0629
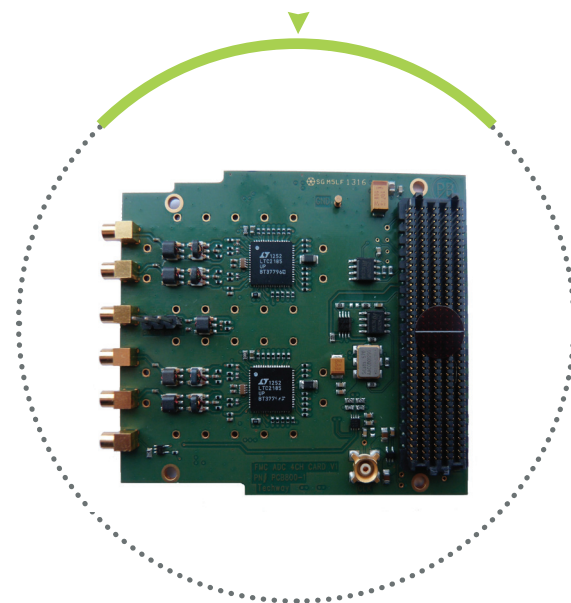
FMC ADC 125

Environmental information

Operating temperature range: 0°c to 50°c
Storage temperature range: -55°c to 125°c
Maximum shock range: 10g during 20ms
Maximum vibration range: 0.03 g2/Hz
Compliant with ROHS process

Ordering information

FMC-ADC-125

The TechwaY ADC125 mezzanine is a fully compliant FMC mezzanine (VITA 57.1) which offers four 16bits A/D channels up to 125 MSPS.

The ADC125 mezzanine is based on two dual Analog-to-Digital converters from Linear Technology: the LTC2185.

This mezzanine allows you to sample your signals with your own external sampling clock. You also get the capability to use the on-board sampling clock. A trigger input is available to be able to synchronize all channels with a 1 sample accuracy.

You are able to fine-tune the ADCs through the I²C bus. ADC gain, bias and delay can be set-up according to your needs. Temperature and power monitoring can be check directly from the FPGA.

Applications

Radar
Sonar
Medical equipment
Aerospace and test measurement instruments

Benefits

Ready To Use
    FMC – VITA 57.1 – compliant

Easy To Use
    Free SDK with example design
    TechwaY support
Cost effective

FMC ADC 125

Features

Four Sampling Channels
One common trigger input
One common sampling clock input
Internal programmable clock generator available
Selected sampling clock from external or local
16 bits resolution
Input range: 1Vpp
Up to 125MHz sampling frequency
Up to 550MHz analog bandwidth (depend of input analog stage)
Up to 90dB SFDR
Up to 77 dB SNR
DDR LVCMOS/LVDS outputs

Software Development Kit

ADC set up
Controlling the card by I2C

Firmware

VHDL ADC control module

Block Diagram