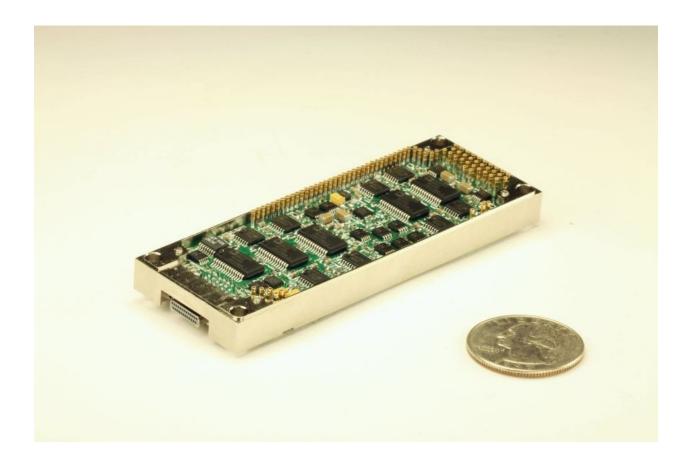


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MICRO PCM ENCODER SERIES MODEL MI_SG_ADD8 8 CHANNEL SIGNAL CONDITIONING ADD ON MODULE

The MI_SG_ADD8 module was designed to be used with the 4 Channel module, MI_SG4. This increases the number of programmable signal conditioning channels to 12. The MI_SG_ADD8 add on module "MUST STACK ON TOP" of the MI_SG4 module. Each channel has its own ADC.



Electrical Specifications:

Analog Inputs:

8 Differential Inputs with full signal conditioning, programmable simultaneous sampling.

Gain: High resolution programmable with >16,000 possible gains from 0.5 to 5,000.

Offset: High resolution programmable with >8,000 offsets from -4.5V to +4.5V.

Anti Aliasing Filters: High resolution programmable 4 pole Butterworth with >8,000 cutoff frequencies from 3 Hz to 20 kHz.

Allowable input signal levels on either input from -5V to +5V.

Maximum Input \pm 40 volts will not damage any analog input.

Input Impedance: 1.0 Gig ohm (Power On)

System Gain Accuracy: $\pm 0.2\%$ maximum over the operating temperature range.

A/D: 1 per channel, 16 Bits, 0 + 5.0 Volts, DC to 1 Mega samples per second.

Fir Filters:

Each channel has its own independent programmable FIR filter with programmable tap length from 16 to 1024. These filters can be turned on or off on an individual channel basis. Independent oversampling rates are programmable for each channel. Canned FIR filters are provided or the user can design FIR filters and download with PC design SW included.

Environmental:

Operating Temperature:	-40° C to $+85^{\circ}$ C
Storage Temperature:	-55°C to +125°C
Humidity:	Relative humidity of 85% for two hours at 65°C.
Altitude:	Unlimited
Vibration:	20g's RMS from 5 to 2000Hz in each major axis.
Acceleration:	Constant acceleration of 100g's in each axis.
Shock:	100g's for 10m second in each major axis.

Mechanical:

Size:

Length Width Height	inches 3.50 1.25 0.291	mm 88.9 31.75 7.39
Weight:	26 g	
Engraving:	MI_SG4	

MI_SG_ADD8 PINOUT

J1 CONNECTOR : AIRBORN, NK-2E2-025-325-TH00

MATE: AIRBORN, NM-222-025-261-JCAC

<u>PIN</u>	FUNCTION	PIN	FUNCTION
3	IN5+	20	IN9+
1	IN5-	19	IN9-
2	AGND	8	AGND
16	IN6+	22	IN10+
15	IN6-	21	IN10-
14	AGND	10	AGND
7	IN7+	13	IN11+
5	IN7-	11	IN11-
4	AGND	12	AGND
18	IN8+	25	IN12+
17	IN8-	23	IN12-
6	AGND	24	AGND
9	NC		