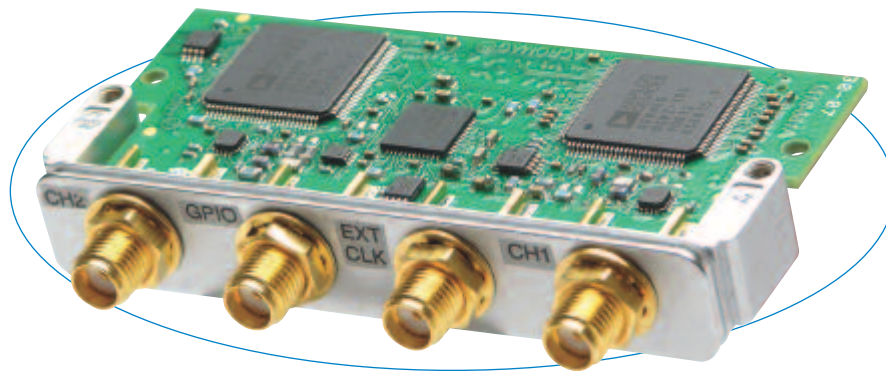


## AXM Series Analog Input (105MHz 16-bit A/D) Extension Modules



### Description

AXM Series extension modules offer numerous I/O options for Acromag's PMC modules with user-configurable FPGAs. These extension modules plug into the front mezzanine on the PMC-LX/SX, PMC-VLX, and PMC-VSX modules.

#### AXM-A30 Analog Input

This module features two 105MHz 16-bit A/D channels. An external clock and trigger can be used to control sampling.

An internal precision clock conditioner provides the functions of jitter cleaning/reconditioning, multiplication, and distribution of a reference clock.

Each clock distribution block includes a programmable divider, a phase synchronization circuit, and a programmable delay. This allows multiple integer-related and phase-adjusted copies of the reference to be distributed to multiple system components.

AXM extension modules attach to the PMC-LX/SX, PMC-VLX, and PMC-VSX module front mezzanine to provide I/O processing capabilities.

### Specifications

#### Analog Input

Input configuration: Two differential channels using two Analog Devices AD9460 A/D converter.

A/D resolution: 16 bits.

Input range: 3.4V peak-to-peak, centered at 0V, into a 50 ohm load.

External clock input: 3.3V peak-to-peak.

Input clock range: 1-105MHz.

Maximum throughput rate:

1 channel (max.): 9.5nS (105MHz).

2 channels (max.): 9.5nS (105MHz).

A/D trigger: External source, FPGA controlled.

Input clock controller: Precision clock conditioner combines the functions of jitter cleaning/reconditioning, multiplication, and distribution of a reference clock.

Signal-to-noise ratio: 69dB (25°C) typical.

Signal-to-noise and distortion: 67dB (25°C) typical.

General purpose I/O: Low voltage TTL.

#### Physical Dimensions

Size: 11.5 mm high x 31.0 mm deep x 74.0 mm wide  
(0.453 inches x 1.220 inches x 2.913 inches)

Stacking height: 5.0 mm (0.197 inches).

Complies with PMC Specification P1386.1 for a single-width PMC module when installed on a supported PMC module.

#### Connectors

Front field I/O: Four SMA PCB jack female receptacle connectors.

#### PMC Compliance

Plugs into Acromag PMC-LX/SX, PMC-VLX, and PMC-VSX modules

#### Environmental

Operating temperature: 0 to 70°C

Storage temperature: -55 to 105°C.

Relative humidity: 5 to 95% non-condensing.

Power: 4.5 Watts typical

MTBF: Consult factory.

### Ordering Information

#### AXM Plug-In I/O Modules

##### AXM-A30

2 analog input channels

##### AXM-??

Custom I/O configurations available, call factory.

#### PMC Modules

For more information, see data sheets

[PMC-LX](#)

[PMC-SX](#)

[PMC-VLX85/VLX110](#)

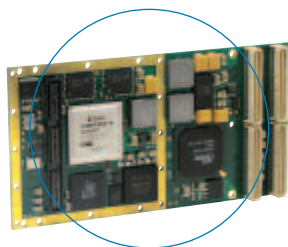
[PMC-VSX](#)

#### Software

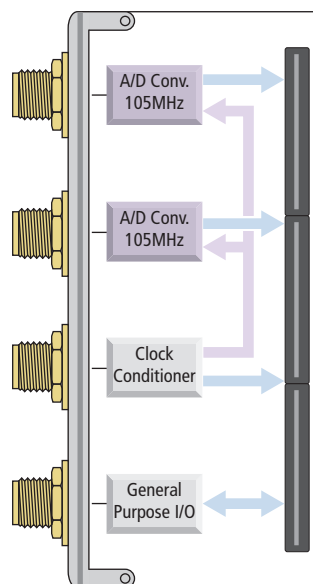
See [software documentation](#) in Catalog 8400-139 for details.

#### Accessories

See [accessories documentation](#) in Catalog 8400-139 for details.



AXM modules attach to PMC Modules with user-configurable FPGAs.



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