

HDMI4K FMC: 4K/60fps Development

April, 2015

Now accepting orders

The HDMI4K FMC enables your next generation 4k/60fps designs today

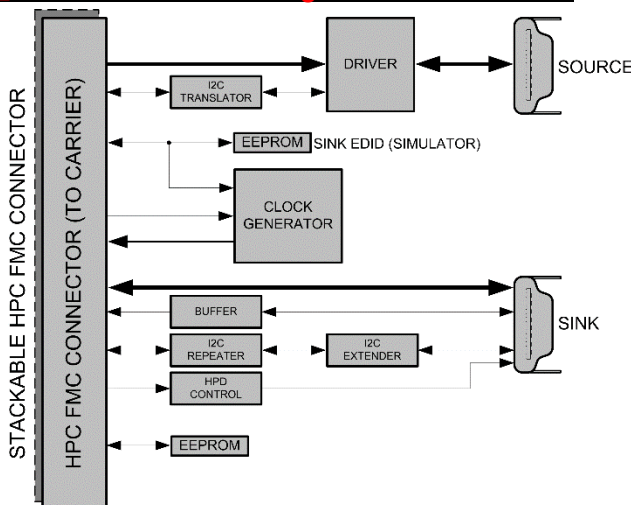


Features

- 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



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

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

For Inquiries or Orders: Email – products@us.inrevium.com

Part Number : TB-FMCH-HDMI4K