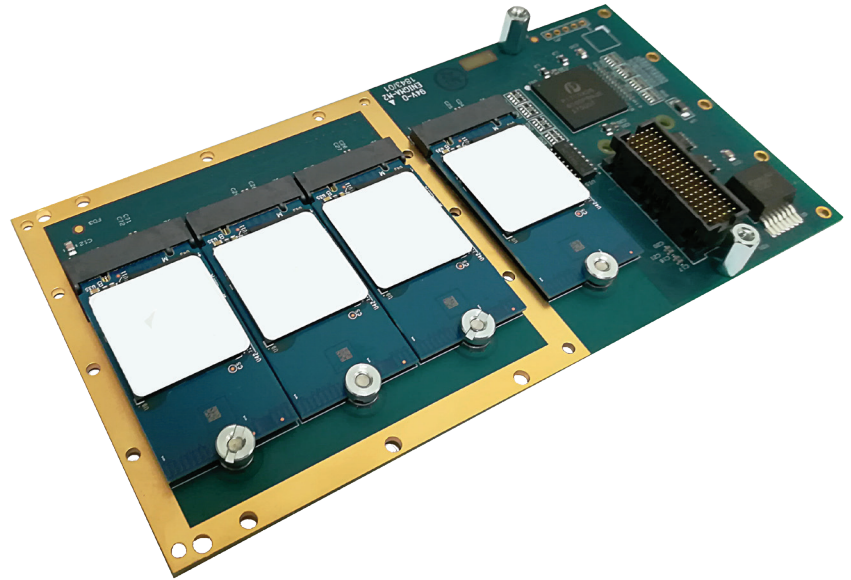


AIR / CONDUCTION COOLED PCIe SSD ADAPTER

9303 / 9304 ccXMC-PCIeStor

DESCRIPTION

The Model 9303/04 is a VITA 42 air or conduction cooled extended temperature XMC adapter card with four M.2 SSD sites for high speed, multi-terabyte storage. Each M.2 site supports one lane of PCIe Gen 2 connectivity at 5 Gb/s per lane when a Gen 2 or 3 capable M.2 PCIe host card is used. An onboard Gen2 PCI Express (PCIe) switch connects one 4-lane upstream PCIe port to four 1-lane downstream ports. Each site supports a 1-lane PCIe Gen 2 connection which works with 1-lane, 2-lane or 4-lane M.2 cards.



The product is supplied as a complete, tested and integrated assembly including pre-installed M.2 drives. The 9303/04 supports all currently available drive capacities and the M.2 sites support standard and widely used 30mm or 42mm long by x 22mm wide M.2 drives.

Because M.2 cards can dissipate considerable power, the 9303/04 couples the M.2 to surface power planes, which then thermally couple to the VITA 20 conduction-cooling features. An XMC front panel is installed on the air cooled version (9303). The front panel kit may also be purchased separately.

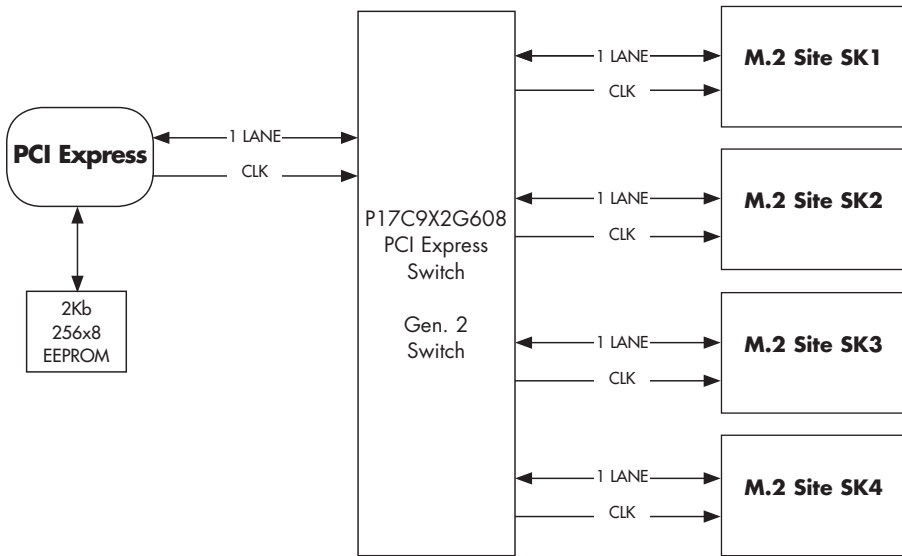
FEATURES

- › Conduction-Cooled -45°C to +85°C operating temperature
- › Multi-terabyte storage capacity across four M.2 PCIe sites
- › Accommodates 30 & 42mm M.2 cards (42mm pre-installed hardware)
- › Optional hardware kit for mounting shorter M.2 drives
- › Optional adapter kit for air-cooling available
- › Onboard PCIe Gen 2 switch
- › 1 Gen 2 x 4 upstream lane
- › 1 Gen 2 x 1 downstream lane per site

BENEFITS

- Mezzanine modularity enables economical storage capacity upgrades
- High speed performance mitigates system data rate bottle necks
- High capacity storage with zero slot usage
- Elma's assembly level configuration control ensures seamless support
- Let Elma's system experts perform your 9303/04 and host card OS integration

DIAGRAM



SPECIFICATIONS

Temperature	Operating Non-Operating	-45C to 85°C media dependent -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 9303/04 ccXMC-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 Gen2 (5 Gb/s) to 4 one lane PCI Express Gen 2 M.2 drive sites.	
Physical	Weight: 2.01 oz (59g), approx. 2.8 oz (80g) including four SSD Dimensions: H .39" (10mm), W 5.2" (74mm), L 2.9" (132.2mm with front panel)	
Power Requirements	Power (No SSD) Power (4 x SSD at idle*) Power (4 x SSD at use*) *SSD dependent	+3.3V +5%, -2% @ 0.4A +3.3V +5%, -2% @ 1.3A +3.3V +5%, -2% @ 1.9A

AIR / CONDUCTION COOLED PCIe SSD ADAPTER

9303 / 9304 ccXMC-PCIeStor

APPLICATIONS

- › 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

RELATED PRODUCTS

APPLIPAK



Single board computer



9304 ccXMC-PCIeStor



Integrated operating system driver support and optional ruggedization

Combine your 9303/04 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.

EXAMPLE ORDER NUMBER		PART NUMBER
Model 9303	Model 9303 with four 512GB MLC SSDs and conformal coating.	9303512G4SSMYS

ORDERING INFORMATION

9303-04 ccXMC-PCIeStor	930	4	5	6	7	8	9	10	11	12	13	14	15	16	17
		-	-	-	-	-	-	-	-	-	-	-	-	-	-

(15-17 Project Spec.)

4

Air or conduction cooled*

3 = air cooled
4 = conduction cooled

5, 6, 7, 8

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, 3 or 4

14

Temperature Requirements

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

13

Conformal Coating

Y/N

10, 11, 12

Drive Type

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

*Air cooled requires the addition of front panel model 9303-FRPNL
**Consult Elma for the complete range of available drive capacities.
The model description on all quotes must include any other specific drive attributes necessary to fulfilling the application requirement

ACCESSORIES

Description	Model Number
Optional hardware kit for mounting a single 30, 42, or 60 mm M.2 card	9303-MOUNT-HW
Front panel kit for use in air cooled applications. Included and mounted when the 9303 air cooled version is ordered.	9303-FRPNL

© Copyright 2019 by Elma Electronic, Inc. Subject to technical modifications, all data supplied without liability.

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: +33 388 56 72 50	Israel: +972 3 930 50 25	Switzerland: +41 44 933 41 11	United States: +1 510 656 3400