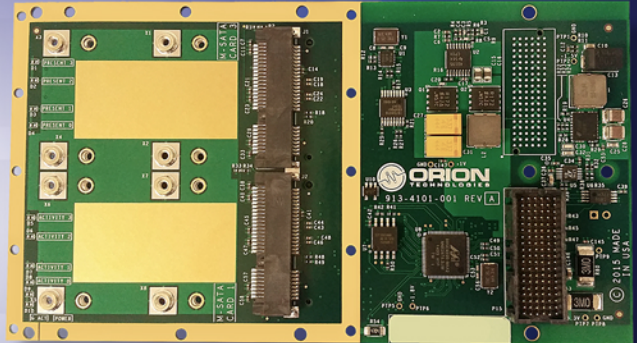


# XMC4101

## XMC Flash Storage Module Quad mSATA SSD Carrier



### Power and Flexibility

The Orion XMC4102 Flash Storage Module is a flexible, rugged, high-performance mSATA carrier card that is capable of storing Terabytes of data using up to four 6Gb/s mSATA sites.

The XMC interface implements the VITA 42.3 standard to provide two 5 Gbps PCI Express 2.0 lanes. This allows simultaneous streaming of up to 1GB/s read and 1GB/s write data.

The SATA controller presents a standard AHCI 1.0 interface that is supported natively by most operating systems. Generations 1, 2, and 3 of the SATA wire protocol are supported to allow communication with mSATA payloads at 1.5, 3, or 6 Gbps.

### Features

- VITA 42.3 single-width XMC
- PCI Express 2.0 x2 interface on P15 supports 2.5 Gbps and 5 Gbps
- Available with PCIe Refclk onboard or host-driven
- Supports PCIe Advanced Error Reporting
- Supports PCIe Virtual Channel (VC-0)
- Up to Four 6Gb/s mSATA sites
- SATA 3.0 compliant
- 6Gb/s SATA PHY with speed negotiation to backward support 3Gb/s and 1.5Gb/s
- Up to 1GB/s of data throughput
- Native Command Queuing
- 32 outstanding commands per port for high performance
- Standard AHCI interface supported by most Operating Systems
- Native Linux Support
- Native Windows Support
- Extended Temp: -40°C to +85°C



# Options Guide



Base Model Number

PCIe Clock Options

- 1 = On-board Oscillator
- 2 = Clock from XMC Connector

LED Locations

- 1 = LEDs on back of board
- 2 = LEDs on connector side of the board

Memory Options

- 1 = 64GB SATA MLC (1 card)
- 2 = 512GB SATA MLC (4 cards)
- 3 = 2TB SATA MLC (4 cards)
- \*Contact us about other options and types

Environmental Options

- 1 = Commercial Temperature Air Cooled
- 2 = Extended Temperature Air Cooled

## Block Diagram

