

XPort6192

End of Life

Small Form Factor (SFF) 128 GB Removable SATA Solid-State Drive (SSD) with 256-bit Encryption

Please see XPort6193

- ▶ Small form factor fits within a standard 3U 0.8 in. pitch slot
- ▶ -40°C to +85°C operating temperature range
- ▶ High-reliability 100,000 life cycle connector
- ▶ Hot Swap capabilities possible in some configurations
- ▶ Easy insertion and extraction mechanism
- ▶ AES 256-bit encryption (optional)
- ▶ Designed for rugged environments
- ▶ Up to 128 GB capacity
- ▶ 240 MB/s read and 215 MB/s write performance
- ▶ 36 connector key options
- ▶ Based on reliable SLC NAND flash technology
- ▶ 100,000 program/erase cycles
- ▶ Global wear-leveling support for added memory endurance
- ▶ ATA Secure Erase support
- ▶ Declassification support (optional)



XPort6192

The XPort6192 has been designed from the ground up to meet today's ruggedized secure storage requirements. By utilizing solid-state NAND flash technology, the XPort6192 provides a high-performance, high-density, reliable, removable memory solution with declassification capability. The XPort6192 is capable of operating within the demanding environments of MIL-STD-810F, including harsh temperatures from -40°C to +85°C, as well as rigorous shock and vibration conditions.

Optionally, the XPort6192 can provide 256-bit AES encryption, utilizing a NIST- and CSE-certified encryption chip. The encryption hardware is designed to encrypt/decrypt the entire card with minimal performance degradation. It supports key management via the SATA API or an optional I²C interface.

Designed with a high-reliability connector, the XPort6192 will support up to 100,000 insertions and extractions. The use of SLC NAND flash components allows the XPort6192 to support least 100,000 program erase cycles. The card also supports global wear-leveling to prolong the life of the memory. The XPort6192 provides best-in-class performance, supporting up to 240 MB/s reads and 215 MB/s writes.

X-ES

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...Always Fast

Extreme Engineering Solutions

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Physical Characteristics

- Small Form Factor (SFF)
- 133.6 mm (L) x 74.5 mm (W) x 14.3 mm (H)
- Connector keying (36 options)
- 3U cPCI or 3U VPX carriers available

Storage Characteristics

- Serial ATA (SATA) capable of 3 Gb/s
- SLC technology
- Up to 128 GB total
- 240 MB/s sustained read
- 215 MB/s sustained write

Endurance

- 100,000 insertions and extractions
- 100,000 program and erase cycles
- Global wear-leveling support for added program and erase endurance

Security

- 256-bit AES encryption (optional)
- CBC block cipher mode
- ATA Secure Erase support
- Declassification support (optional)

Key Management

- SATA API
- I²C interface (optional)

Environmental Requirements

Contact factory for appropriate board configuration based on environmental requirements.

- Supported ruggedization levels (see chart below): 1, 3, 5

Power Requirements

- Less than 4 W maximum power dissipation

Ruggedization Level	Level 1	Level 3	Level 5
Cooling Method	Standard Air-Cooled	Rugged Air-Cooled	Conduction-Cooled
Operating Temperature	0 to +55°C ambient (300 LFM)	-40 to +70°C (600 LFM)	-40 to +85°C (board rail surface)
Storage Temperature	-40 to +85°C ambient	-55 to +105°C ambient	-55 to +105°C ambient
Vibration	0.002 g ² /Hz, 5 to 2000 Hz	0.04 g ² /Hz (maximum), 5 to 2000 Hz	0.1 g ² /Hz (maximum), 5 to 2000 Hz
Shock	20 g, 11 ms sawtooth	30 g, 11 ms sawtooth	40 g, 11 ms sawtooth
Humidity	0% to 95% non-condensing	0% to 95% non-condensing	0% to 95% non-condensing

