

XMC645

XMC Storage with Octal NVMe Solid State Drives



XMC645

Key Features

- XMC Storage
- PCIe x8 Gen4 to host
- Eight one TB of NVMe SSD devices
- PCIe x4 Gen3 to each NVMe SSD
- 8 TB Storage

Benefits

- Multi-Terabit storage capacity in a single module
AMC/VPX/XMC form factor carrier
- Electrical, mechanical, software, and system-level
expertise in house
- Full system supply from industry leader
- AS9100 and ISO9001 certified company



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XMC645

The XMC645 is a storage (HBA) which supports up to eight NVMe devices. The NVMe storage provides high speed and low latency read/write to the SSD devices. The module come with 8 TB of storage. The module could be configured in different RAID type configuration depending on the OS.

The XMC645 has PCIe x8 Gen4 to the host and PCIe x4 Gen3 to each of the NVMe SSD module.

The module comes in conduction cool or convection cool.



Figure 1: XMC645

Block Diagram

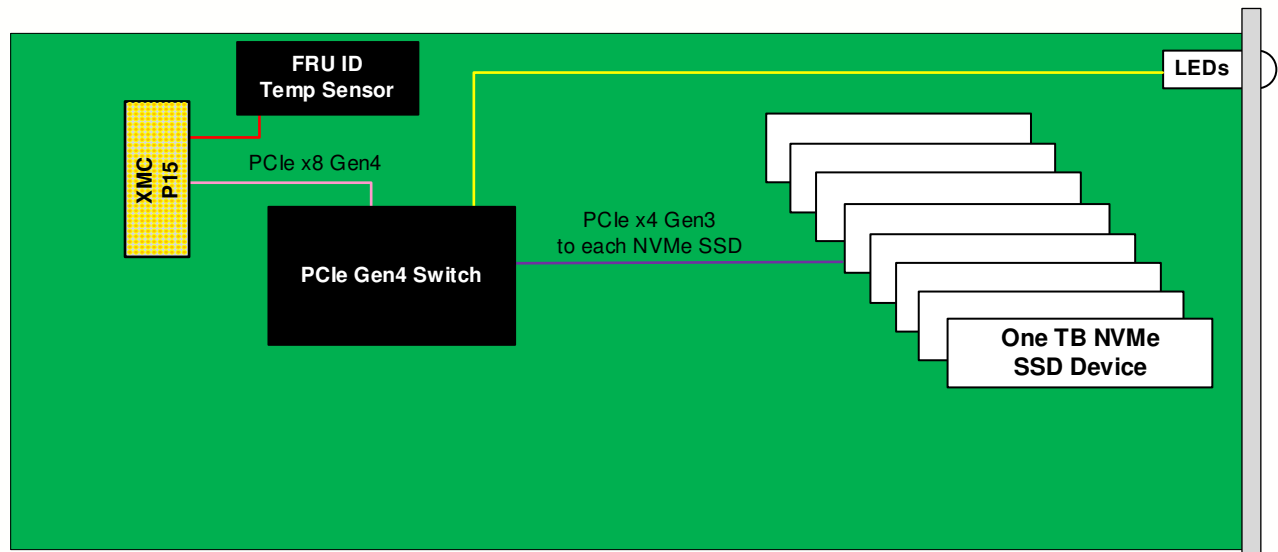


Figure 2: XMC645 Functional Block Diagram

Specifications

Architecture		
Physical	Dimensions	Single Width, per VITA 42.0 Specification
Type	XMC Storage	8 TB of NVMe SSD
Standards		
XMC	Type	Storage
Module Management	Sensors	FRU info and Temp Sensor
PCIe	Lanes	PCIe x8 Gen4 to host
Storage	SSD	PCIe x4 Gen3 to each NVMe SSD
Configuration		
Power	XMC645	~32W depending on the utilization
Environmental	Temperature	See Ordering Options and Environmental Spec Sheet
Front Panel	Interface Connectors	Micro USB connector for MGT RS-232
	LEDs	Activity
Software Support	Operating System	Linux, Windows, and VxWorks
Other		
MTBF	MIL Hand book 217-F@ TBD hrs	
Certifications	Designed to meet FCC, CE and UL certifications, where applicable	
Standards	VadaTech is certified to both the ISO9001:2015 and AS9100D standards	
Warranty	Two (2) years, see VadaTech Terms and Conditions	

INTEGRATION SERVICES AND APPLICATION-READY PLATFORMS

VadaTech has a full ecosystem of OpenVPX, ATCA and MTCA products including chassis platforms, shelf managers, AMC modules, Switch and Payload Boards, Rear Transition Modules (RTMs), Power Modules, and more. The company also offers integration services as well as pre-configured Application-Ready Platforms. Please contact VadaTech Sales for more information.

Ordering Options

XMC645 – AB0-000-0HJ

A = Storage		
0 = 8 TB Total 1 = Reserved 2 = Reserved 3 = Reserved		
B = XMC Connectors		H = Environmental
0 = VITA 42 1 = VITA 61		See Environmental Specification
		J = Conformal Coating
		0 = No coating 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic

Environmental Specification

Option H	Air Cooled		Conduction Cooled		
	H = 0	H = 1	H = 2	H = 3	H = 4
Operating Temperature	AC1* (0°C to +55°C)	AC3* (-40°C to +70°C)	CC1* (0°C to +55°C)	CC3* (-40°C to +70°C)	CC4* (-40°C to +85°C)
Storage Temperature	C1* (-40°C to +85°C)	C3* (-50°C to +100°C)	C1* (-40°C to +85°C)	C3* (-50°C to +100°C)	C3* (-50°C to +100°C)
Operating Vibration	V2* (0.04 g2/Hz max)	V2* (0.04 g2/Hz max)	V3* (0.1 g2/Hz max)	V3* (0.1 g2/Hz max)	V3 (0.1 g2/Hz max)
Storage Vibration	OS1* (20g)	OS1* (20g)	OS2* (40g)	OS2* (40g)	OS2* (40g)
Humidity	95% non-condensing	95% non-condensing	95% non-condensing	95% non-condensing	95% non-condensing

Notes:

*Nomenclature per ANSI/VITA 47. Contact local sales office for conduction cooled (H = 2, 3, 4).

Related Products

VPX516



3U FPGA carrier for FPGA Mezzanine Card (FMC) per VITA 46 and VITA 57
Xilinx Virtex-7 690T FPGA in FFG-1761 package
High-performance clock jitter cleaner

VPX592



3U FPGA carrier for FMC per VITA 46 and VITA 57
Xilinx Kintex UltraScale™ XCKU115 FPGA
High-performance clock jitter cleaner

VPX599



Xilinx Kintex UltraScale™ XCKU115 FPGA
Dual ADC 12-bit @ 6.4 GSPS
Dual DAC 16-bit @ 12 GSPS (AD9162 or AD9164)

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