

AX10410



Features

- * PC/104 standard expansion module
- * Compatible with Keithley Metrabyte DAS-16G
- * Programmable gains: 1, 2, 4 and 8
- * 16 Single-ended or 8 differential analog inputs with 12-bit resolution
- * Up to 90KHz sampling rate through DMA mode operation
- * 2 channels of 12-bit D/A output
- * 8-bit TTL/DTL compatible inputs and outputs
- * 1 channel counter/timer
- * Software drivers containing Basic, C, Pascal and Windows 3.1, Windows 95/98/NT

General Description

The AX10410 is a member of PC/104 family. This module can be installed to any PC/104 CPU boards to become a high performance data acquisition and control system. It offers five most desired functions in a PC/104 form-factor package: Analog Input, Analog Output, Digital Input, Digital Output and Counter/Timer.

The AX10410 features 8 differential or 16 single-ended analog input with 12-bit resolution. The AX10410 has a maximum sampling rate of 90KHz. The AX10410 provides ranges for signal level inputs of +10V, +5V, +2.5V, +1.25V for unipolar and +-10V, +-5V, +-2.5V, +-1.25V for bipolar. The transfer of data can be accomplished in 3 ways: by software trigger, interrupt service routine or DMA.

In addition to its analog inputs, the AX10410 also provides two channels of 12-bit analog output. The D/A converter may be operated with internal reference voltage +-5V bipolar or 0 to 10V unipolar.

16 bits of digital I/O are available on the AX10410. Eight bits of digital output and eight bits of digital input are brought out through the AX10410's 50-pin connector.

Specifications

- * Laboratory Automation
- * Signal Analysis
- * Chromatography
- * Process Control n Specifications Analog Input Subsystem
- * Number of inputs:
16 S.E. or 8 D.I.
- * Resolution: 12-bit
- * Gain: 1, 2, 4, 8
- * Input Range:
Unipolar: 0-1.25, 2.5, 5, 10V
Bipolar :
* 1.25,
* 2.5,
* 5,
* 10V
- * Sampling Rate: 90KHz max.
- * System Accuracy (Gain=1): +-0.03% FSR
- * Channel Acquisition Time to +-1/2 LSB Gain=1, 2, 4, 8: 9 us

- * A/D Conversion Time: 10us
- * Input Impedance
- Off Channel: 100M Ω , 20pF
- On Channel: 100M Ω , 20pF
- * Maximum Input Voltage Without Damage
- Power On: 35V
- Power Off: 20V
- * Common Mode Rejection Ratio:
- Gain=1 : 90dB
- * Integral Nonlinearity: 1 LSB
- * Number of Interrupts: 1
- * Channel of DMA: 1 or 3
- Analog Output Subsystem
- * Number of Channel: 2
- * Output Ranges:
- *5V or 0 to +10V, internal reference supplied
- * Current Output Capacity:
- +5mA max.
- High Speed Multifunction Data Acquisition Module
- Digital I/O Subsystem
- * Digital Input Lines: 8
- * Digital Output Lines: 8
- * Logic Family: LSTTL
- * Input/Output Level:
- TTL/DTL compatible
- Counter/Timer Subsystem
- * Type:
- programmable interval timer counters Three 16-bit down counters
- * Clock Input: D.C. to 10MHz
- * Input Level:
- TTL, DTL, CMOS compatible
- * Output Range:
- 2.5MHz to 72 minutes/pls
- Power Requirement
- * +5VDC : 0.6A typ.
- Physical/Environmental
- * Dimensions: 95 x 90mm
- * Weight: 130g
- * Relative Humidity:
- 0 to 90%, non-condensing

Ordering Information

- * AX10410
- High Speed Multifunction Data Acquisition Module, Gains: 1, 2, 4, 8, including user's manual, utility diskette with Basic, C, Pascal and Windows drivers
- Screw Terminal Panel
- * AX750
- General Purpose Screw Terminal Panel, with 1 meter cable and 50-pin connector, is a convenient connection interface for A/D, D/A and DIO signal
- Signal Terminal Panel
- * AX752
- 16 Channel Amplifier & Multiplexer Panel
- * AX757
- 8 Channel Relay Output & Optoisolated DI Panel
- Software Driver
- * AS59010
- DA&C Windows 3.1 Driver

- * AS59020
DA&C Windows 95/98 Driver
- * AS59040
DA&C Windows NT Driver
Third Party Software Package
- * LABTECH Series
 - * Supports DOS and Windows LABTECH driver
 - * Supports AXIOM data acquisition cards
- * LabVIEW
 - * Supports 16-bit and 32-bit LabVIEW driver
 - * Supports AXIOM data acquisition card
 - * Supports IDAM-7000 Series
- * DASYSLab
 - * Supports 16-bit and 32-bit DASYSLab
 - * Supports AXIOM data acquisition card