

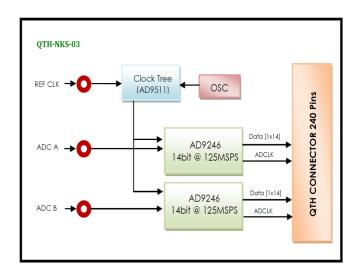
## QTH-NKS-03 High Pin Count QTH Module

# 2- Channel 14-bit ADC 125MSPS

### **Description**

The QTH-NKS-03 is a dual-channel 14-bit ADC at 125MSPS that enable simultaneous and high speed sensitivity. This module was designed based on one-channel AD9246 ADC of Analog Device Company with LVCMOS outputs. 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 QSH/QTH standard; therefore it can have the maximum data throughput and minimum latency.

### **Functional Block Diagram**



#### **Features**

- 2 Channels, 14-bit Resolution, 125 MSPS
- SNR = 69 dBFS @ 70 MHz and 125 MSPS
- SFDR = 84 dBc @ 70 MHz and 125 MSPS
- ENOB = 11.3 Bits @ 70 MHz and 125 MSPS
- Analog Input Filter Options
- Flexible Analog Input: 1V p-p to 2V p-p Range
- Serial Port Control: Programmable Clock and Data Alignment
- 1.8V Analog Supply Operation
- Xtalk Isolation >90 dB
- 1.8V to 3.3V Output Supply
- High Performance AC-Coupled Analog Input
- Phase Matched Clocking (On-board a Clock Distributer)
- Differential Input with 650MHz Bandwidth
- On-board 125 MHZ Crystal Oscillator
- QTH Interface Connector for Digital Output, Power LEDs and Single-ended MCX Connector for AIN & EXTCLK
- Direct ADC Connection to Host FPGA Ensures
- Maximum Throughput
- Physical Dimensions (L: 120.7 mm, W: 92.2 mm)
- Pin-Compatible with the AD9233
- Industrial Temperature Range (-40°C to 85°C)

## **Application**

- RADAR/SONAR
- Communication
- Imaging
- Medical Equipments
- Ultrasound Systems



# **Compatibility Table**

# **Order Information**

NIKSOO Platform	Compatibility
NKS-V5-PCIE-A	Yes
FP-NKS-01-A	Yes
NKS-V5-PCI-A	Yes
FMC-NKS106-PCI-A	Yes
FMC-NKS016-PCIE-A	Yes

