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Two Port 4-Lane MIPI® FMC
Part Number : TB-FMCL-MIPI

Product Outline

4-lane SLVS MIPI ports featuring:
- Meticom® MC20901 and MC20902 D-PHY™ Bridges
- MIPI speeds up to 2.5Gb/s (FPGA dependent)

FMC Connectors
- LPC FMC connector, GBTCLK and DP not used
- Voltage translators for the Bridge devices as well a I2C and GPIOs to the MIPI connectors
- Bank associated CC Clock lines associated with each 4-lane LVDS group from FMC host
- Clock strap option accommodates inrevium TB-OP-FMCL adapter bank clock routing

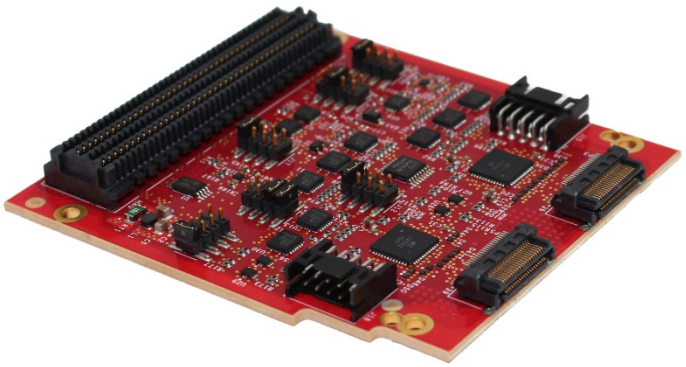
IO Connectors, Facilities
- Two SAMTEC LSHM series right-angle connectors
- Four GPIOs and I2C available on each MIPI port: GPIO and I2C voltage levels independently selectable
- 12V and USER power available on each connector
- USER voltage (common to both MIPI ports) jumper options: 1.5V, 1.8V, 2.5V and 3.3V, all at 800mA total
- Power status LEDs on board

Power Requirements
- 12V and 3.3V both at 500mA max.
- VADJ at 100mA max.

Board Dimensions
- Single width, air-cooled, LPC FMC, VITA 57.1 compatible.

Image Sensor and Display Adapters
- Proprietary connectors are supported by adapters for different image sensors and displays. Standard adapters: Omnivision® OV13855 image sensors and AUO® B101UAN01.7 display.
- Custom adapters available upon request

This two port MIPI FMC helps you pick the right peripherals for your next mobile device



Features
- Two independently clocked 4-lane SLVS MIPI ports on high density faceplate receptacles, identical pinouts
- Leading low-latency LVDS to SLVS translators
- Variants available
  - 4-lane CSI-2/DSI (Rx/Tx)
  - Dual CSI-2 (Rx/Rx)
  - Dual DSI/DSI (Tx/Tx)
  - Direct (without onboard D-PHYs)
- Compatible with FMC Specification (VITA 57.1)
- Designed for electrical compatibility with inrevium TB- 7V-2000T-LSI (via TB-OP-FMCL adapter), Xilinx KC705, VC707, VC709, and KCU105 (UltraScale™)
- Up to 1Gb/s per MIPI lane using HR I/Os in DDR mode (Xilinx® 7-series)

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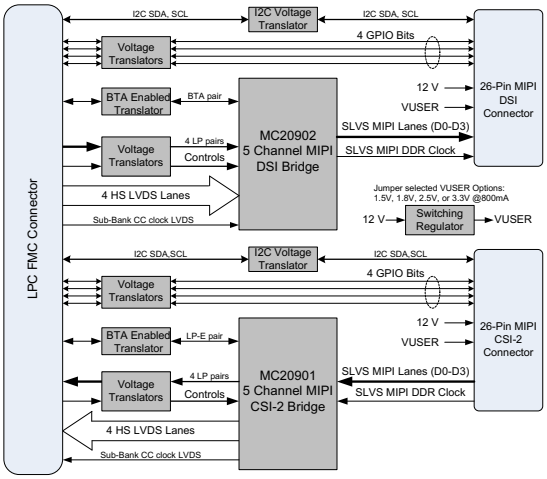
Function Block Diagram



Available References

Design Package (available under license)

- Schematics, PCB Layout, Artwork, Bill of Materials

FPGA Reference Designs

- Downloadable .bit file examples (VC707)

Sales and Support

For additional information, questions or request for quotation visit: www.fidus.com

Customize your TB-FMCL-MIPI (-2CSI, -2DSI, DIRECT)

Adapter PNs: TB-OV13850-ADAPTER, TB-AUO101-ADAPTER

Speak with our Design Services Group on how to accelerate your custom design: design@fidus.com

About Fidus

Fidus Systems, founded in 2001, specializes in leading-edge electronic product development with offices in Ottawa and Waterloo Ontario, and San Jose, California. Our hardware, software, FPGA and signal integrity teams architect, design and deliver next-generation products for clients in emerging technology markets. We build long-term relationships by consistently exceeding expectations.

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