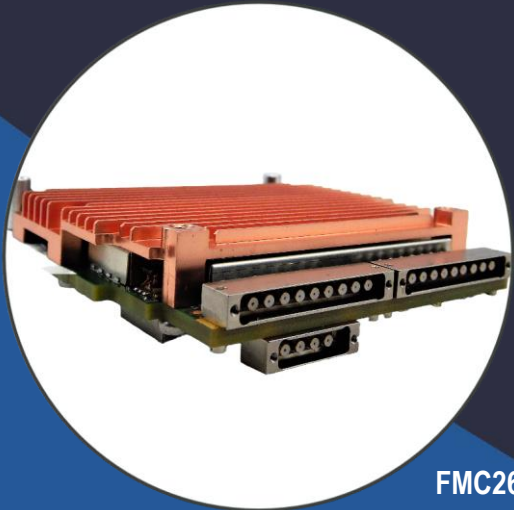# FMC260

Octal RF Transceiver AD9371

FMC260

Key Features

- FPGA Mezzanine Card (FMC+) per VITA 57.4
- Octal wideband Transceiver, 300 MHz to 6 GHz, using four AD9371
- Transmit synthesis bandwidth to 250 MHz
- Two Observation Receiver, one Sniffer Receiver
- Clock from onboard Wideband PLL or direct RF clock
    - LMK04821 PLL with 122.88 MHz VCXO

Benefits

- 3G/4G Micro and macro base stations (BTS)
- FDD and TDD active antenna systems
- Compatible with a broad range of Xilinx- and Altera-based FMC/FMC+ carriers from VadaTech and others
- 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

FMC260

The FMC260 has four AD9371 transceivers, each providing dual differential transmitter, dual differential receiver, two observation receivers and a sniffer receiver. The transceivers have a tuneable range of 300 MHz to 6000 MHz with transmit synthesis bandwidth to 250 MHz and receive bandwidth of 8 MHz to 100 MHz. The module is suitable for aerospace, instrumentation and communication applications, and supports frequency division duplex (FDD) and time division duplex (TDD) operation.

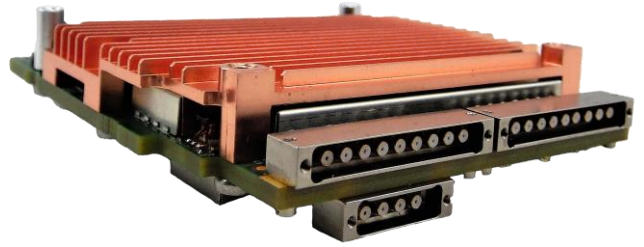**NOTE: This module does not meet the VITA57 components height.**

Figure 1: FMC260

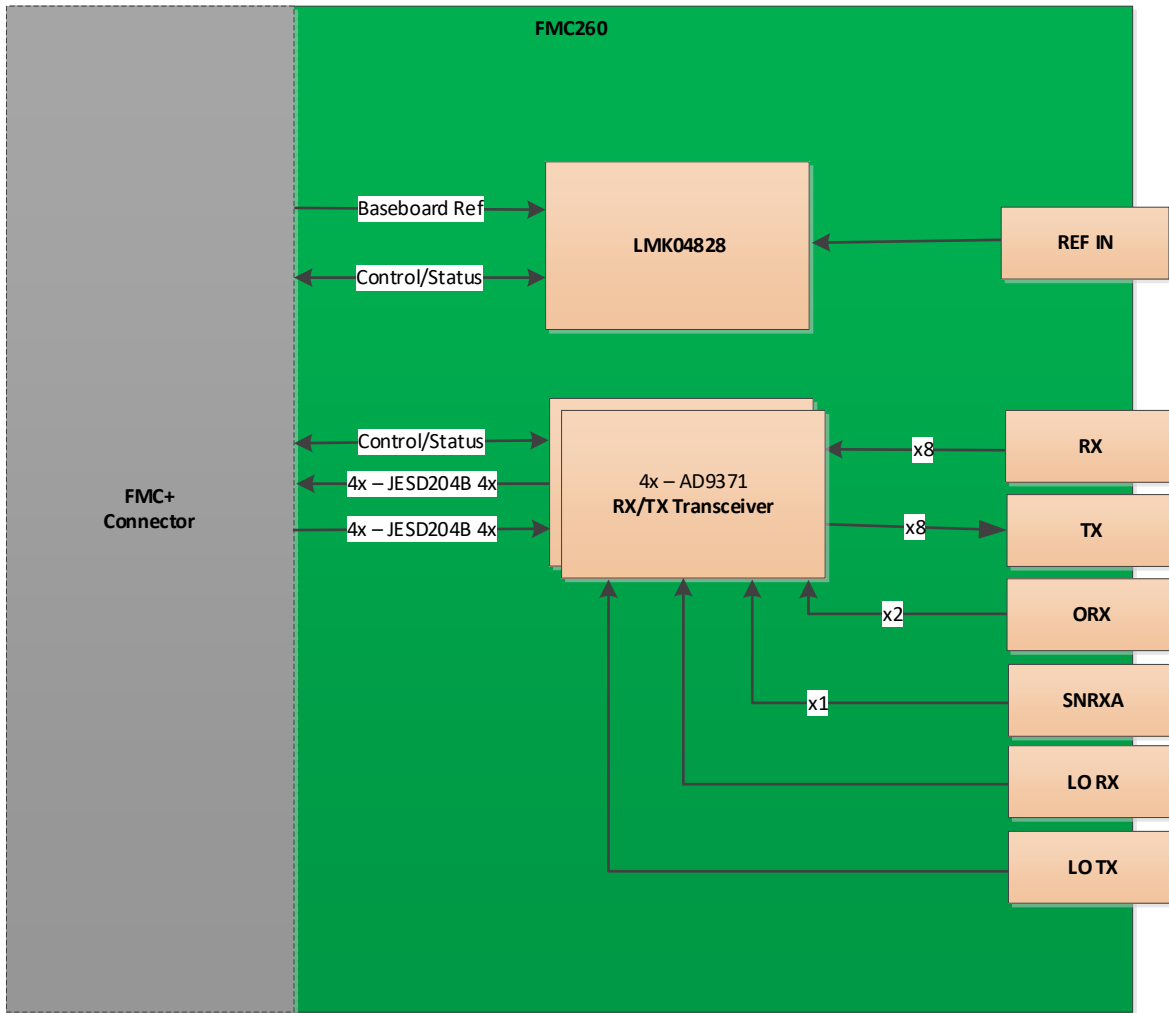*Figure 2: FMC260 Without Heatsink and Heat Spreader*

Block Diagram

Figure 3: FMC260 Functional Block Diagram

FMC260 – Quad RF transceivers

Specifications

Architecture		
Physical	**Dimensions**	Single Module
		Width: 2.71" (69 mm)
		Depth: 3.01" (76.5 mm)
Type	**FMC**	Quad AD9371
Standards		
FMC	**Type**	ANSI/VITA 57.4
Configuration		
Power	**FMC260**	15W
Environmental	**Temperature**	See Ordering Options
		Storage Temperature: –40° to +85°C
	Altitude	40,000 ft non-operating
	Vibration	Operating 9.8 m/s2 (1G), 5-500 Hz
	Shock	Operating 30Gs each axis
	Relative Humidity	5 to 95% non-condensing
Front Panel	**Interface Connectors**	TE Nano-miniature connectors
	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

FMC260 – 000-000-00J

		J = Temperature Range and Conformal 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:

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

Related Products

AMC592

- AMC FPGA carrier for FMC per VITA 57
- Xilinx UltraScale™ XCKU115 FPGA
- Supported by DAQ Series™ data acquisition software

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

VPX592

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

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: +886-2-2637-7655 | Fax: +886-2-2637-7792

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