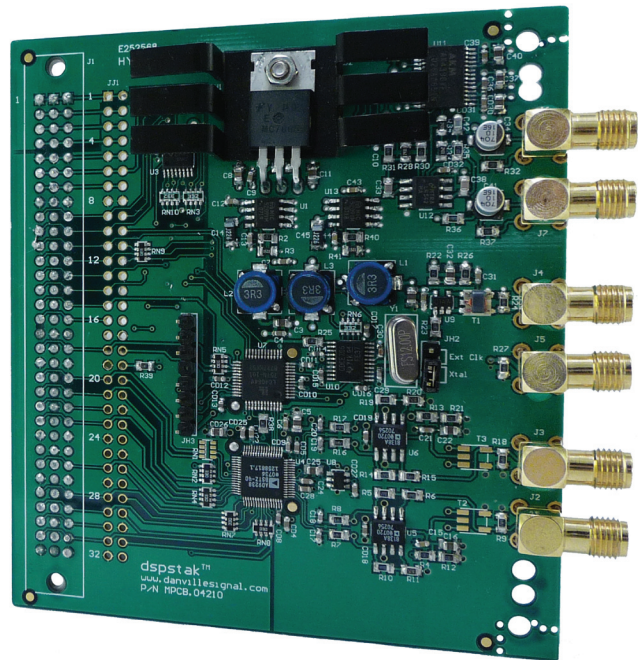


dspstak™ a9248

- **Dual 50 Ohm Inputs (SMA Connectors)**
- **Up to 25M/s Sample Rate in Two Channel Mode**
- **Up to 40M/s Sample Rate in Single Channel Mode**
- **On-board Programmable Clock for External Clocking**
- **External Trigger**
- **SPI Expansion Interface**
- **Simultaneous Sampling of Both Channels**
- **Fast Sample and Hold Suitable for Undersampling Applications**



The dspstak a9248 high speed I/O module is a two channel ADC based on an Analog Devices' AD9248 14 bit A/D converter. The board is designed to interface with Danville's dspstak 21369 or dspstak 21369+FPGA DSP Engines using the PDAP interface.

The internal clock is based on a Texas Instruments' CDCE706 programmable clock. The frequency can be changed via software control using the DSP's I2C interface. The external trigger synchronizes to the sample clock so that the A & B channels are always correctly aligned in two channel mode.

Each channel has overload indication. Data may be either two's complement or offset binary format. In single channel mode, either the A or B channel may be selected. In dual channel mode, each channel is sampled simultaneously with the same clock. This is particularly important for I/Q applications.

The dspstak a9248 includes a two channel audio sigma delta DAC capable of samplings as high as 200k/s.



Product Variations:

dspstak a9248 - (Transformer Inputs)	P/N A.04211A-1
dspstak a9248 - (Amplifier Inputs)	P/N A.04211A-2

Key Components:

Analog Devices AD9238
AKM AK4396A
Analog Devices AD8138 (Amplifier Input Option)
Texas Instruments CDCE706

Connections:

Inputs:	50 ohm SMA
Outputs:	50 ohm SMA
External Clock:	50 ohm SMA
External Trigger:	50 ohm SMA

Operating Temperature:

-40 to +85 C

Size:

100mm x 87.8mm (3.937" x 3.458")
Height: 16.55mm (0.65") above PCB
PCB Thickness: 1.6mm

Companion dspstak Engines:

dspstak 21369zx	P/N A.09369B-1
dspstak 21369zx with ICE	P/N A.09369B-1-ICE
dspstak 21369cy25	P/N A.12369-25
dspstak 21369cy25 with ICE	P/N A.12369-25-ICE
dspstak 21369cy05	P/N A.12369-05
dspstak 21369cy05 with ICE	P/N A.12369-05-ICE



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