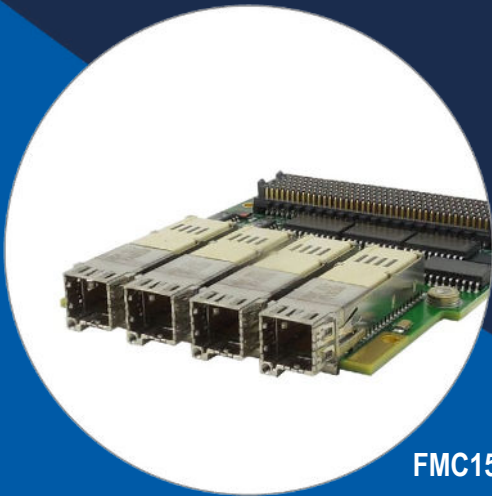


FMC151

Multi I/O FMC Module, ECL or
NECL Input/Output,
RS-422 and Fiber Optics



FMC151

Key Features

- 12 x TX ECL or NECL RX/TX
- 4 x RS-422 RX/TX
- Dual Fiber Optics ST style (1300-nm wave length, 2KM)
 - FDDI
 - ATM
 - 100BAES-FX
 - Custom protocol
- User LED

Benefits

- Single module to provide multiple I/O
- Utilizing commercially-available, standard high-density connector for ease of cabling
- All I/O types utilize differential signaling between the transceivers on the FMC and the FPGA on the carrier for optimal signal integrity across the FMC connector
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader
- AS9100 and ISO9001 certified company



FMC151

The FMC151 is an FPGA Mezzanine Card (FMC) per VITA 57.1 standard (see comment below) offering a small footprint and allowing for general-purpose I/O expansion with Fiber Optics.

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The Module does not follow the VITA57 height constrain. It has an additional Daughter card that mates to the FMC module to allow it to accommodate the Fiber Optics. For example, on the AMC FPGA FMC Carriers, it requires a full-height AMC panel to accommodate all the I/Os. The Carrier must have a monolithic panel (the FMC151 does not come with an FMC panel) to cover the FMC151 I/O envelope.

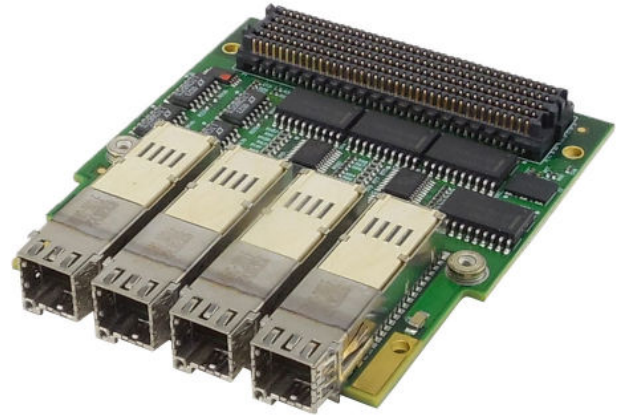


Figure 1: FMC151

Block Diagram

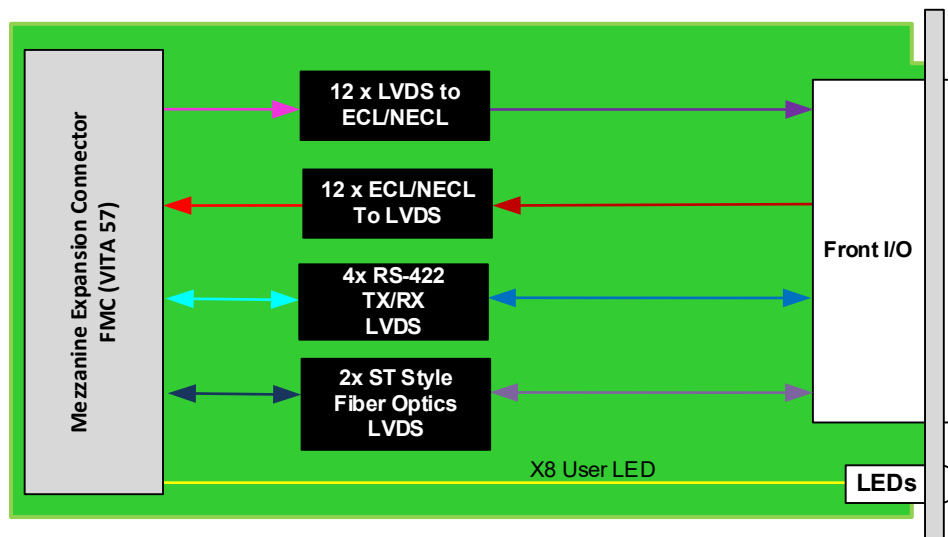


Figure 1: FMC151 Functional Block Diagram

Specifications

| | | |
|--------------------------|---|---|
| Architecture | | |
| Physical | Dimensions | Single Module |
| | | Width: 2.71" (69 mm) |
| | | Depth: 3.01" (76.5 mm) |
| Type | FMC | Digital I/O |
| Standards | | |
| FMC | Type | ANSI/VITA 57.1 - 2008 |
| Configuration | | |
| Power | FMC151 | 5W |
| 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 | High-density connector (latching style) for I/O and ST-Style Fiber Optics |
| | 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 ISO9001:2000 and AS9100B:2004 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

FMC151 – 000-000-00J

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

Related Products



- 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)



- Xilinx Zynq® UltraScale+ XCZU15EG FPGA
- 8 GB of 64-bit wide DDR4 Memory (single bank) with ECC
- MPSoC with block RAM and UltraRAM

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