
- High performance
- Flexible and scalable
- Rugged conduction or air cooled designs

TECHNICAL SPECIFICATIONS



Network

- Up to 13 GbE ports (1000Base-T)
- Up to 8 10Gbit Ethernet ports (10GBase-T or 10GBase-SR optical)
- Up to 4 25Gbit Ethernet ports (25GBase-SR/LR optical, -CR copper)
- Up to 2 40Gb Ethernet ports (40GBase-SR4 optical)
- Up to 1 100Gb Ethernet port (100GBase-SR4 optical)

Storage

- Up to 40TB SLC removable SSD
- Up to 80TB MLC removable SSD
- RAID modes 0, 1 and 5
- Supported file systems: EXT4, UFS, FAT, NTFS
- Exported file systems: SMB/CIFS, NFS, AFP, FTP, HTTP and rsync
- JBOD, RAID 0, RAID 1, RAID5 support

Data Security

- HWFDE using XTS-AES 256bit (option)
- Certified FIPS 140-2 encryption inside (AES-256)
- SWFDE using XTS-AES 256bit (option)
- Write protected memory (option)

Monitoring

- SMART
- SNMP
- Syslog

Front Panel Interfaces

- Removable storage bay

Rear Panel Interfaces

- 1x Power
- 1x GPS antenna input

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)*

EMI/RFI

- Tested to MIL-STD-461

Humidity

- Up to 100%, condensing

Size, Weight & Power

- 6.2 x 7.9 x 4.1¹**
- 7.6 x 13.4 x 3.5²**
- Weight: 8.16 lb (configuration dependent)
- Power: from 5W idle (configuration dependent)

Power Supply

- 16-40V DC (nominal)

* Contact factory for high altitude options

** Conduction cooled, small form factor

*** Conduction cooled, half rack

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

- Offload Systems
- XSR RDM
- Titan 40Gb Ethernet XMC
- Titan 25Gb Ethernet XMC
- Titan 10Gb Ethernet XMC
- Titan Gigabit Ethernet XMC



SPECTRA AEROSPACE & DEFENSE

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