

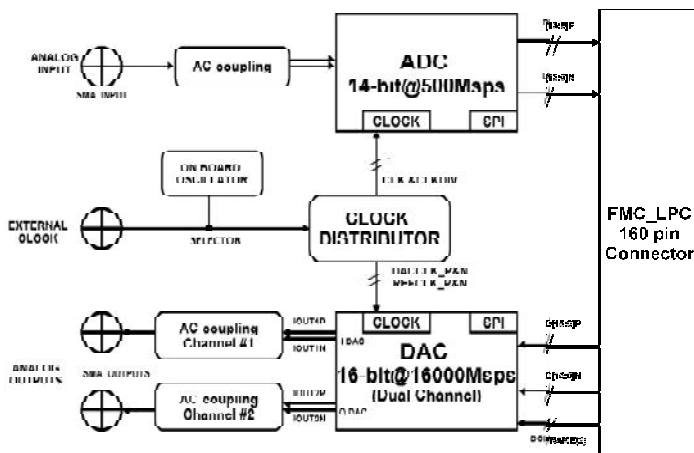
UTS offers multiple hardware solutions on industry standard processor/FPGA cards with FMC interface modules, targeted for communication and RADAR applications. The UTS-FMC-12-HF1 is one channel 14 bit, 500 Msp/s ADC and two channel 16 bit 1500 MSPS DAC solution is ideal choice for wideband IF processing applications. The card is offered with LPC-FMC connector, to mate with most of the industry standard carrier boards. The card has on board clock generator with integrated VCO, to provide the desired clocks to ADC and DAC.



Key features

- ❖ One channel 14-bit ADC and dual channel 16-bit DAC.
- ❖ Synchronized clocking scheme for ADC and DAC.
- ❖ AC coupling paths at input and output paths.
- ❖ UTS reference solution available for telemetry, RADAR DRFM and wide band Frequency Hopping Radio applications.

High Speed ADC_DAC Block Diagram



Specifications

Parameter	Value
Frequency range	1- 600 MHz ADC 1- 600 MHz DAC
Bandwidth (ADC & DAC)	ADC upto 200 MHz DAC upto 300 MHz
ADC resolution	14-bits
ADC sampling rate	500 MSPS
ADC channels	1
Input coupling	AC
Full scale voltage	2Vpp
Spurious frequency components	< -70 dBFS
ADC SNR	70 dB
ADC power consumption	370mW
DAC resolution	16-bits
DAC sampling rate	1500 MSPS
DAC channels	2
Output coupling	AC
Digital expansion connectors	LPC-FMC
Clocking	Internal or external
Input and output connector type	SMA
Usage configuration	Daughter card for FPGA boards
Power	12V, 1 Amp DC (through FMC pins)
Mechanical Size	L: 9.25cm, W:7.20cm
Weight	90 grams

Applications

- RADAR, DRFM, Jamming
- Synthetic Aperture Radar / Seeker
- Wideband Software defined radios
- Satellite wideband telemetry
- Direct IF applications
- Beam forming application
- Aerospace and test measurement instruments

Ordering Information

Part number: UTS-FMC-12-HF1