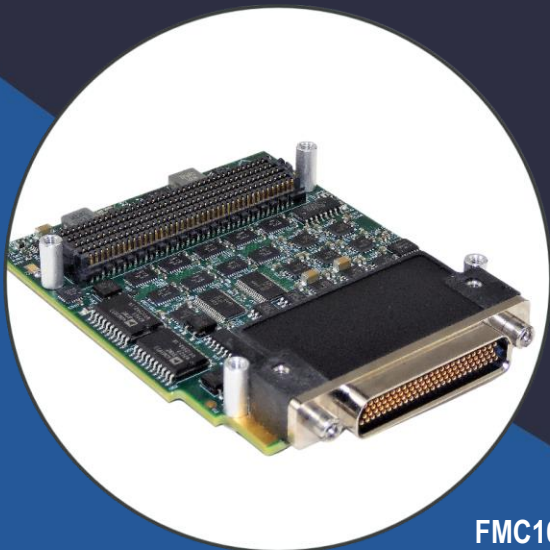


FMC161

ARINC-429, ARINC-717, CAN Bus,
Serial Sync and Discrete I/O



FMC161

Key Features

- FPGA Mezzanine Card (FMC) compatible with VITA 57.1
- Single-module
- 20x ARINC-429
- 2x ARINC-717
- 2x Serial Sync
- 2x Can Bus
- 6x Discrete
- Carrier board FPGA reference design sources available

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



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FMC161

The FMC161 is an FPGA Mezzanine Module per VITA 57.1 specification providing ARINC-429, ARINC-717, Serial Sync, two Can Bus and discrete.

The I/O is divided up as follow:

- 20 x ARINC-429
- 2 x ARINC-717
- 2 x Serial Sync
- 2 x Can Bus
- 6 x Discrete

The I/O is provided thru an HDC (High Density Connector).

The FMC161 does not come with the front panel FMC. When installed into an FMC Carrier the carrier panel has to be build monolithic to cover the FMC I/O.

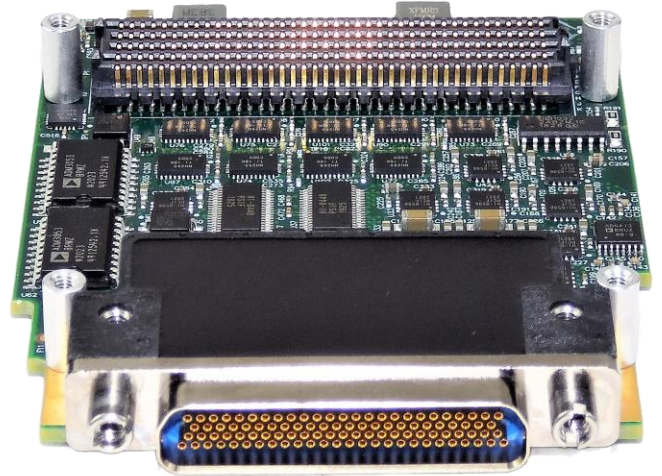


Figure 1: VRT705A

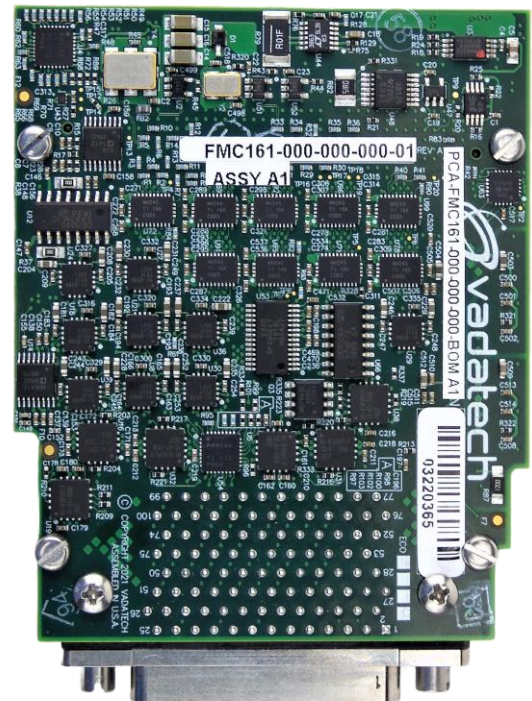


Figure 2: FMC161 Underside View

Block Diagram

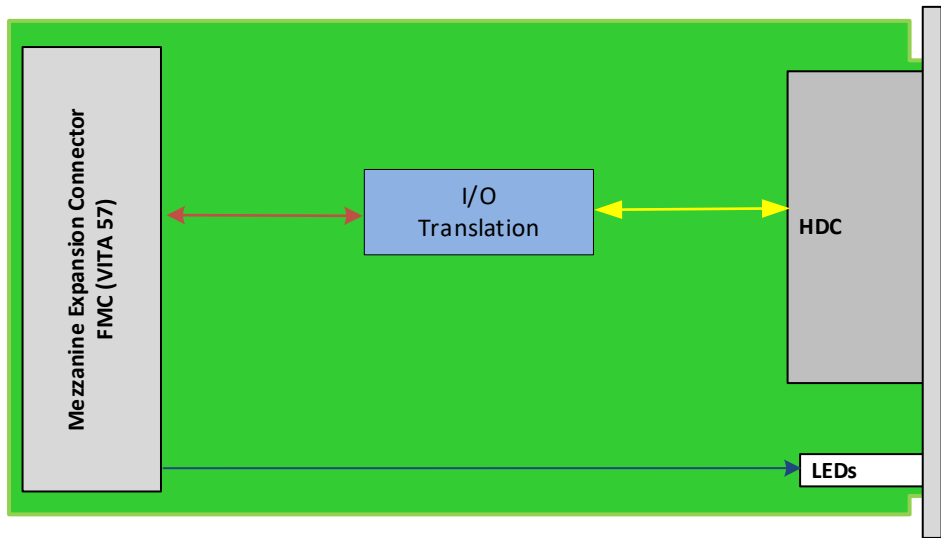


Figure 1: FMC161 Functional Block Diagram

Specifications

Architecture	
Physical	Dimensions Single Module Width: 2.71" (69 mm) Depth: 3.01" (76.5 mm)
Type	FMC ARINC-429, ARINC-717, CAN Bus, Serial Sync and Discrete
Standards	
FMC	Type ANSI/VITA 57.1 – 2008
Configuration	
Power	FMC161 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 RJ-45, MMCX and Micro USB for RS-232 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

FMC161 – 000-000-0HJ

		H = Operating Temperature
		0 = Commercial 1 = Industrial
		J = Conformal Coating
		0 = None 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic

Related Products

VPX592



- 3U FPGA carrier for FPGA Mezzanine Card (FMC) per VITA 46 and VITA 57
- Xilinx Kintex UltraScale™ XCKU115 FPGA
- 20 GB of DDR4 Memory (2 banks of 64-bit wide, and single bank of 32-bit wide)

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

AMC585



- Xilinx UltraScale+ XCZU19EG FPGA
- Single FMC+ (VITA 57.4) site
- MPSoC with block RAM and UltraRAM

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

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