

30 KS/s 12-Bit Analog and Digital I/O Board for the ISA Bus

OME-A-8111



- ✓ 12-Bit A/D Converter
- ✓ 8 Single-Ended Input Channels
- ✓ 30 KS/s Sampling Rate
- ✓ One 12-Bit Analog Output Channel
- ✓ Software Programmable Gain: 1, 2, 4, 8, 16
- ✓ A/D Trigger Modes: Software Trigger, Pacer Trigger
- ✓ A/D Data Transfer Modes: Polling, Interrupt
- ✓ 16 Digital Inputs and 16 Digital Outputs

The OME-A-8111 is a 12-bit multi-function analog and digital I/O board for PC/AT compatible computers. The OME-A-8111 offers 8 analog input channels, plus one channel of analog output with 12-bit resolution. In addition, the OME-A-8111 has 16 digital inputs and 16 digital outputs. The OME-A-8111 provides gains of 1, 2, 4, 8, 16. It has a maximum sampling rate of 30 KS/s.

Software Development Kit

All boards are supplied with a standard software development kit for Windows 98/NT/2000/XP. The software development kit includes dll files for programming in C, C++ or other high level languages and OCX files for Visual Basic or Active X programming. LabView drivers are also included.

Specifications

Analog Input Channels:

8 single-ended channels

Input Range: $\pm 5V$, $\pm 2.5V$, $\pm 1.25V$, $\pm 0.625V$, $\pm 0.3125V$

Resolution: 12-bits

Conversion Rate: 30 KS/s

Input Impedance: 10 M Ω /6 pf

Overvoltage Protection: $\pm 35V$

Linearity: ± 1 bit

Sample & Hold: On chip

Zero Drift: ± 25 ppm/ $^{\circ}C$ of full scale



OME-A-8111 shown smaller than actual size.

D/A OUTPUTS

Channels: 1 independent

Type: 12-bit double buffers

Linearity: 0.006% FS

Output Range: 0 to 5V or 0 to 10V

Internal Reference: +10V or -10V

Output Driving: ± 5 mA

DIGITAL I/O

Input: 16 (LSTTL)

Input Low: $V_{IL} = 0.8V$ max

$I_{IL} = -0.4$ mA max

Input High: $V_{IH} = 2.0V$ min

$I_{IH} = 20$ μA max

Outputs: 16 channel TTL levels

Outputs Low: $V_{OL} = 0.5V$ max

$I_{OL} = 8$ mA max

Outputs High: $V_{OH} = 2.7V$ min

$I_{OH} = -400$ μA max

General Environmental

Power Requirements:

+5V @ 200 mA (max)

Operating Temperature:

0 to 50 $^{\circ}C$ (32 to 122 $^{\circ}F$)

Storage Temperature:

-20 to 70 $^{\circ}C$ (-4 to 176 $^{\circ}F$)

Humidity: 0 to 90% RH

non-condensing

Dimensions: 157 H x 106 mm W
(6.18 x 4.17")

To Order

Model No.	Description
OME-A-8111	30 KS/s 12-bit multi-function board
OME-DB-37	Direct connect 37-pin screw terminal board for analog I/O
OME-DN-37	37-pin D-Sub DIN rail mount I/O connector board (two 37-pin D-Sub connectors, one for expansion) for analog inputs, includes one 1 m (3') cable
OME-DB-889D	16-channel analog input multiplexer board, includes 1 m (3') cable
OME-DB-16P	16-channel Isolated digital input board, includes 1 m (3') cable
OME-DB-16R	16-channel relay output board, includes 1 m (3') cable
OME-DB-24C	24-channel open-collector output board, includes 1 m (3') cable
OME-DB-24SSR	24-channel SSR output board