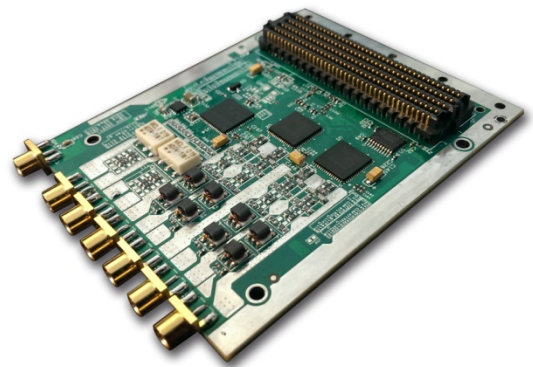


FMC-NKS-401210 High Pin Count FMC Module

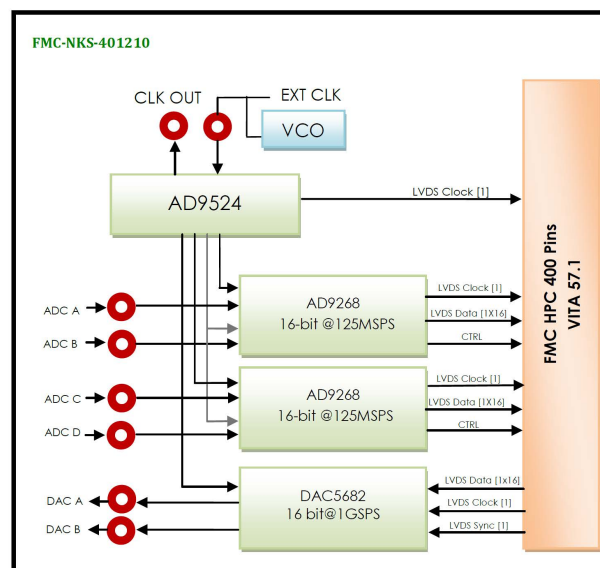
4- Channel 16-bit ADC 125MSPS 2- Channel 16-bit DAC 1GSPS

Description

The FMC-NKS-401210 is a four-channel 16-bit ADC at 125MSPS synchronous and maximum sampling rate and dual channel 16-bit DAC at 1GSPS synchronous and maximum sampling rate. This module was designed based on dual-channel AD9268 ADC of Analog Device Company with DDR LVDS or CMOS outputs and dual-channel DAC5682 DAC of TI Company with DDR LVDS inputs. Because of containing a FMC-HPC connector, FMC-NKS-401210 is electrically compliant to VITA 57.1 standard. Controlling of clock source, sampling frequency and calibration by a SPI BUS are its other features. The clock sampling can be provided from an external or internal source and then send to distribution clock unit. This module can use on every carrier card which follows the VITA 57.1 standards; therefore it can have the maximum data throughput and minimum latency.



Functional Block Diagram



WWW.NIKSOO.COM/FMC-NKS-401210

Support: support@niksoo.com
Email: info@niksoo.com

www.niksoo.com

Features

ADC's:

- 4 Channels, 16-bit Resolution, 125 MSPS
- Differential Analog Input with 650MHz Bandwidth
- SNR = 75 dBFS @ 20 MHz and 125 MSPS
- SFDR > 80 dBc @ 20 MHz and 125 MSPS
- ENOB = 12.4 Bits @ 20 MHz and 125 MSPS
- Xtalk Isolation > 95dB
- Low Power: 750 mW @ 125 MSPS
- High Performance AC-Coupled Analog Input
- Pin Compatible with AD9650
- Operating temperature: -40°C to +85°C (Industrial)
- Physical Dimensions (L: 83.8 mm, W: 69 mm)

Application

- Radar/SONAR
- Medical Equipment
- Wide Band-Width Communications
- Advanced control systems and Remote forwarding

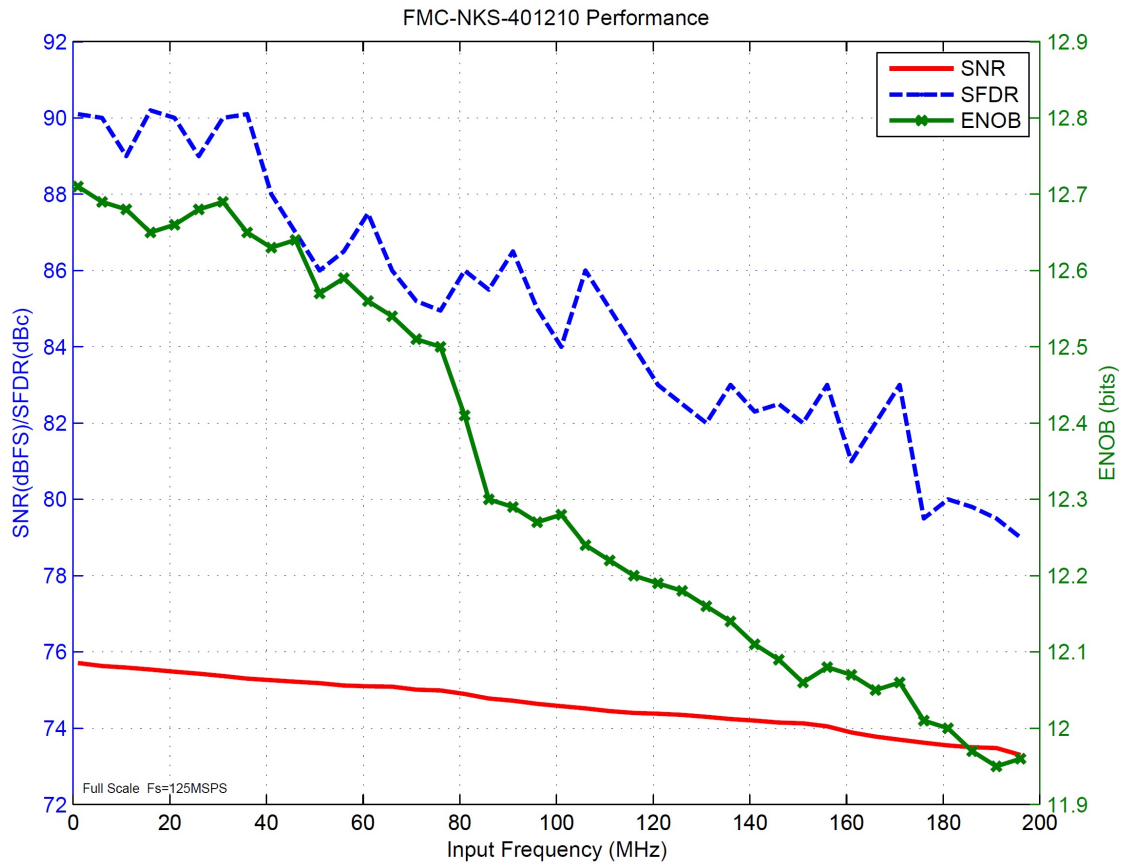
DAC's:

- 2 Channels, 16-Bit, 1GSPS Update Rate
- Analog Output with 500MHz Bandwidth
- Phase Noise > 100dBc @ 1kHz and 1GSPS
- 2x-32x Clock Multiplying PLL/VCO
- 2x or 4x Interpolation Filters
- High Performance AC-Coupled Analog Output

Other's:

- VITA 57.1 Compliant
- FMC Interface Connector for Digital Output, Power LEDs and Single-ended MCX Connector for AIN, AOUT& EXTCLK
- Flexible clock tree enables
- Direct ADC Connection to Host FPGA Ensures

FMC-NKS-401210 Performance (Full Scale, $F_s = 125\text{MSPS}$)



Compatibility Table

Platform	Compatibility
FMC-NKS016-PCIE-A	Yes
FMC-NKS106-PCI-A	Yes
FMC-NKS-V106-A	Yes
VC707	Yes
ML605	Yes

Order Information

