Quad SFP/SFP+, GbE/10GbE

KEY FEATURES

- FPGA Mezzanine Card (FMC) per VITA-57
- Single module
- Quad SPF/SPF+ cages for quad ports
- Re-driver on all four ports for a better signal quality
- RoHS compliant

Benefits of Choosing VadaTech

- Design utilizes proven VadaTech subcomponents and engineering techniques
- Electrical, mechanical, software, and system-level expertise in house
- Full ecosystem of front and rear boards, enclosures, specialty modules, and test/dev products from one source
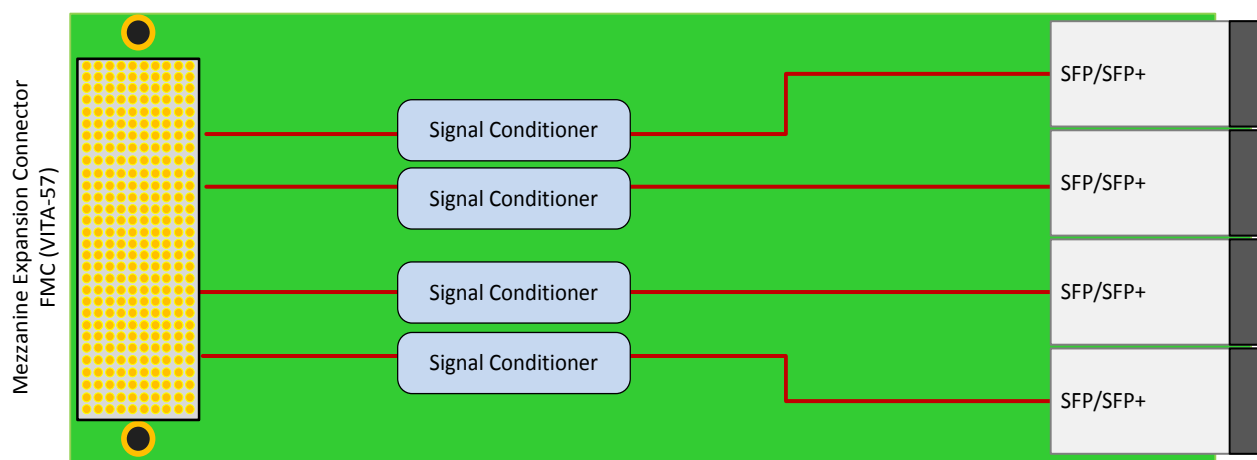- AS9100 and ISO9001 certified company

The FMC109 is an FPGA Mezzanine Module per VITA 57 specification. The FMC109 has quad SFP/SFP+ cages which allows for Quad GbE/10GbE to be routed to appropriate FMC pins. The FMC109 has quad re-driver on board to allow long copper cables for the SFP+ vs. fiber to reduce total system cost.

Note: The Carrier must have no component on the top side for 46 mm for this module to fit property. All VadaTech FMC Carriers provide this clearance. Further this module requires the Carrier board front panel to be modified. When ordering any of the VadaTech FMC Carriers, VadaTech will provide the modified front panel at no extra cost. The FMC109 is shipped without any FMC panel.

INTEGRATION SERVICES AND APPLICATION-READY PLATFORMS

VadaTech has a full ecosystem of ATCA and µTCA products including chassis platforms, shelf managers, AMC modules, Switch and Payload Boards, Rear Transition Modules (RTM), 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.

BLOCK DIAGRAM

FMC QUAD SFP/SFP+ for GbE/10GbE – FMC109

SPECIFICATIONS

Architecture		
Physical	Dimensions	Single module
		Width: 2.71″ (69 mm)
		Depth: 3.011″ (76.5 mm)
Type	FMC	Four port GbE, 10 GbE
		Single FMC slot

Standards		
FMC	VITA57	ANSI/VITA 57.1-2008

Configuration		
Power	FMC109	GbE/10 GbE module dependant
Environmental	Temperature	Operating temperature: –5° to 55° C (air flow requirement of >400 LFM, industrial versions also available (See environmental spec sheet)
		Storage temperature: –40° to +85° C
	Vibration	Operating 9.8 m/s^2 (1G), 5 to 500 Hz
	Shock	30Gs on each axis
	Relative Humidity	5 to 95 percent, non-condensing
Front Panel	Interface Connectors	Quad SFP/SFP+ connectors
	LEDs	None

Other	
MTBF	MIL Handbook 217-F@TBD Hrs
Certifications	Designed to meet FCC, CE and UL certifications where applicable
Compliance	PICMG 3.0 Rev 3.0, RoHS 2 and NEBS Level 3.
Standards	VadaTech is certified to both the ISO9001:2000 and AS9100B:2004 standards
Warranty	Two (2) years
Trademarks and Disclaimer	The VadaTech logo is a registered trademark of VadaTech, Inc. Other registered trademarks are the property of their respective owners. AdvancedTCA™ and the AdvancedMC™ logo are trademarks of the PCI Industrial Computers Manufacturers Group. All rights reserved. Specification subject to change without notice

ORDERING OPTIONS

FMC109 – ABC – D00 – 0HJ

A = SFP/SFP+ Transceiver First Port
0 = None
1 = 10GBASE-SR
2 = Reserved
3 = 10GBASE-LRM
4 = 10GBASE-LR
5 = Copper 1000Base-TX
6 = Fiber 1GbE SX
7 = Fiber 1GbE LX

B = SFP/SFP+ Transceiver Second Port
0 = None
1 = 10GBASE-SR
2 = Reserved
3 = 10GBASE-LRM
4 = 10GBASE-LR
5 = Copper 1000Base-TX
6 = Fiber 1GbE SX
7 = Fiber 1GbE LX

C = SFP/SFP+ Transceiver Third Port
0 = None
1 = 10GBASE-SR
2 = Reserved
3 = 10GBASE-LRM
4 = 10GBASE-LR
5 = Copper 1000Base-TX
6 = Fiber 1GbE SX
7 = Fiber 1GbE LX

D = SFP/SFP+ Transceiver Fourth Port
0 = None
1 = 10GBASE-SR
2 = Reserved
3 = 10GBASE-LRM
4 = 10GBASE-LR
5 = Copper 1000Base-TX
6 = Fiber 1GbE SX
7 = Fiber 1GbE LX

H = Operating Temperature
0 = Commercial (-5° to +55° C)
1 = Industrial (–20° to +70° C)

J = Conformal Coating
0 = None
1 = Humiseal 1A33 Polyurethane
2 = Humiseal 1B31 Acrylic

RELATED PRODUCTS

**EXP200 Express
Chassis Platform**

**AMC517 Kintex-7
FPGA Carrier for FMC**

**AMC532 Stratix-V
FPGA Carrier for FMC**

CONTACT US

VadaTech Corporate Office

198 N. Gibson Rd.
Henderson, NV 89014
Email: info@vadatech.com
Telephone: +1 702 896-3337
Fax: +1 702 896-0332

Asia Pacific Sales Office

7 Floor, No. 2, Wenhu Street, Neihu District,
Taipei 114,Taiwan
Email: info@vadatech.com
Telephone: +886-2-2627-7655
Fax: +886-2-2627-7792

VadaTech European Sales Office

Ocean Village Innovation Centre, Ocean Way,
Ocean Village, Southampton, SO14 3JZ
Email: info@vadatech.com
Telephone: +44 2380 381982
Fax: +44 2380 381983