

Product Outline

4K/60, 6Gbps performance, featuring:

FMC Connectors

- HPC FMC connector
- Expansion (stackable) HPC FMC
- Supports a second card of the same type

IO Connectors

- HDMI connectors
- CEC and HPD support

Configurability and Testability

- Jumpers
- I²C loopback capability
- HPD and CEC loopback capability
- HDMI 5V from Sink or onboard supply
- EEPROMs
- Dedicated local EEPROM for Sink EDID
- Onboard EEPROM for encryption purposes

Clocking

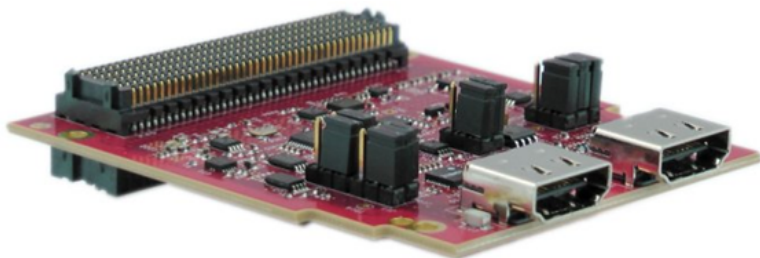
- Clock Generator (Silicon Labs: Si5324)
- Capable of locking to a reference from the FPGA carrier card, or free running using the onboard reference
- Used to generate and return the necessary clocks to the FPGA carrier card (drives MGT REFCLK and/or LVDS clock)

Power Requirements

- Main rails: 12V and 3.3V
- VADJ: 1.5 to 3.3V (onboard level translators)

Board Dimension

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

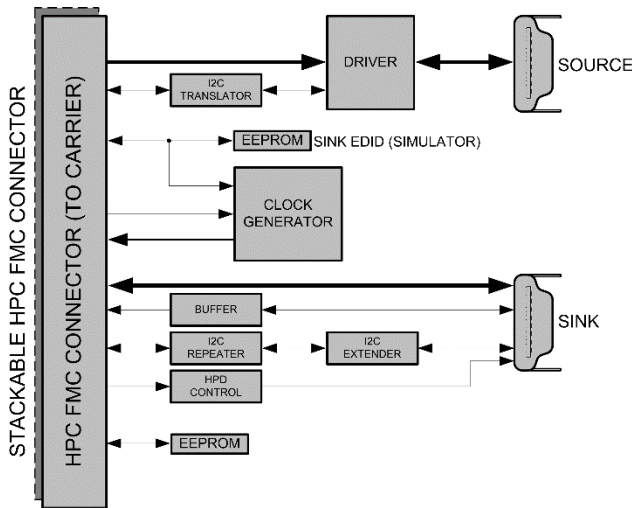


Features

- 2x HDMI connectors
 - 1x HDMI4K Source
 - 1x HDMI4K Sink
- Compatible with FMC Specification (VITA 57.1)
- Designed for electrical compatibility with most carrier cards.*
- Proven operation with inrevium ACDC and KC705.
- Stackable FMC design supports additional TB-FMCH-HDMI4K

* 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 ACDC targets

Sales – Ordering Enquiries

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

Customize your TB-FMCH-HDMI4K

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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