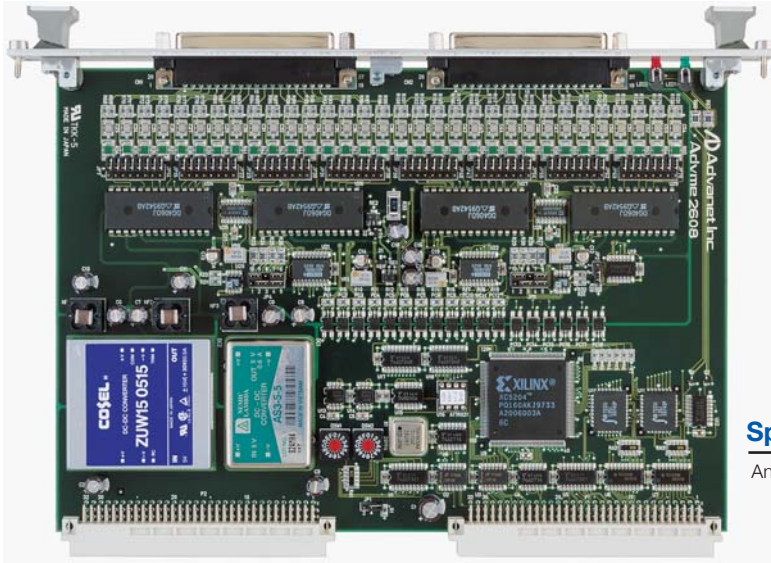# Advanet Inc.

Advme 2608
64-ch 16-bit A/D Board

Features

16-bit resolution A/D converter board with 64 singled-ended and 32 differential input channels

Jumper switch can be used to set the input range for all channels at once to one of the following ranges: ±10V, 0 to 5V or 0 to 10V

High resolution (16-bit) and multiple channels (64 channels)

Input channels are isolated from the VME bus

Internal state machine automatically performs A/D conversion, so there is no burden on the CPU

Built-in pacer clock means A/D conversion can be periodically performed

Built-in 512-word FIFO

Interrupt can be issued after scanning is completed

Operates from a single +5V power supply by VME bus

LED lamp indicates A/D conversion in progress and bus access

C-language sample program provided

Device driver for VxWorks available (option)

Specifications

Analog input

No. of channels : 64 channels (single-ended) or 32 channels (differential) (use short pin to set all channels at once)

Input range : Standard: ±10V, 0 to 10V, 0 to 5V
(use short pin to set all channels at once)
*0 to 20mA is available as an option when placing an order

Input impedance : Typ. 1MΩ

Input filter : 500Hz (-3dB)
(Other cutoff frequencies are optional when placing an order)

Input connector : Two 37-pin DSUB female connectors

FIFO : 512 words

Pacer clock : Minimum 1ms cycle,
Can be set in 1ms step increments up to 1sec.

A/D conversion

Resolution : 16-bit (15-bit no-miss code is guaranteed)

Trigger mode : Six A/D conversion trigger modes
• 32-channel batch conversion mode using program
• 64-channel batch conversion mode using program
• 32-channel batch conversion mode using external clock
• 64-channel batch conversion mode using external clock
• 32-channel continuous scan mode using pacer clock
• 64-channel continuous scan mode using pacer clock

Gain adjustment : Gain adjustment trimmer common to all channels

Offset adjustment : Offset adjustment trimmer common to all channels

Overall accuracy : ±0.1% (F.S. at 25°C)
(including gain error, offset error and linearity error)

Temperature characteristics : Typ. ±50ppm/°C, Up to ±100ppm/°C

Conversion time : Up to 30µs per channel
960µs (64-channel batch conversion)
480µs (32-channel batch conversion)

Isolation

Isolation method : Photo-coupler (between analog and digital circuits)

Withstanding voltage : Between input and system: AC500V for one minute
Between input and channels: non-isolated

Bus interface

VMEbus Revision C.3 compliant

A16: AM codes 29 and 2D D16: D08 (E0)

Power requirements : 5V±5% (supplied by VME bus) 0.76A

Board size (excluding protrusions)

262mm x 172mm x 20mm Double height, single width

Weight : TBD

Note: The following specifications and product appearance are subject to change for enhancement without notice.