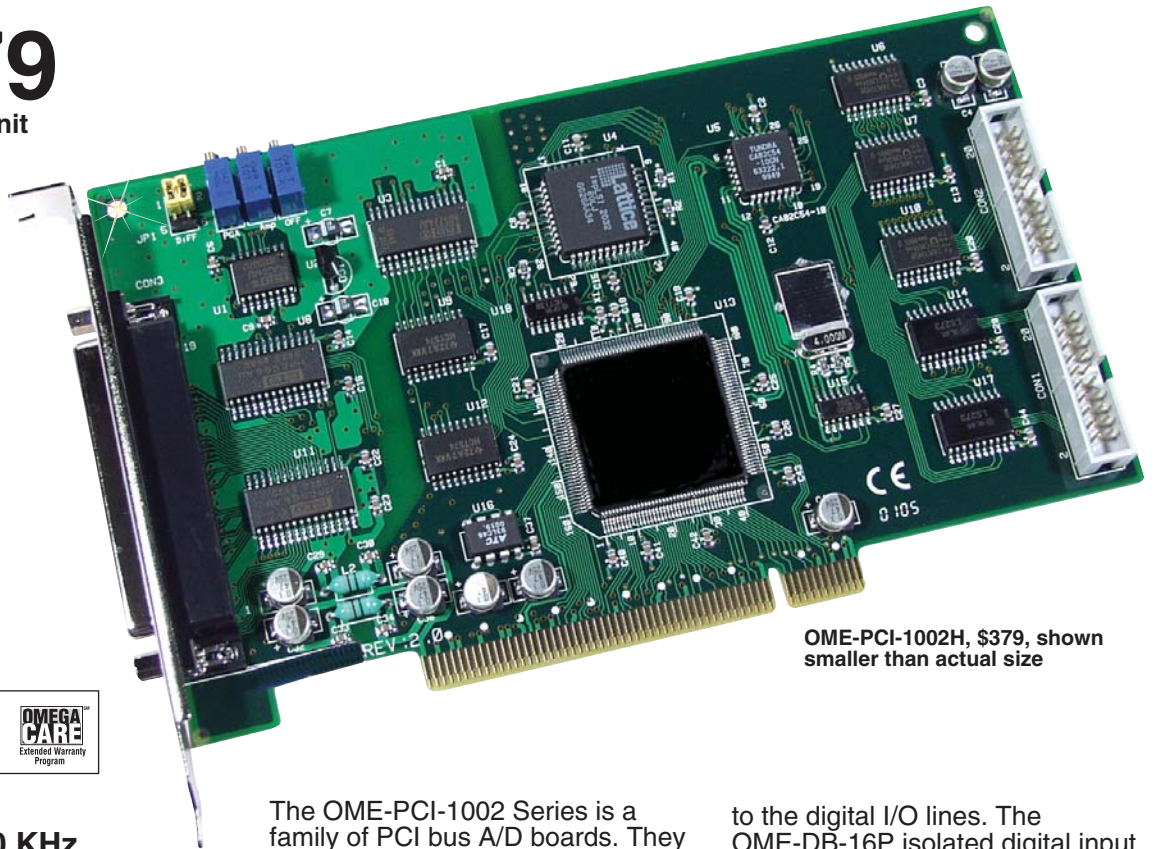


# 110 KS/s 12-Bit Low-Cost A/D Boards

## OME-PCI-1002L/OME-PCI-1002H

**\$379**

Basic unit



OME-PCI-1002H, \$379, shown smaller than actual size



- ✓ PCI Bus
- ✓ 12-Bit 110 KHz A/D Converter
- ✓ 32 Single-Ended/16 Differential Analog Inputs
- ✓ Sampling Rate:  
OME-PCI-1002L: 110KS/s  
OME-PCI-1002H: 40KS/s (Single Channel or Multiple Channels)
- ✓ Three Different External Triggers: Post-Trigger, Pre-Trigger, External Pacer Trigger
- ✓ 16 Digital Input and 16 Digital Output Channels
- ✓ OME-PCI-1002L: Programmable Low Gain: 1, 2, 4, 8
- ✓ OME-PCI-1002H: Programmable High Gain: 1, 10, 100, 1000
- ✓ Half-Size Board
- ✓ Includes Software Development Kit

The OME-PCI-1002 Series is a family of PCI bus A/D boards. They feature 110 KHz data acquisition under DOS and Windows. The boards provide 32 single-ended or 16 differential inputs, 16 digital input and 16 digital output channels.

The suffix "H" denotes a high-gain model and the suffix "L" denotes a low-gain model. The OME-PCI-1002 Series provides three flexible external trigger modes: post-trigger, pre-trigger, middle trigger.

### Software Development Kit

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

The OME-PCI-1002 includes 16-channels of digital input and 16-channels of digital output. An OME-DB-8025 screw terminal panel can be used to connect

to the digital I/O lines. The OME-DB-16P isolated digital input board and OME-DB-16R relay board can be used to connect the digital I/O on the OME-PCI-1002 to real-world signals.

### OME-PCI-1002H Input Ranges (High Gain)

Gain	Range	Throughput
1	±5 V	40 K/s
10	±0.5 V	40 K/s
100	±0.05 V	10 K/s
1000	±0.005 V	1 K/s

### OME-PCI-1002L Input Ranges (Low Gain)

Gain	Range	Throughput
1	±5 V	110 K/s
2	±2.5 V	110 K/s
4	±1.25 V	110 K/s
8	±0.625 V	110 K/s

## Specifications

### ANALOG INPUT SPECIFICATIONS

#### Channels:

OME-PCI-1002H, OME-PCI-1002L:  
32 single-ended/16 differential

#### Resolution: 12-bits

#### Max Conversion Rate:

OME-PCI-1002H: 40 KS/s

OME-PCI-1002L: 110 KS/s

Input Impedance: 10,000 MΩ/6pF

Overvoltage Protection: ±35 V

Accuracy: 0.01% of reading ±1-bit

Linearity: ±1-bit

### DIGITAL I/O

Inputs: 16 channels; TTL levels

#### Input Low:

$V_{IL} = 0.8 \text{ V max}$

$I_{IL} = 4 \text{ mA}$

#### Input High:

$V_{IH} = 2 \text{ V min}$

$I_{IH} = -20 \text{ } \mu\text{A max}$



OME-DB-16P, \$99, shown smaller than actual size

Outputs: 16 channels; TTL levels

#### Output Low:

$V_{OL} = 0.33 \text{ V max}$

$I_{OL} = 4 \text{ mA max}$

#### Output High:

$V_{OH} = 3.83 \text{ V min}$

$I_{OH} = -400 \text{ } \mu\text{A max}$

### TIMER COUNTER

#### Internal Pacer Timer:

16-bit, 8 MHz input

#### External Pacer Timer:

16-bit, 8 MHz input

#### Machine Independent Timer:

16-bit, 8 MHz input

### GENERAL ENVIRONMENTAL

#### Operating Temperature:

0 to 50°C (32 to 122°F)

#### Storage Temperature:

-20 to 70°C (-4 to 158°F)

#### Humidity: 0 to 90% RH

non-condensing

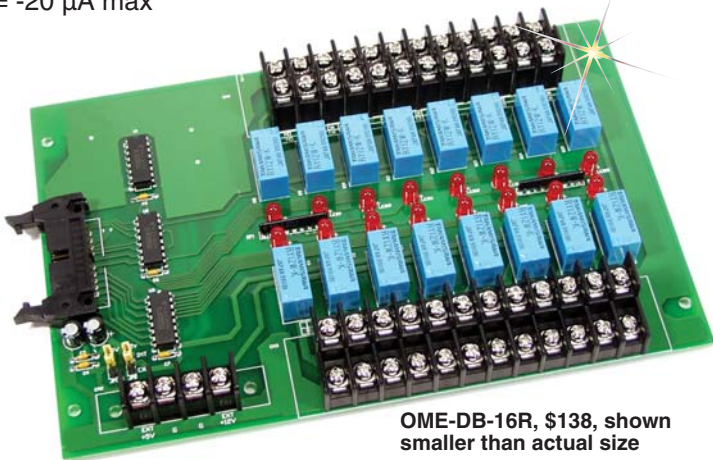
#### Dimensions: 175 L x 105 mm H

(6.9 x 4.1")

#### Power Requirements:

5 V @ 350 mA (max)

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



OME-DB-16R, \$138, shown smaller than actual size

**AVAILABLE FOR FAST DELIVERY!**

### To Order (Specify Model Number)

Model Number	Price	Description
OME-PCI-1002H	\$379	40 KS/s high gain, 12-bit analog and digital I/O board
OME-PCI-1002L	379	110 KS/s low gain, 12-bit analog and digital I/O board
OME-DB-1825/1	99	Screw terminal board for analog input channels with 1 m 37-pin D-Sub cable
OME-DB-1825/2	109	Screw terminal board for analog input channels with 2 m 37-pin D-Sub cable
OME-DB-8025	69	Screw terminal board for digital I/O, includes two 1 m 20-pin flat cable
OME-DB-16P	99	16-channel isolated digital input board, includes 1 m 20-pin flat cable
OME-DB-16R	149	16-channel SPDT relay board, includes 1 m 20-pin flat cables
OME-ADP-20/PCI	39	20-pin extender (extends the dual 20-pin digital I/O flat cable connectors on the board to the PC slot window), includes two 20-pin flat cables

Each OME-PCI-1002H and OME-PCI-1002L data acquisition board includes complete operator's manual on CD ROM and software development kit.

**Ordering Example:** OME-PCI-1002H, high-gain data acquisition board, OME-DB-8025, screw terminal board and OCW-1, OMEGACARE<sup>SM</sup> 1-year extended warranty for OME-PCI-1002H (adds 1 year to standard 1-year warranty), \$379 + 69 + 36 = \$484.



#### UNITED STATES

[www.omega.com](http://www.omega.com)  
1-800-TC-OMEGA  
Stamford, CT.

#### CANADA

[www.omega.ca](http://www.omega.ca)  
Laval(Quebec)  
1-800-TC-OMEGA

#### GERMANY

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Deckenpfronn, Germany  
0800-8266342

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0800-488-488

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#### CZECH REPUBLIC

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