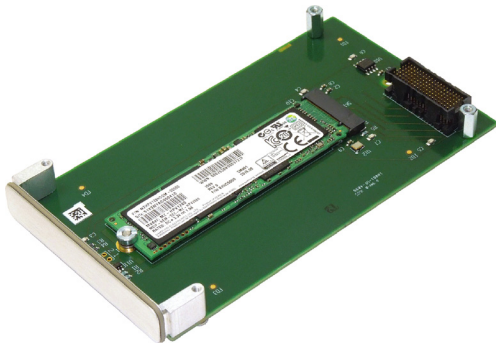


# 9301 XMC-PCIeStor

## High Speed PCIe Gen 2 SSD Adapter



### Description

The Model 9301 is a VITA 42.3 XMC adapter card with a single M.2 SSD site. The M.2 site supports up to 4 lanes of PCIe Gen 2 connectivity at 5 Gb/s per lane when a Gen 2 or 3 capable M.2 PCIe card is used. The 9301 also accepts x1, x2, or x4 M.2 cards at PCIe Gen 1, Gen 2 or Gen 3 speeds. However, only Gen 2 speeds can be reached. The product is supplied as a complete, tested and integrated assembly including a pre-installed M.2 drive. The 9301 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 9301 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

- PCIe Gen 2 x4 host connectivity for blazingly fast data rates
- Single M keyed M.2 PCI-e 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 9301 / 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
  - 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: 9301512GSSMYS

Model 9301 with a 512GB MLC SSD and conformal coating.  
Standard temperature operation.

**AppliPak**

Combine your 9301 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.

**XMC**

# 9301 XMC-PCIeStor

## High Speed PCIe Gen 2 SSD Adapter

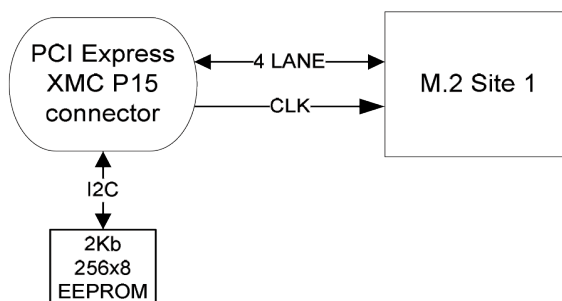


Storage

PICMG

### Block Diagram and Environmentals

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.



#### General

The 9301 XMC-PCIeStor 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: Gen1 (2.5 Gb/s), Gen2 (5 Gb/s)

#### Physical

Weight: 1.58oz (44.8 grams), 1.83oz (51.7 grams) including 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% @ .01A  
 Power (SSD dependent) +3.3V +5%, -2% @ 1.97A

### Order Information

#### 9301 XMC-PCIeStor

9301 5 6 7 8 9 10 11 12 13 - 14 15 16 (15-16 Project Spec.)

#### 5, 6, 7, 8) 2.5" Drive capacity\*

- xxxG
- xxxT

Example  
 064G = 64GB drive  
 512G = 512GB drive  
 012T = 1.2TB drive

#### 9, 10, 11) 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

#### 12) Conformal Coating

- Y/N

#### 13) Temperature Requirements

- S = 0°C to +55°C
- E = -40°C to +85°C (Consult Factory)
- O = Other

Linux and Windows software drivers are not required when using AHCI M.2 drives. NVMe drives may require an Intel NVMe driver for Windows. Product has not been tested with VxWorks.

\*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	9301-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
For other countries, please visit our website.			
<b>Elma Electronic Inc. • www.elma.com</b>			