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NES-FMC-SDR6 FMC Mezzanine Module 6 CHANNEL RF IN PCI104 FOOTPRINT

HIGHLIGHTS

PCIe104 form factor

FMC HPC connector for interfacing with PCIe104z carrier

Six SMA Vertical RF input connectors – RF2-19A-T-00-50-G

Input frequency range 70 MHz - 6 GHz, input Bandwidth - tunable from 200 kHz to

56 MHz

Input LNA HMC8410LP2FE, NF = 1.6 (0.3 to 3 GHz); Gain <= 17.5 dB (parameters from IC datasheet)

Six SMA Vertical RF output connectors

Output frequency range 50MHz - 6 GHz, TX EVM <= - 40 dB

Maximal output power 8 dBm at 800 MHz, 7.5 dBm at 2.4 GHz



RELATED PRODUCTS

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HIGHLIGHTS

Built-in fractional LO synthesizer, tuning step - 2.4 Hz

Built-in GNSS module LEA-8MT, for precision timing reference

GNSS antenna, passive or active via one SMA connector

One external Trigger input via SMA connector - logic signal

One external reference clock input via SMA connector ranging from 10-80 MHz

Internal 40 MHz OCXO, +-100ppb, as an option can be used 40 MHz TCXO

Dual row 14 -pin IO header with 6 six LVDS signals connected to the FMC

Power consumption: 12V - Max 0.6A, 3V3 - Max 2A, VADJ - Max 0.1A

Supported VADJ voltage 1.2V, 1.8V, and 2.5V

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DESCRIPTION

NES-FMC-SDR6 is an RF FMC module with Six RF channels (options for 2 and 4) of Rx/Tx in PCIe104 form factor. This module is electrically compliant to Vita57.1 HPC standard but mechanically is not. The module is based on AD9361 RF Agile Transceiver, with LNAs at RX channels. The platform is intended for prototyping and development of software-defined radio systems, beamforming, angle of arrival systems, femtocell/picocell/microcell base stations.

This module can attach to our NES-PCIe104 board for processing power. A complete solution for setting up the RF ICs, clocks, and capturing the waveforms is available including the ADI Linux kernel for the ARM on NES-PCIe104 and our custom IP core for the PL side.

Order Part Number:

- NES-FMC-SDR2
- 2 Channel RF FMC Module in PCI104 Footprint 4 Channel RF FMC Module in PCI104 Footprint
- NES-FMC-SDR4
- 6 Channel RF FMC Module in PCI104 Footprint - NES-FMC-SDR6