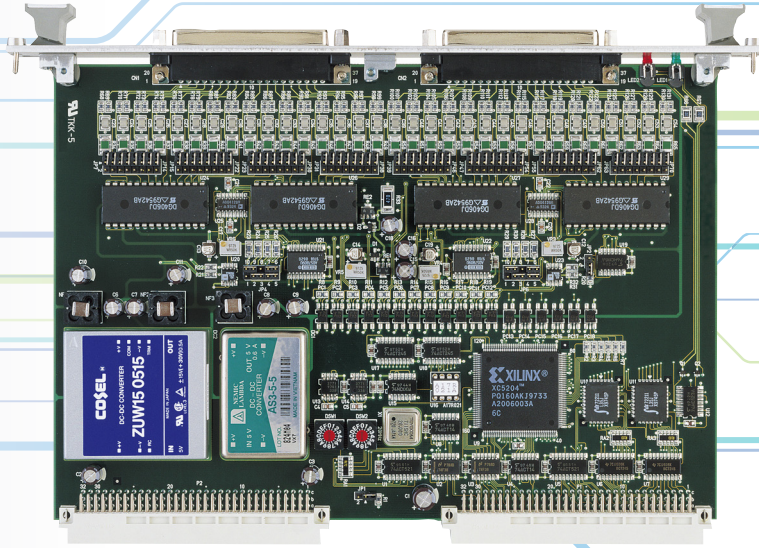


16-bit resolution A/D converter VME board

Advme2608A

High resolution (16-bit)
Multiple channels (64 channels)
512-word FIFO



FEATURES

Isolation – Input channels are isolated from the VMEbus

A/D Conversion – Internal state machine automatically performs A/D conversion. Built-in pacer clock allow A/D conversion to be periodically performed. Built-in 512-word FIFO is provided.

Interrupts – Interrupt generated after scanning is complete

LED – Light indicates A/D conversion in progress and bus access

Software – C-language sample program is provided.

Device Driver – Driver for VxWorks is available as an option.

- Defense
- Industrial
- Medical
- Transportation

The Advme2608 is a 16-bit resolution A/D converter VME 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: $\pm 10V$, 0 to 5V or 0 to 10V. Internal state machine automatically performs A/D conversion.

The Advme2608 is a 16-bit resolution A/D converter VME 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: $\pm 10V$, 0 to 5V or 0 to 10V. Operates from a single +5V power supply by VME bus

Isolation:

Input channels are isolated from the VME bus.

A/D Conversion

Internal state machine automatically performs A/D conversion.

Built-in pacer clock allow A/D conversion to be periodically performed.

Built-in 512-word FIFO is provided.

Other Features

Interrupt can be issued after scanning is completed.

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

C-language sample program is provided.

Device driver for VxWorks is available as an option.

System Architecture

ARCHITECTURE	<ul style="list-style-type: none"> • VME compliant
ANALOG INPUT	<ul style="list-style-type: none"> • Number of channels: 64 single-ended or 32 differential • Input range: <ul style="list-style-type: none"> -standard: $\pm 10V$, 0 to 10V, 0 to 5V -option: 0 to 20mA • Input impedance: 1MΩ typical • Input filter: <ul style="list-style-type: none"> -500Hz -3dB -other outoff frequencies are optionally available • Input connector: two 37-pin DSUB female connectors • FIFO: 512 words • Pacer clock: <ul style="list-style-type: none"> -minimum 1ms cycle -can be set in 1ms step increments up to 1s
A/D CONVERSION	<ul style="list-style-type: none"> • Resolution: 16-bit (15-bit no-miss code is guaranteed) • Trigger mode: Six A/D conversion trigger modes: <ul style="list-style-type: none"> -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: $\pm 0.1\%$ (F.S. at 25°C, including gain error, offset error and linearity error) • Temperature characteristics: $\pm 50\text{ppm}/^\circ\text{C}$ typical, up to $\pm 100\text{ppm}/^\circ\text{C}$ • Conversion time: up to 30μs per channel <ul style="list-style-type: none"> -960μs (64-channel batch conversion) -480μs (32-channel batch conversion)
ISOLATION	<ul style="list-style-type: none"> • Method: photo-coupler (between analog and digital circuits) • Withstanding voltage between input and system: 500V AC for one minute • Withstanding voltage between input and channels: non-isolated
BUS INTERFACE	<ul style="list-style-type: none"> • VME bus • Width complies with A16 D16/D08 (EO)
RoHS	<ul style="list-style-type: none"> • Compliant
POWER SUPPLY	<ul style="list-style-type: none"> • Single +5V DC
POWER CONSUMPTION	<ul style="list-style-type: none"> • 5W typical
MECHANICAL	<ul style="list-style-type: none"> • Dimensions: 6U – 262 x 172 x 20 mm (10.31" x 6.77" x 0.79") • Pitch: Single slot – 20.02 mm (0.79") • Weight: 300g typical
OPERATING TEMPERATURE	<ul style="list-style-type: none"> • 0° to 50°C
HUMIDITY	<ul style="list-style-type: none"> • 0 to 90% non-condensing
OPERATING SYSTEM SUPPORT	<ul style="list-style-type: none"> • VxWorks®
OPTIONS	<ul style="list-style-type: none"> • Cutoff frequencies of input filter • Device driver for VxWorks®

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