



NES-FMC-DAC4

FMC Mezzanine 4 CHANNEL DAC

► HIGHLIGHTS

Two AD9172 dual 16-bit 12GSPS Digital to Analog Converter, JESD204B based.

HMC7044 – High performance 3.2GHz JESD204B jitter attenuator

Six connectors, SSMC type:

- Four connectors for DAC output signals
- One for reference clock
- One Trigger input

JESD204B Subclass 1 capable

100 MHz onboard VCXO

10 MHz onboard TCXO as reference clock, or external user reference clock

Vadj supported voltages: 1.8V, 2.5V, 3.3V

FMC+ connectors

First connector – HPC FMC+ mezzanine connector (ASP-184330-01) will use LA banks for digital interface, 16 Ten-gigabit pairs will be used to transmit data from a carrier to DACs.

Second connector – HPC FMC+ carrier connector (ASP-184329-01) provide piggyback connectivity of NES-FMC-ADC4 board.

Input type: DC – coupled, single-ended, 3.3V logic, ESD protected

Input impedance : >100 kOhm

RELATED PRODUCTS





NES-FMC-DAC4

FMC Mezzanine 4 CHANNEL ADC

► HIGHLIGHTS

Frequency range: DC – 10 MHz;

Maximum input voltage – 3.3V;

Logic “0” voltage <0.4V

Triggering voltage >1V.

NES-FMC-DAC4 is a four channels DAC module based on the industry-standard FMC+ standard. It utilizes two onboard AD9172 for Digital to Analog Conversion, and interfaces work through the JESD204B IP core. This module is an advanced High-speed Digital to Analog converter in the market with a 16-bit resolution capable of a sample rate at 12.6 GSPS and has dual channels in a single package. Each DAC IC can be configured via the SPI interface separately.

The module includes an HMC7044 – High-performance 3.2GHz JESD204B jitter attenuator for obtaining the best results. Onboard the module is a 100 MHz onboard VCXO; and 10 MHz TCXO as reference clock, or external user reference clock;

To maximize utilization of FPGA carrier card transceivers, NES-FMC-DAC4 has a carrier-type FMC+ connector on the solder side. So an NES-FMC-ADC4 can be piggy-backed by this module which means, all 16 Rx and TX transceivers of carrier cards can be used. This feature is the optimization of transceivers' use offered by this module. On one FMC+ site, a four-channel DAC and a four-channel ADC can coexist and provide substantial savings in space and resource use.

Order Part Number:

- NES-FMC-DAC-4 FMC+ Mezzanine Module 4 channel DAC equipped with two AD9172