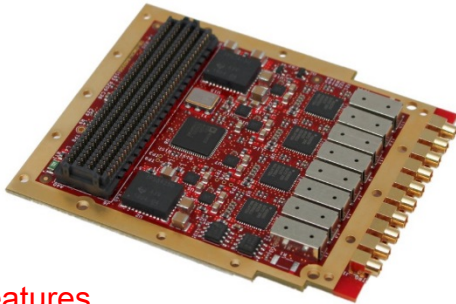


# 8-Ch, 14-bit, 250MSPS, JESD204B, ADC FMC

June, 2016

**Pre-order now!**  
**Avail. Q2/2016**

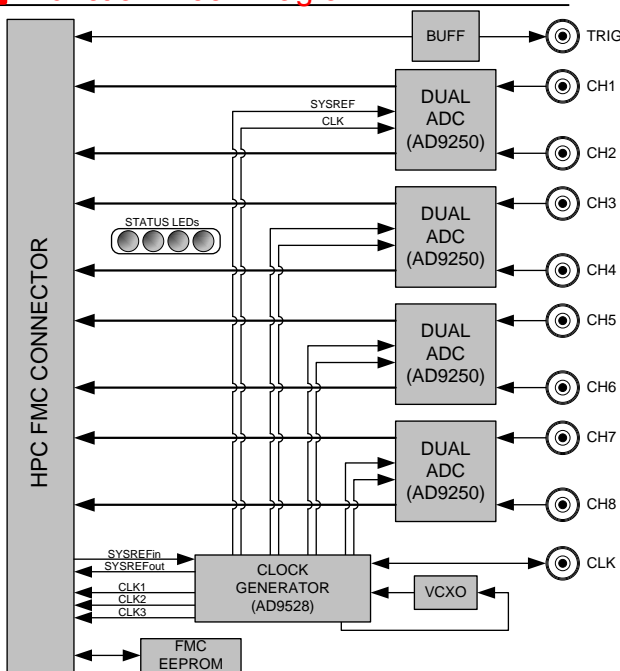
Ideal for general instrumentation and a variety of mixed signal application developments



## 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, free running using the onboard reference, or locking to an external 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-200fs 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](mailto:products@us.inrevium.com)

Part Number : TB-FMCH-8AD250