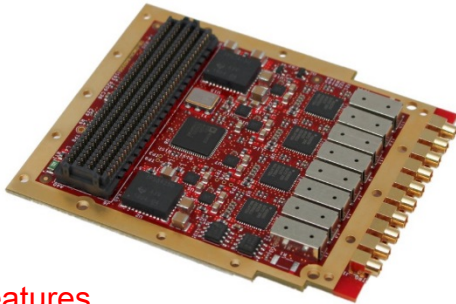


8-Ch, 14-bit, 250MSPS, JESD204B, ADC FMC

May, 2016

Pre-order now!
Avail. Q2/2016

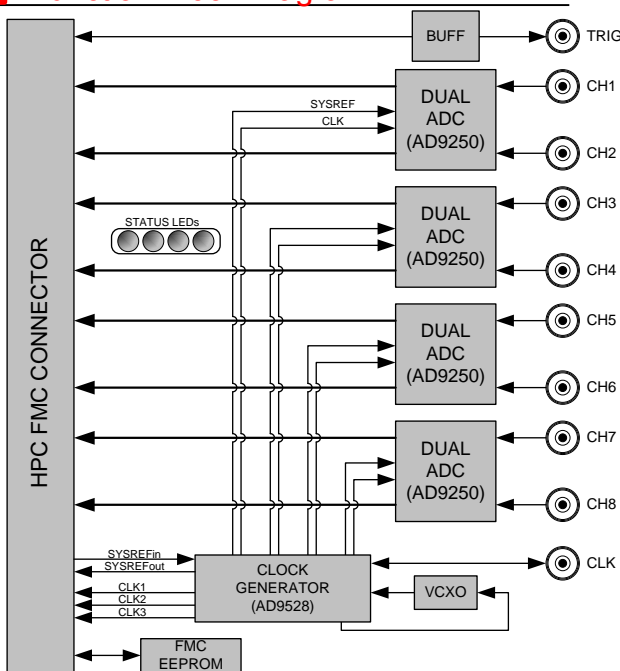
Ideal for general instrumentation and a variety of mixed signal application developments



Features

- 10x MMCX connectors
 - 8x Transformer-coupled ADC inputs
 - 1x Trigger input/output
 - 1x Clock reference input/output
 - Single width, conduction cooled FMC
 - Compatible with FMC Specification (VITA 57.1)
 - Designed for electrical compatibility with most carrier cards.*
- * Verify your target mainboard with us prior to ordering

Function Block Diagram



Product Outline

8-Ch, 250MSPS, 14-bit, JESD204B, ADC FMC:

IO Connectors

- 8x MMCX analog inputs
- 1x Trigger input/output [LVTTTL, 5V TOL]
 - trigger bleeds into channel for latency measurement
 - trigger output can be used to initiate an external event upon data pattern detection
- 1x Reference clock input/output [SINE]
 - synchronize multiple boards via a master reference

Clocking

- Clock Generator (Analog Devices: AD9528)
 - capable of locking to a reference from the FPGA carrier card, or free running using the onboard reference
 - generates and returns the necessary clocks to the FPGA carrier card (drives MGT REFCLK and/or Global Clock)
 - Flexible and programmable SYSREF generation

Performance

- Analog input bandwidth: 4.5 MHz – 500 MHz (-3dB)
- Ch-to-ch crosstalk below -75dB @ TBD MHz
- Onboard clock generator capable of sub-100fs jitter
- Full-scale input programmable 1.383 Vpp – 2.087Vpp
- ADC Multiple Device Synchronization (MDS) for coherent sampling across all ADC channels (JESD204B class MCDA-ML)

Power Requirements

- Main rails: 12V and 3.3V
- VADJ: 1.2 to 3.3V (onboard level translators)

Board Dimension

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

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)
- VC707 and ACDC targets

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

Part Number : TB-FMCH-8AD250