# **FMC267**

# Single DAC with Quad ADC DC Coupled



**FMC267** 

# **Key Features**

- DAC based on the Texas Instruments DAC3171 device with 14-bit @ 500 MSPS
- ADC based on the Analog Device AD9268 16-bit @ 125MSPS
- On board PLL
- FPGA Mezzanine Card (FMC) per VITA 57
- Clock input for synchronization via front or rear

### **Benefits**

- Ideal for communication, Diversity Radio Systems, I/Q demodulation 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





# **FMC267**

The FMC267 is an FMC per VITA 57 specification. The FMC267 has a single DAC3171 Device from Texas Instruments which provides a DAC at 14-bit with 500 MSPS. The front DAC output is DC coupled.

Further, the FMC267 has quad ADC based on Analog Device AD9268 at 16-bit with 125 MSPS. The ADC are DC coupled output.

The module has a clock input via front panel which allows synchronization to an external clock. The FMC267 allows the synchronization clock to also come from the carrier.

The module has 8 SSMC Connectors for its ADC/DAC, clock input and Trigger in/out.



Figure 1: FMC267



Figure 2: FMC267 without Heatsink



Figure 3: FMC267 Front Panel View

# **Block Diagram**

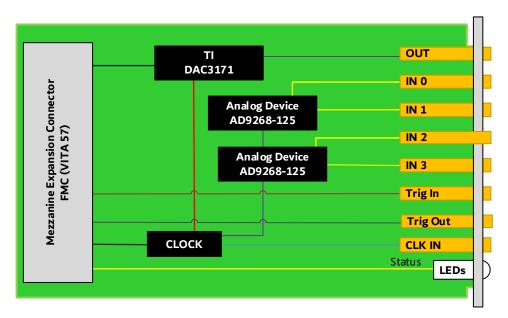


Figure 4: FMC267 Functional Block Diagram

# **Specifications**

Architecture		
Physical	Dimensions	Single Module
		Width: 2.71" (69 mm)
		Depth: 3.01" (76.5 mm)
Туре	FMC	Quad ADC with Single DAC
Standards		
FMC	Туре	ANSI/VITA 57.4
Configuration		
Power	FMC267	6W
Environmental	Temperature	See Ordering Options
		Storage Temperature: –40° to +85°C
	Altitude	40,000 ft non-operating
		Operating 9.8 m/s2 (1G), 5-500 Hz
		Operating 30Gs each axis
		5 to 95% non-condensing
Front Panel	Interface Connectors	
		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 VadaTo	ech 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 preconfigured Application-Ready Platforms. Please contact VadaTech Sales for more information.

## **Ordering Options**

### FMC267 - 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 1B31 Acrylic* 7 = Extended (-40° to +85°C), Humiseal 1B31 Acrylic*

#### Notes:

### **Related Products**





- AMC FPGA carrier for FMC per VITA 57
- Xilinx UltraScale™ XCKU115 FPGA
- Supported by DAQ Series<sup>™</sup> 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

<sup>\*</sup>Conduction cooled; temperature is at edge of module. Consult factory for availability.

### **Contact**

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- · 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





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