

These FPGA Mezzanine Cards are compatible with standard VITA 57.1 and can be mounted on carrier boards – e.g. DAMC-FMC25 – for high speed communication.

The FMC-2SFP+ and FMC-4SFP+ boards have a configurable oscillator and a wide I/O operating range (1.5V to 3.3V on V_{AD1}).

Available in 2-channel or 4-channel SFP/SFP+ versions.

Features

- FPGA Mezzanine Card
- High-Pin-Count FMC Module (Vita 57.1 compliant) with LPC compatibility for SFP/SFP+ applications
- Wide I/O operating voltage range:
 V_{AD1} can vary from 1.2V to 3.3V
- True level conversion of all SFP+ module pins including I2C bus lines
- I2C-Controlled oscillator (10-280MHz)
- Available as 4-channel or 2-channel version
- Fits on any FMC carrier without front panel modification
- Individual module status via LEDs
- Compatibility with the DAMC-FMC25
 Board
- Autonomous Mode: Clock speed setting and transmitter activation via DIP switches

Applications

- Photon Beam Position Monitors
- Multi-Channel Fast Current Acquisition
- Detector Readout

The FMC-SFP4 is a cost-efficient FPGA mezzanine card (FMC) designed according to ANSI/VITA 57.1.

It offers four SFP/SFP+ module slots. All module pins are translated to the FMC Carrier Voltage V_{ADJ}) that can be in the range of 1.2V to 3.3V.

With this low operating voltage it can be used on almost all carriers.

The module is designed as an HPC module but can also be operated on an LPC carrier (one channel + clock).

The components are placed to be compatible with carriers that have components under the FMC module.

The SFP+ cage is placed to fit to all carriers without front panel modification (card is only 16mm longer than described by FMC standard).

The module features an I2C-controlled LVDS oscillator chip that operates in the range from 10 to 280 MHz.

Automatic configuration of clock oscillator and module pins for standalone operation is selectable via onboard jumpers.

Commercially available versions are the dual channel FMC-2SFP+ with standard VITA 57.1 bezel and the quad-channel FMC-4SFP+.

Please check the MTCA.4 section on the website www.caenels.com in order to check for news, updates and additional information on the FMC-Pico-1M4 cards and other MTCA.4 products.



About CAENels

CAEN ELS is a leading company in the design of power supplies and state-of-the-art complete electronic systems for the Physics research world, having its main focus on dedicated solutions for the particle accelerator community.

Magnet Power Supply Systems

Beamline Electronic Instrumentation

Precision Current Transducers

MTCA.4 – MicroTCA for Physics

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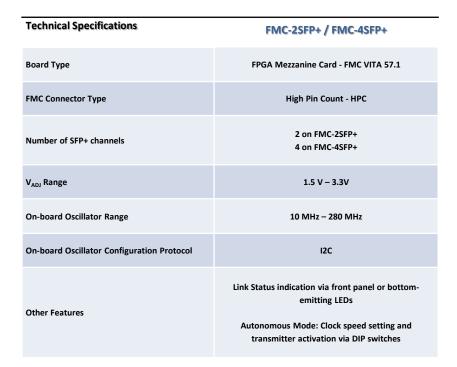


∷ www.caenels.com



Deutsches Elektronen-SYnchrotron

Ein Forschungszentrum der Helmholtz-Gemeinschaft





FMC-2SFP+ board

Ordering Options

FMC4SFP2XAAA	FMC-SFP2	Dual-channel SFP/SFP+ Adapter FMC
FMC4SFP4XAAA	FMC-SFP4	Quad-channel SFP/SFP+ Adapter FMC

