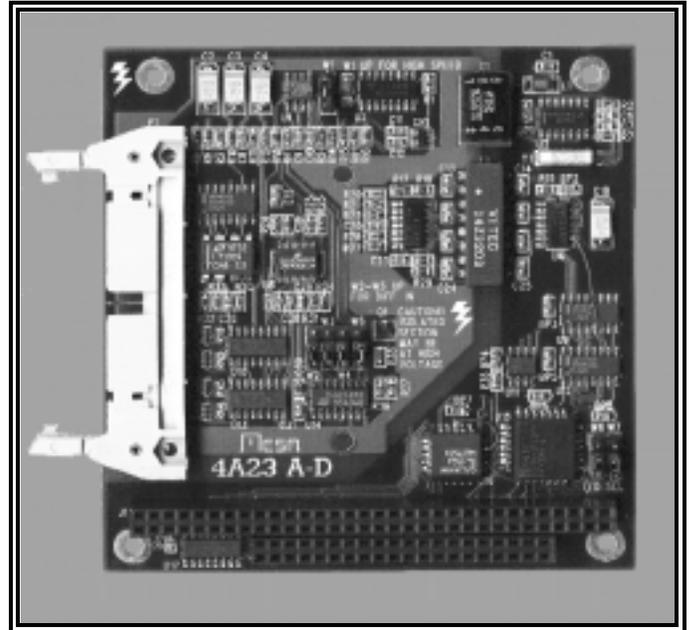


4A23 20 BIT DELTA-SIGMA A-D

- **20 bit resolution**
- **6 programmable input ranges**
- **500V input isolation**
- **16 single ended or 8 diff. Inputs**
- **Chopper stabilized input amplifier**
- **EEPROM calibration storage**
- **Polled or driven interrupt mode**
- **On card temperature sensor**
- **Low power consumption**
- **Made in USA - local support**
- **2 year warranty**



The 4A23 is a high resolution, low power, delta-sigma, A-D card for the PC/104 bus. 8 differential or 16 single ended inputs are provided.

The inputs have 500V isolation from system ground for noise elimination and to permit floating measurements.

The 4A23 has 5 programmable input ranges: 25 mV, 50 mV, 100 mV, 1V, 2.5V, and 5V full scale. All ranges except the 5V range can be bipolar.

A-D input is conditioned with a chopper stabilized instrumentation amplifier for minimum offset drift < 50 nV/°C. A high quality reference is used to insure overall gain stability of < 10 PPM/°C

Conversion rate can be programmed from 3.76 Hz to 202 Hz, with higher rates trading off conversion rate for noise.

The 4A23 can be run in polled or interrupt driven modes, allowing background data acquisition. Interrupts 2,3,4,5,7,10,11, or 12 can be used

All calibration information is stored in an on card EEPROM, so no zero or full scale calibration potentiometer are needed.

The low overall power consumption (>300 mW) reduces thermocouple induced offsets that can cause problems in lower input ranges.

An on-card temperature sensor is available for thermocouple cold-junction compensation.

Driver software for background data collection is provided, as is source code for driver and example programs.

The 4A23s reference voltage is brought out to the input connector for ratiometric type applications.

4A23 CONNECTOR PINOUT:

PIN#	SIGNAL	PIN#	SIGNAL
1	SHIELD GND	18	AIN13
2	SHIELD GND	19	AIN14
3	AIN0	20	AIN14
4	AIN1	21	SHIELD GND
5	AIN2	22	SHIELD GND
6	AIN3	23	INPUT GND
7	AIN4	24	INPUT GND
8	AIN5	25	VREF (2.5V)
9	AIN6	26	VREF (2.5V)
10	AIN7	27	INPUT GND
11	SHIELD GND	28	INPUT GND
12	SHIELD GND	29	MBIT2
13	AIN8	30	MBIT3
14	AIN9	31	MBIT4
15	AIN10	32	-7 UNREG (5 mA max)
16	AIN11	33	SHIELD GND
17	AIN12	34	+7 UNREG (5mA max)

ORDERING INFORMATION:

4A23 PC/104 20 BIT DELTA-SIGMA A-D CARD

Add -I for industrial temperature range.