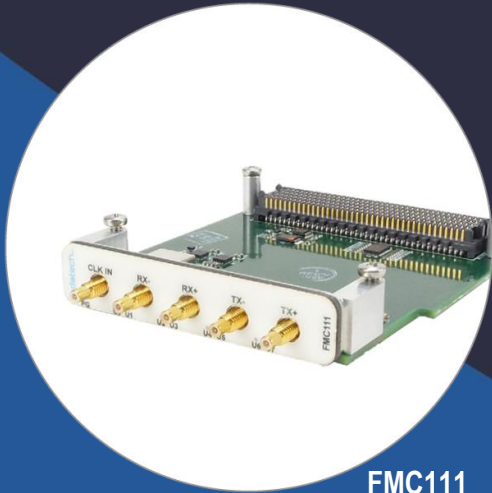


FMC111

Single SERDES Input/Output with Clock Input



FMC111

Key Features

- DP0 single SERDES RX+/- and TX+/- routed to the front
- Direct Clock input to GBTCLK0 and GBTCLK1
- SSMC connector for RX/TX pair and the clock input

Benefits

- For Testing and direct coupled SERDES
- 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



FMC111

The FMC111 is an FPGA Mezzanine Card (FMC) per VITA 57.1 standard. The unit has a small footprint that enables the DP0 pairs to be accessed directly via SSMC connectors. A sinewave clock input can be used as a differential to the GBTCLK0+/- and GBTCLK1+/-.

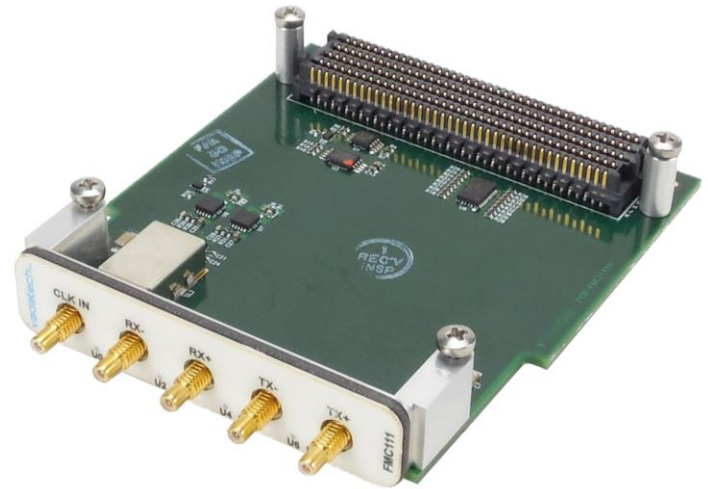


Figure 1: FMC111

Block Diagram

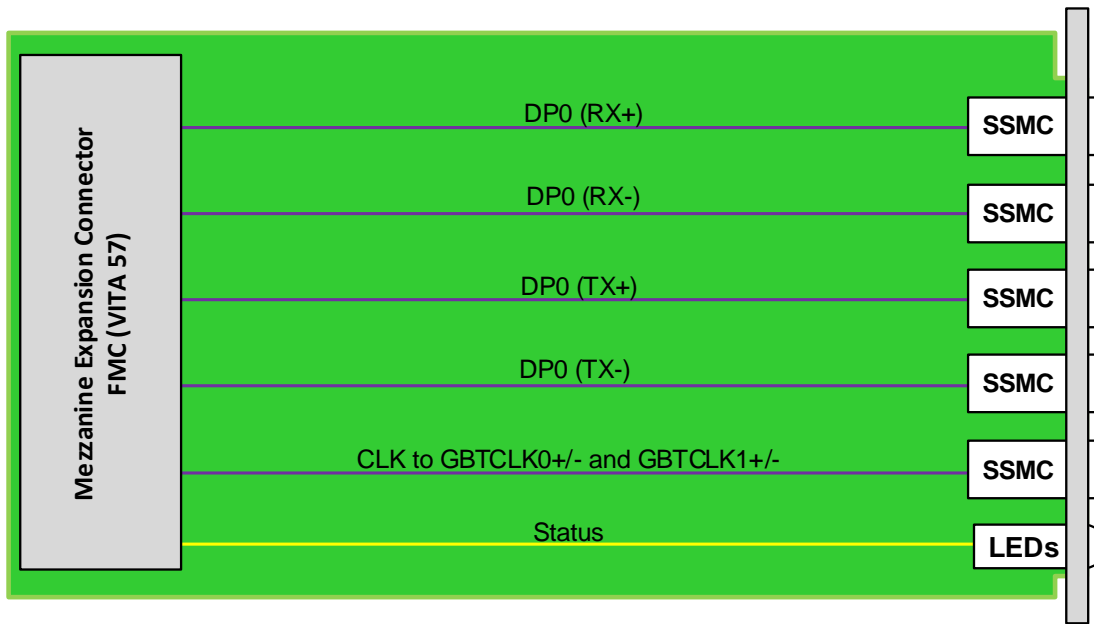


Figure 2: FMC111 Functional Block Diagram

Specifications

Architecture	
Physical	Dimensions Single Module Width: 2.71" (69 mm) Depth: 3.01" (76.5 mm)
Type	FMC Direct Input/Output to DP0+/- with clock
Standards	
FMC	Type ANSI/VITA 57.1 - 2008
Configuration	
Power	FMC111 0.2W
Environmental	Temperature See Ordering Options Storage Temperature: -40° to +85°C Altitude 40,000 ft non-operating Vibration Operating 9.8 m/s ² (1G), 5-500 Hz Shock Operating 30Gs each axis Relative Humidity 5 to 95% non-condensing
Front Panel	Interface Connectors SSMC LEDs Status
Software Support	Operating System Agnostic
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

FMC111 – 000-000-G0J

		G = FMC Board Spacing 0 = 10 mm (per VITA 57 specification) 1 = 17.5 mm*
		J = Temperature Range and Coating 0 = Commercial (–5° to +55°C), No coating 1 = Commercial (–5° to +55°C), Humiseal 1A33 Polyurethane 2 = Commercial (–5° to +55°C), Humiseal 1B31 Acrylic 3 = Industrial (–20° to +70°C), No coating 4 = Industrial (–20° to +70°C), Humiseal 1A33 Polyurethane 5 = Industrial (–20° to +70°C), Humiseal 1B31 Acrylic 6 = Extended (–40° to +85°C), Humiseal 1A33 Polyurethane** 7 = Extended (–40° to +85°C), Humiseal 1B31 Acrylic**

Notes: *For use with carriers that require higher mating clearance, such as VadaTech AMC595.

** Conduction cooled; temperature is at edge of module. Consult factory for availability.

Related Products

VT951



- MicroTCA rugged 1U 19" rackmount chassis platform
- Designed to meet MIL-STD-810F, MIL-STD-901D for shock/vibration
- Designed to meet MIL-STD-461E for EMI

FMC214



- Dual complete transceiver signal chain solution using Analog Devices AD9361 transceiver
- Frequency range 70 MHz to 6 GHz with instantaneous bandwidth from 200 kHz to 56 MHz
- MIMO transceiver is Time Domain Duplex (TDD) and Frequency Domain Duplex (FDD) compatible

AMC599



- Xilinx UltraScale™ XCKU115 FPGA
- Dual ADC 12-bit @ 6.4 GSPS or quad ADC at 3.2 GSPS
- Dual DAC 16-bit @ 12 GSPS (AD9162 or AD9164)

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, Wenhua 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

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.

© 2019 VadaTech Incorporated. All rights reserved.
DOC NO. 4FM737-12 REV 01 | VERSION 1.0 – NOV/19