



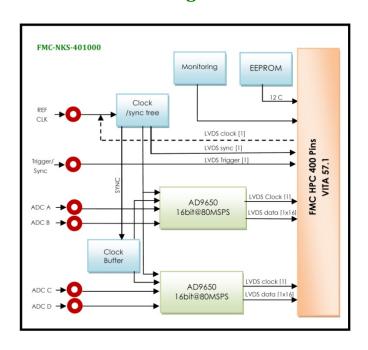
## FMC-NKS-401000 High Pin Count FMC Module

# 4-Channel16-bitADC 80MSPS

## **Description**

The FMC-NKS-401000 is a 4-channel 16-bit ADC which can provide synchronous and maximum sampling rate at 80MSPS. This module was designed based on dualchannel AD9650 ADC of Analog Device Company with DDR LVDS or CMOS outputs. Because of containing a FMC-HPC connector, FMC-NKS-401000 is mechanically and 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. Additionally a trigger input for customized sampling control is available. 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**



### **Features**

#### ADC's:

- 4 Channels, 16-bit Resolution, 80 MSPS
- Differential Analog Input with 650MHz Bandwidth
- Analog Input Filter Options
- SNR = 75 dBFS @ 70 MHz and 80 MSPS
- SFDR = 86 dBc @ 70 MHz and 80 MSPS
- ENOB = 12.5 Bits @ 70 MHz and 80 MSPS
- Xtalk Isolation > 95dB
- Low Power: 750 mW @ 80 MSPS
- High Performance AC-Coupled Analog Input
- 1.8 V Analog Supply Operation
- 1.8 V CMOS or LVDS Output Supply
- Flexible Analog Input Range: 1V p-p to 2V p-p
- Serial Port Control
- Pin Compatible with AD9258, AD9251, AD9231, AD9268 and AD9204.

#### 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 (Internal Clock, External Clock, Internal Clock with External Reference)
- Direct ADC Connection to Host FPGA Ensures
- Operating Temperature: -40°C to +85°C (Industrial)
- Physical Dimensions (L: 83.8 mm, W: 69 mm)

## **Application**

- RADAR/SONAR
- Medical Equipment
- Multimode digital receivers (3G)
- GSM, EDGE, W-CDMA, LTE
- CDMA2000, WiMAX, TD-SCDMA

### WWW.NIKSOO.COM/FMC-NKS-401000

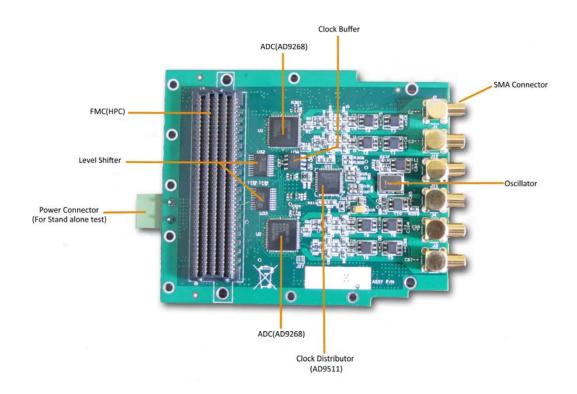
Support: support@niksoo.comwww.niksoo.com

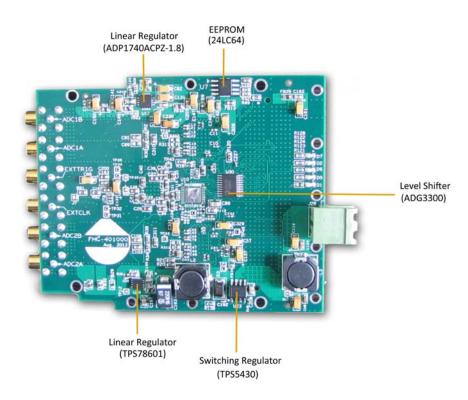
Email: info@niksoo.com





## **Board Features**





Support: support@niksoo.comwww.niksoo.com

Email: info@niksoo.com

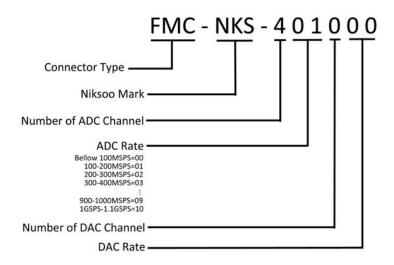




# **Compatibility Table**

Platform	Compatibility
FMC-NKS016-PCIE-A	Yes
FMC-NKS106-PCI-A	Yes
FMC-NKS-V106-A	Yes
VITA57.1 Carrier Cards	Yes

# **Order Information**



Email: info@niksoo.com