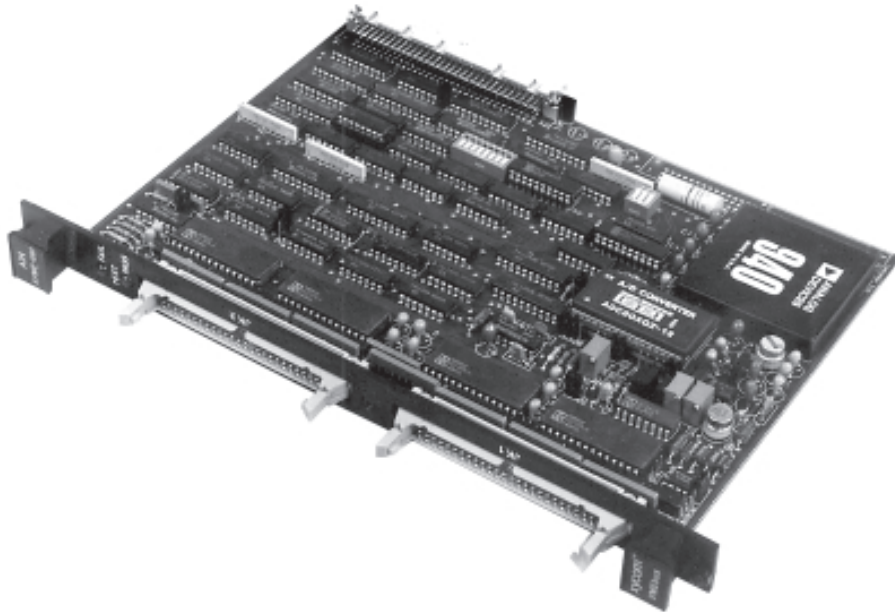


# XVME-560

## Analog Input Module



### Features

- 64 single-ended or 32 differential channels
- 12-bit input resolution
- On-board DC/DC converter
- Jumper-selectable voltage ranges: 0-5 V, 0-10 V,  $\pm 2.5$  V,  $\pm 5$  V, and  $\pm 10$  V
- Software-programmable gain: 1, 2, 4 or 8
- Can interrupt at any of seven VMEbus interrupt levels

### Applications

- Slide wires
- Analytical equipment
- Microphones
- RTDs and thermistors
- Temperature transmitters
- Strain gauges and load cells
- Tach generators

### Overview

The XVME-560 Analog Input Module is a powerful VMEbus-compatible analog input module capable of performing 12-bit A/D conversions on up to 64 different input channels.

The XVME-560 can be programmed to operate in one of four operating modes: random channel, sequential channel, single-channel, or external-trigger mode. After the completion of an A/D conversion, an optional interrupt may be generated.

The XVME-564 can sample unipolar and bipolar inputs, with voltage ranges of 0-5 V, 0-10 V,  $\pm 2.5$  V,  $\pm 5$  V, and  $\pm 10$  V. Programmable gains of 1, 2, 4, or 8 may be software-selected.

## Hardware Specifications

### Number of Channels

Single-ended	64
Differential	32

### A/D Input Full Scale Voltage Ranges

(Jumper-selectable)

Unipolar	0-5 V, 0-10 V
Bipolar	±2.5 V, ±5 V, ±10 V

### Software-Programmable Gain

1, 2, 4 or 8

### Effective Full-Scale Input Ranges

Unipolar	0-625 mV to 0-10 V
Bipolar	±312.5 mV to ±10 V

### Maximum Input Voltage

(without damage)

Power on	±44 V
Power off	±30 V

### Input Impedance

w/ 22M ohm resistor	17M ohm, min.
w/o 22M ohm resistor	100M ohm, min.

**Bias Current** ±100 nA, max.

**Input Capacitance** 225 pF, max.

**Operating Common Mode Voltage** +14 V

### Accuracy

Resolution	12 bits
Overall error	±1/2 LSB
Differential linearity	±1 LSB
System accuracy	
with Gain = 1	±0.025% of FSR
with Gain = 8	±0.05% of FSR

**Common Mode Rejection Ratio** 74 db, min

**Monotonicity** Guaranteed

### Speed

Conversion time	50 µsec
Throughput	20K conversions/sec

**Power Requirements** ±5 V typical, 2.00 A

## Warranty

The XVME-560 carries a two-year warranty.

## Environmental Specifications

### Temperature

Operating	0° to 65°C (32° to 149°F)
Nonoperating	-40° to 85°C (-40° to 185°F)

### Humidity

Operating:	20 to 80% RH, non-condensing
Nonoperating	20 to 90% RH, non-condensing

### Altitude

Operating	Sea level to 10,000 ft. (3048m)
Nonoperating	Sea level to 40,000 ft (12192 m)

### Vibration

Operating	5 to 2,000 Hz .015" (0.38 mm) peak-to-peak displacement 2.5g (max.) acceleration
Nonoperating	5 to 2,000 Hz .030" (0.76 mm) peak-to-peak displacement 5.0 g (max.) acceleration

### Shock

Operating	30 g peak acceleration, 11 msec duration
Nonoperating	50 g peak acceleration 11 msec duration

## VMEbus Compliance

Complies with VMEbus Specification, IEEE 1014

A16/A24:D16/D08(EO)DTB Slave

Interrupter - I(1)-I(7)(STAT), RORA

Interrupter Vector - D08(O)(DYN)

Utility Signals - SYSFAIL

Form Factor - NEXP

Conforms to Xycom Automation Standard I/O

Architecture

## Ordering Information

XVME-560: 64 SE/32 DI Channel Analog Input Module (with Programmable Gain)

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<http://www.xycomautomation.com/>

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