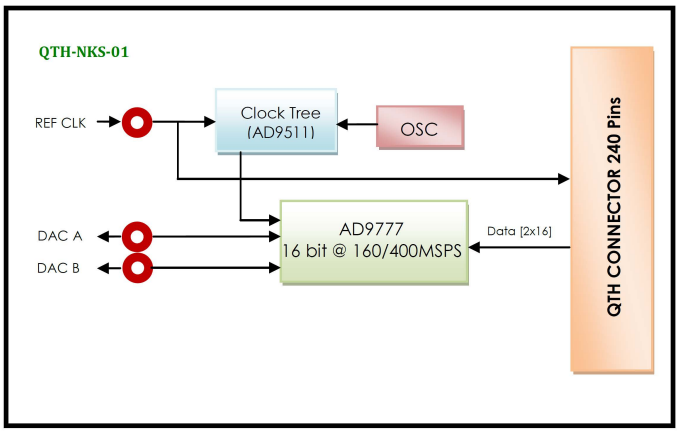
QTH-NKS-01 Digital to Analog Converter Module

2-channel 16-bit DAC 160MSPS

Description

The QTH-NKS-01 is a dual-channel 16-bit DAC at 160MSPS (no interpolation) synchronous and maximum sampling rate of 400MSPS (8x interpolation). This module was designed based on dual-channel AD9777 DAC of Analog Device Company with LVCMOS inputs. 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, 16-bit Resolution I/Q, 160/400 MSPS DAC Converter
- 3.3V Analog Supply Operation and 3.3V Output Supply
- SFDR = 80 dBFS @ 10 MHz & 20 MHz Bandwidth
- Programmable Channel Gain Over 1 dB Range in 0.01 dB Increment and Offset Adjustment
- Serial Port Control: Programmable Clock and Data Alignment
- On-chip 1.2 V Reference
- Internal PLL Clock Multiplier & Selectable Internal Clock Divider
- Versatile Clock Input
- Selectable 2×/4×/8× Interpolating Filter
- fs/4, fs/8 Digital Quadrature Modulation Capability
- Dual-port or Single-port Interleaved Input Data
- Dual Differential Current Output (Iout=±20mA) Terminated to 50 Ohm
- A SAMTEC Interface Connector for Digital Output, Power LEDs and MCX Connector for AOUT & EXTCLK
- Phase Matched Clocking (On-board a Clock Distributer)
- On-board 160MHZ Ultra Low Phase Noise TCXO
- Physical Dimensions (L: 120.7 mm, W: 92.2 mm)
- Industrial Temperature Range (-40°C to 85°C)

Application

- Radar
- Communications
- Medical equipments
- Advanced Remote Control and Guidance Systems
- Detectors, Air force Equipments and GPS

Support: support@niksoo.com
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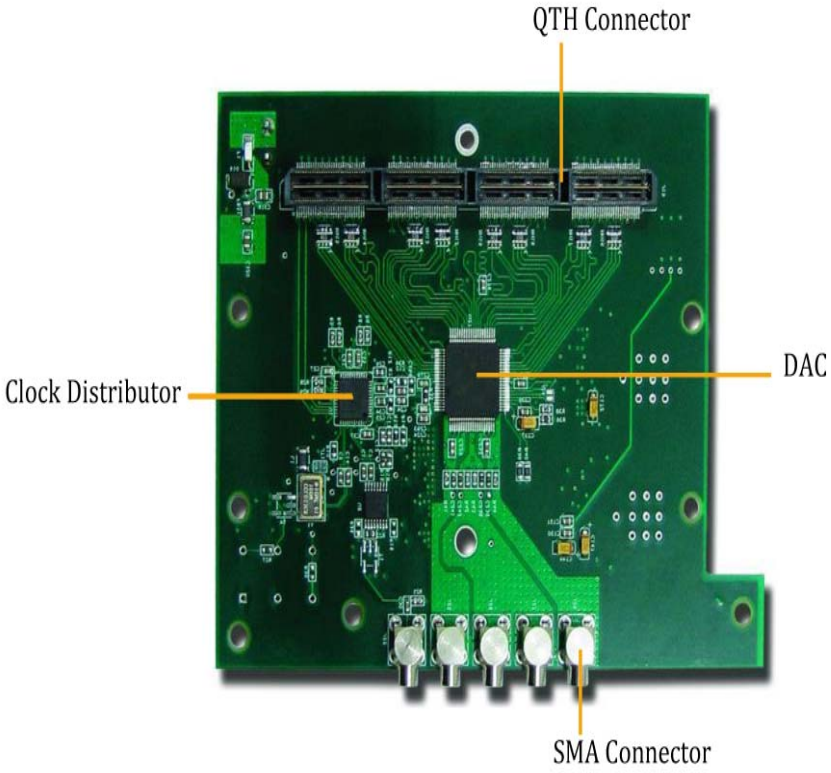
Board Features



Compatibility Table

NIKSOO Platform	Compatibility
SP-V4SX55-PCI-A	Yes
NKS-V5-PCIE-A-SX50T	Yes
NKS-V5-PCIE-A-SX95T	Yes
FP-NKS-01-A	Yes
NKS-V5-PCI-A	Yes
FMC-NKS106-PCI-A	Yes
FMC-NKS016-PCIE-A	Yes

Order Information