9302 XMC-PCleStor

High Speed / Capacity PCle Gen 2 SSD Adapter





Description

The Model 9302 is a VITA 42.3 XMC adapter card with three M.2 SSD sites. Each M.2 site supports one lane of PCle Gen 2 connectivity at 5 Gb/s per lane when a Gen 2 or 3 capable M.2 PCle card is used. An onboard Gen2 PCl Express (PCle) switch connects one 4-lane upstream PCle port to three 1-lane downstream ports.

The product is supplied as a complete, tested and integrated assembly including pre-installed M.2 drive. The 9302 supports all currently available drive capacities.

The M.2 site supports standard and widely used 80mm x 22mm M.2 drives. Inquire about an optional hardware kit for mounting 30, 42 and 60 mm length drives.

M.2 drives can dissipate considerable power and the 9302 provides ventilation holes enabling forced-air cooling to be drawn through the assembly. Forced air cooling is highly recommended for this product.

Note: M.2 SATA drives are not supported.

No software drivers are required for Linux or Windows when AHCI M.2 drives are used. If a NVMe drive is selected then an Intel NVMe driver may be required for Windows systems. Product has not been tested in a VxWorks environment.

Features

- PCle Gen 2 x4 host connectivity for blazingly fast data rates
- Three M keyed M.2 PCI-e sites
- On board PCle switch
- One Gen 2 x4 upstream lane
- Three Gen 2 x1 lanes, one per site
- Unique ventilation feature for optimum cooling
- Industrial temperature range(Consult Factory)
- RoHS 6/6 Compliant

Benefits

- Mezzanine modularity enables economical storage capacity upgrades
- High speed performance mitigates system data rate bottle necks
- Elma's assembly level configuration control ensures seamless support
- Let Elma's system experts perform your 9302 / host card OS integration

Applications and Related Products

- High capacity storage requirements for a wide range of defense applications including ground, shipboard and airborne systems
 - Signal intelligence data storage
 - o Engine control systems data
 - Mission data storage
- Rugged industrial and defense storage supporting systems requiring resistance to high temperature and high shock and vibration. Equipment and process monitoring data storage

Example Order Number: 9302512G3SSMYS

Model 9302 with three 512GB MLC SSDs and conformal coating. Standard temperature operation.



AppliPak

Combine your 9302 or any of Elma's line of mezzanine storage products with your choice of our partner VPX, VME, cPCI and cPCI Serial single board computers, operating systems and device drivers for a fully integrated and tested assembly sold and supported by Elma under one model number with a single point of contact.



9302 XMC-PCleStor





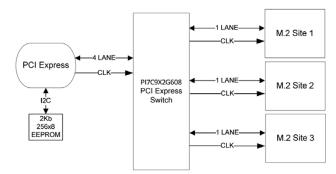
Storage

PICMG

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Specification Specification			
Temperature	Operating	0 to 55°C with media	
	Non-operating	-55 to +105°C (board only - not media)	
Relative Humidity	Operating	5% to 95% non-condensing	
Vibration (Sine)	Operating	5G (10 to 2000 Hz)	
Shock	Operating	20G (11 ms)	
Altitude	Operating	Typical similar equipment is at 15,000 ft.	

High Speed / Capacity PCIe Gen 2 SSD Adapter



General

The 9302 XMC-PCleStor conforms to the VITA 42.3 standard for serial attached mezzanine cards. It is intended for use on host cards which support an XMC host site.

Input / Output

Four lane PCI Express Gen2 (5 Gb/s) to 3 one lane PCI Express Gen 2 M.2 drive sites.

Physical

Weight: 1.86 oz (52.6g), 2.58 oz (73.3g) including three SSD Dimensions: H .39" (10mm), W 5.2" (74mm), L 2.9" (132.2mm with front panel)

Power Requirements

Power (No SSD) +3.3V +5%, -2% @ 0.4A Power (SSD dependent) +3.3V +5%, -2% @ 2.37A

Order Information

9302 XMC-PCleStor

5, 6, 7, 8) 2.5" Drive capacity, all drives same capacity

• xxxG • xxxT

Example

064G = 64GB drive 512G = 512GB drive 012T = 1.2TB drive 9) Number of drives installed*

• Enter 1,2 or 3

10, 11, 12) 2.5" Drive Type

- SSS = commercial solid state SLC
- SSM = commercial solid state MLC
 STS = extended temp solid state SLC
- STM = extended temp solid state MLC

• Y/N

14) Temperature Requirements

13) Conformal Coating

- S = 0° C to $+55^{\circ}$ C
- E = -40°C to +85°C (Consult Factory)
- O = Other

The model description on all quotes must include any other specific drive attributes necessary to fulfilling the application requirement.

*All drives identical. Consult Elma for the complete range of available drive capacities.

Description	Model Numbers
Optional hardware kit for mounting a single 30, 42, or 60 mm M.2 card	9302-MT-HW

Please contact our sales team for more details.

China: +86 21 5866 5908 Germany: +49 7231 97 34 0 Singapore: +65 6479 8552 United Kingdom: +44 1234 838 822 France: +33 437 06 21 10 Israel: +972 3 930 50 25 Switzerland: +41 44 933 41 11 United States: +1 510 656 3400

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