ADC125 FMC

ANALOG-TO-DIGITAL CONVERTERS FMC



Four 16bits A/D channels up to 125 MSPS

APPLICATIONS

- RADAR
- **SONAR**
- Medical equipment
- Aerospace
- Test & measurement

BENEFITS

- Ready-to-use :
 - FMC (VITA 57.1) compliant
- Easy-to-use :
- Free SDK with example design
- TECHWAY support
- Cost-effective

KEY FEATURES

- 2 Dual Analog-to-Digital converters
- Four 16bits A/D channels
- Up to 125 MSPS
- On-board sampling clock

TECHWAY'S 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.

DEFENCE

INDUSTRY







Information and photos subject to change without

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DEVELOPMENT KIT

• Firmware :

- VHDL ADC control module
- Software :
- ADC set up
- Controlling card by I2C



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• 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

• 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

BLOCK DIAGRAM

Reference	Description
FMC-ADC_4CH_125	FMC (VITA57.1) card with 4 channels ADC @16 bits, 125MHz
DK_FMC_ADC_4CH_125	Development Kit for the ADC125 FMC