

UTS offers multiple hardware solutions on industry standard VPX bus and FMC interface targeted for communication and RADAR applications. The UTS-FMC-22-125 is 16 bit ADC and DAC solution is ideal choice for IF processing applications. The card is offered with LPC-FMC connector, to mate with most of the industry standard carrier boards. With 125/250 Msps sampling maximum upto 40MHz/80 MHz instantaneous bandwidth can be supported.

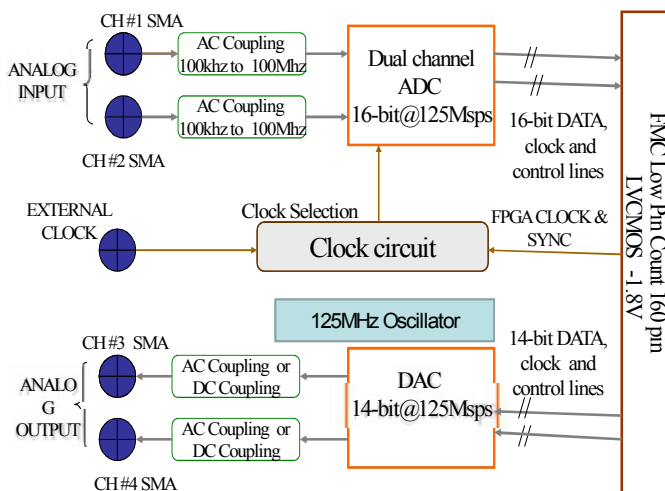
The DAC paths are provided with options for AC or DC coupling. The DC option is suitable for application where demodulated baseband/video signal need to be played out.



## Key features

- ❖ Dual channel 16-bit ADC and dual channel 14-bit DAC.
- ❖ Two channel simultaneously sampling ADC and DACs.
- ❖ AC and DC coupling paths at input and output paths.
- ❖ Perfect solution for telemetry and wide band MODEM applications.

DIGITIZER BLOCK DIAGRAM



## Specifications

Parameter	Value
<b>Frequency range</b>	DC - 80 MHz
<b>Bandwidth (ADC &amp; DAC)</b>	Maximum up to 40 MHz
<b>ADC resolution</b>	16-bits
<b>ADC sampling rate</b>	125 MSPS / 250 MHz
<b>ADC channels</b>	2
<b>Input coupling</b>	AC and DC
<b>Full scale voltage</b>	2Vpp (10Vpp for jumper setting)
<b>Spurious frequency components</b>	< -70dBFS
<b>ADC SNR</b>	76 dB
<b>ADC power consumption</b>	370mW
<b>Bandwidth (DAC)</b>	Maximum upto 40 MHz / 80 MHz
<b>DAC resolution</b>	14-bits
<b>DAC sampling rate</b>	125 MSPS / 250 MHz
<b>DAC channels</b>	2
<b>Output coupling</b>	AC and DC
<b>Digital expansion connectors</b>	LPC-FMC
<b>Clocking</b>	Internal or external
<b>Input and output connector type</b>	SMA
<b>Usage configuration</b>	Daughter card for FPGA boards
<b>Power</b>	12V, 4 Amp DC (FMC)
<b>Mechanical Size</b>	L: 9.25cm, W:7.20cm
<b>Weight</b>	90 grams

## Applications

- Software defined radios
- Multi channel data acquisitions
- Telemetry
- Direct IF applications
- Beam forming application
- Wireless communication receivers
- Aerospace and test measurement instruments
- Medical/test instrumentation.

## Ordering Information

Part number: UTS-FMC-22-XXX-YY  
 XXX - 125 or 250 (Msps) clock speed  
 YY - AC/DC coupling