

XTREME I/O EXPRESS ADC-DAC ANALOG I/O

PART NUMBER: DAG103, DAG104, DAG106

Connect Tech's Xtreme I/O Express ADC-DAC is an analog and digital peripheral board for the PCIe/104 small form factor embedded market place. This product is ideal for data acquisition, measurement and control applications.

The Xtreme I/O Express ADC-DAC supports harsh environments with demanding conditions with an extended temperature range of -40°C to +85°C.



FEATURES

- 32 single ended analog inputs with 16-bit resolution, 500ksps sampling rate and a wide input voltage range up to $\pm 10V$
- 16-bit bi-directional digital I/O with selectable voltage ranges
- DAC static, waveform and PWM output configuration modes
- 4 analog output channels with 16-bit resolution and a wide output voltage range up to ±10.24V
- ADC static and FIFO waveform capturing modes

SPECIFICATIONS			
Form Factor	PCle/104	Dimensions	Fully PCle/104 compliant: 3.775" x 3.550"
Temperature	-40°C to +85°C (-40°F to +185°F)	Operating Systems	Windows, Linux
ANALOG INPUTS		ANALOG OUTPUTS	
Channels	32 Single Ended, split into 4 groups of 8	Channels	4
Resolution	16-bit	Resolution	16-bit
Sampling Rate	500 Ksps (per channel) 62.5 Ksps (per group)	Setting Time	6 µs
Ranges	Bipolar: ±10.24V, ±5.12V and ±2.56V Unipolar: 0 - 10.24V and 0 - 5.12V	Ranges	Unipolar: 0V to 15V Bipolar: ±10V
Protection	±20V	Accuracy	1LSB INL and DNL
Impedance	1 ΜΩ	Drive	±3mA
Sample & Hold	N/A	DIGITAL I/O	
Accuracy	DNL: ±0.5 LSB, INL; ±0.75	Input/Output Ranges	Hardware selectable +3.3V or +5V(TTL/CMOS)
Signal-to-Noise Ratio	92 dB; TDH: -102 dB	High Current	24mA



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