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

OME-A-8111

1 YEAR WARRANTY

- ✔ **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**
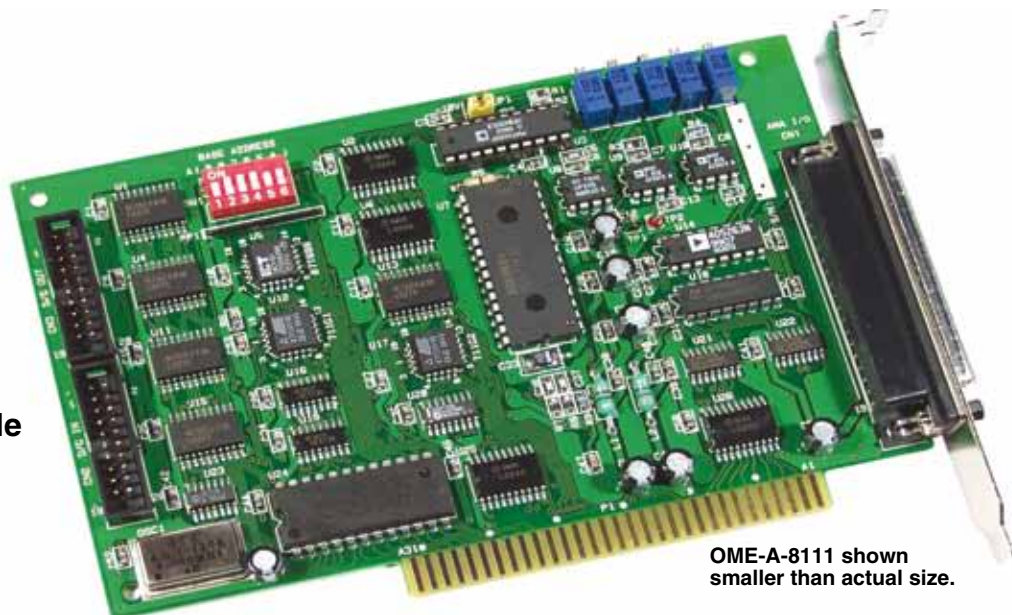
OME-A-8111 shown smaller than actual size.

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: $\pm5V$, $\pm2.5V$, $\pm1.25V$, $\pm0.625V$, $\pm0.3125V$
Resolution: 12-bits
Conversion Rate: 30 KS/s
Input Impedance: 10 MΩ//6 pf
Overvoltage Protection: $\pm35V$
Linearity: ±1 bit
Sample & Hold: On chip
Zero Drift: ±25 ppm/$°C$ of full scale

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: VIL = 0.8V max
IIL = -0.4 mA max
Input High: VIH = 2.0V min
IIH = 20 µA max
Outputs: 16 channel TTL levels
Outputs Low: VOL = 0.5V max
IOL = 8 mA max
Outputs High: VOH = 2.7V min
IOH = -400 µa max

General Environmental
Power Requirements:
+5V @ 200 mA (max)
Operating Temperature:
0 to 50°C (32 to 122°F)
Storage Temperature:
-20 to 70°C (-4 to 176°F)
Humidity: 0 to 90% RH non-condensing
Dimensions: 157 H x 106 mm W (6.18 x 4.17")

OMEGACARESM **Extended Warranty Program**

*OMEGACARE*SM *extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order. OMEGACARE*SM *covers parts, labor and equivalent loaners.*

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

All boards come complete with utility software and user's manual on CD-ROM.
***Ordering Example: OME-A-8111** 12-bit multi-function board and **OCW-1**, OMEGACARE*SM *1 year extended warranty for **OME-A-8111** extends standard 1-year warranty to a total of 2 years.*