XMC249

XMC QUAD 10GBASE-T Front or Rear I/O

XMC249

Key Features

- Quad 10GbE with PCIe x8 Gen3
- Module supports independently on each port:
    - 10BASE-Te
    - 100BASE-TX
    - 1GBASE-T
    - 2.5BASE-T
    - 5GBASE-T
    - 10GBASE-T
- I/O configuration ordering option as:
    - Front I/O
    - Rear I/O

Benefits

- Design utilizes proven VadaTech subcomponents and engineering techniques
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader
- AS9100 and ISO9001 certified company

vadatech
THE POWER OF VISION

XMC249

The XMC249 has Quad 10GbE interface to the host via PCIe x8 Gen3. Ordering option supports flexible I/O routing to the front and/or to the rear of the XMC I/O connector.

The module can support independently on each port different speed:

- 10BASE-Te
- 100Base-TX
- 1GBASE-T
- 2.5GBASE-T
- 5GBASE-T
- 10GBASE-T

The module is available in both air cooled and conduction cooled versions.

Figure A: XMC249 A=0

Figure B: XMC249 A=0 Front Panel View

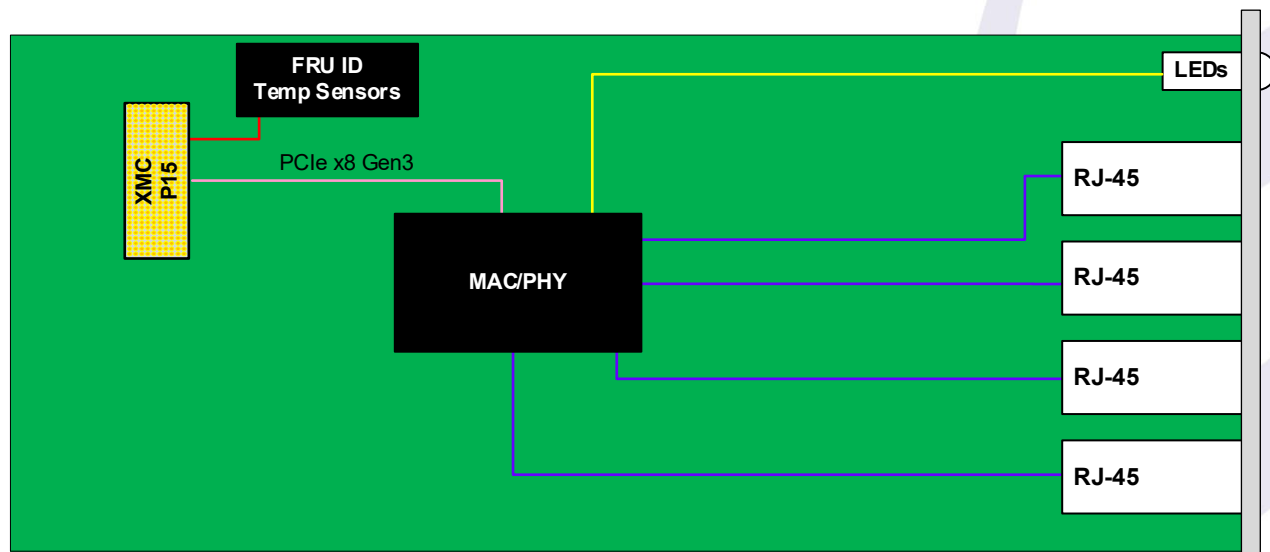Figure C: XMC249 A= 1

Figure D: XMC249 A = 2 Front Panel View

XMC – Quad 10GBase-T

Block Diagram

Figure 1: Functional block diagram (front I/O)
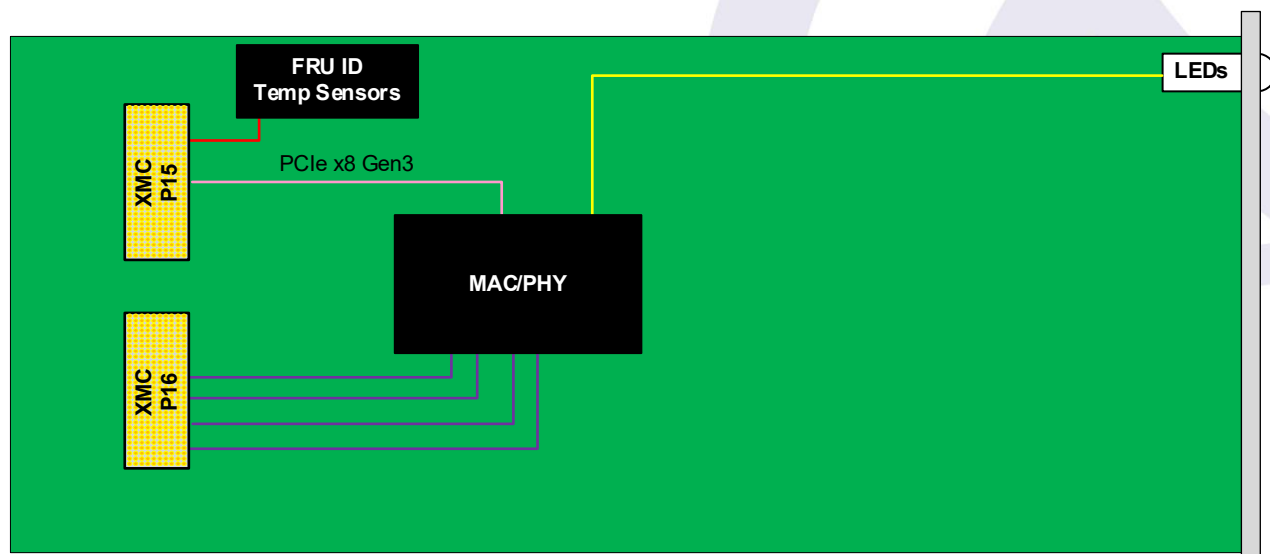
Figure 2: Functional block diagram (rear I/O)

Specifications

Architecture		
Physical	**Dimensions**	Single-Width, per VITA 42.0 specification
Type	**XMC**	Ethernet BASE-T
Standards		
XMC	**Type**	10GbE
Module Management	**Sensors**	FRU info and Temp sensors
Configuration		
Power	**XMC249**	13W Quad 10GBASE-T, 8W Quad 5GBase-T and 5W with 1GBase-T
Environmental	**Temperature**	See Ordering Options and Environmental Spec Sheet
Front Panel	**Interface Connectors**	Ordering option dependent
	LEDs	LNK/ACT
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

XMC249 – AB0-000-0HJ

A = Quad Port I/O		H = Environmental
0 = Front 1 = Rear		
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 3 = Parylene

*Note: These options are no longer supported by the XMC249, please consider XMC249

Environmental Specification

	Air Cooled		Conduction Cooled		
Option H	**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

VPX762

- 6U VPX module Xeon-D SoC (Skylake-D) 6th-Generation
- Single XMC site with I/O expansion going to P5/P6 per VITA46.9 Pin Field P5W1-P64s+X12d+X8d
- PCIe Gen3 x16 (bifurcation to dual x8 or quad x4)

VPX752

- 6U VPX module Intel 5th Generation Xeon-D SoC
- Single XMC site with I/O expansion going to P5/P6
- PCIe Gen3 x16 (dual x8 or quad x4)

VPX105

- 6U VPX module VITA 46.0 for dual PMC/XMC modules
- PCIe x8 to each XMC
- The XMC connector option with VITA 42.0 or VITA 61.0

Contact

VadaTech Corporate Office

198 N. Gibson Road, Henderson, NV 89014

Phone: +1 702 896-3337 | Fax: +1 702 896-0332

Asia Pacific Sales Office

7 Floor, No. 2, Wenhu Street, Neihu District, Taipei 114, Taiwan

Phone: +886-2-2627-7655 | Fax: +886-2-2627-7792

VadaTech European Sales Office

VadaTech House, Bulls Copse Road, Southampton, SO40 9LR

Phone: +44 2380 016403

info@vadatech.com | www.vadatech.com

Choose VadaTech

We are technology leaders

- First-to-market silicon
- Constant innovation
- Open systems expertise

We commit to our customers

- Partnerships power innovation
- Collaborative approach
- Mutual success

We deliver complexity

- Complete signal chain
- System management
- Configurable solutions

We manufacture in-house

- Agile production
- Accelerated deployment
- AS9100 accredited

vadatech
THE POWER OF VISION