

Product Outline

12G-SDI performance, featuring:

- M/A-COM® chipset
(M23145G, M23428G, M23554G)

FMC Connectors

- HPC FMC connector
- Expansion (stackable) HPC FMC
 - Supports a second 12G-SDI card (do not mix and match)

IO Connectors

- HD-BNC type, 75Ω
- Ch0: Dedicated input and dedicated output
- Ch1-3: Individually config. as input or output

Clocking

- Video Sync Separator (TI's LMH1981)
 - Accepts an external video clock-in, and provides Field Sync, Vsync, and Hsync to the FMC conn
- Video Clock Generator (TI's LMH1983™)
 - Accepts Field Sync, Vsync, and Hsync from the FMC connector, and returns 4 synchronized video clocks, and 4 corresponding frame timing signals to the FMC connector
- Standard video frequency oscillators
 - 148.5MHz and 148.35165MHz
 - Can be cross-switched to the FMC connector

Power Requirements

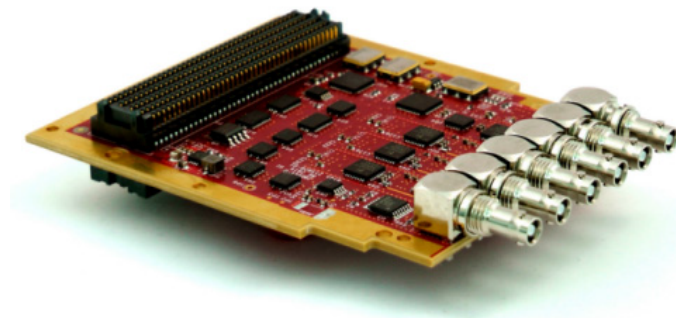
- Main rails: 12V@0.3A and 3.3V
- VADJ: 1.5 to 3.3V (onboard level translators)
- Estimated dissipation: 5W

Board Dimension

- Single width, air-cooled, HPC FMC with regions 1,2,3

Adapter Cables

- QTY 2: HD-BNC-to-BNC, ~10cm (~4") length



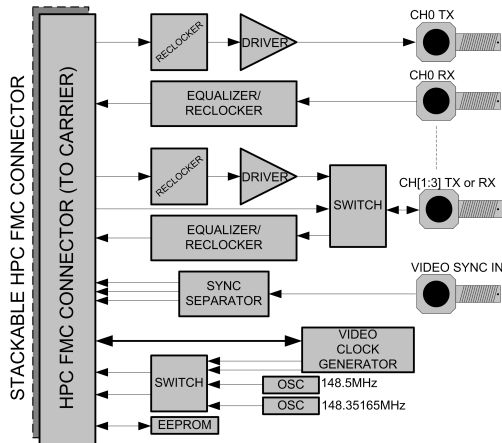
Ideal for general instrumentation and a variety of mixed signal application developments

Features

- 6x 75Ω HD-BNC connectors
 - 1x 12G SDI input, 1x 12G SDI output, 3x 12G In or Out
 - 1x Video Sync input
- Compatible with FMC Specification (VITA 57.1)
- Designed for electrical compatibility* with inrevium ACDC, Xilinx® KC705, VC707, VC709, KCU105, and ZC706
- Stackable FMC design supports additional TB-FMCH-12GSDI

* Verify your target mainboard with us prior to ordering

Function Block Diagram



Available References

Design Package (available under license)

- Schematics, PCB Layout, Artwork, Bill of Materials

FPGA Reference Designs

- Downloadable .bit file examples
- Licensable source (some blocks netlist encrypted)
- KC705 and KCU105 target, coming soon

Sales and Support

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

Customize your FMCH-12GSDI

Speak with our Design Services Group on how to accelerate your custom design:
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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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