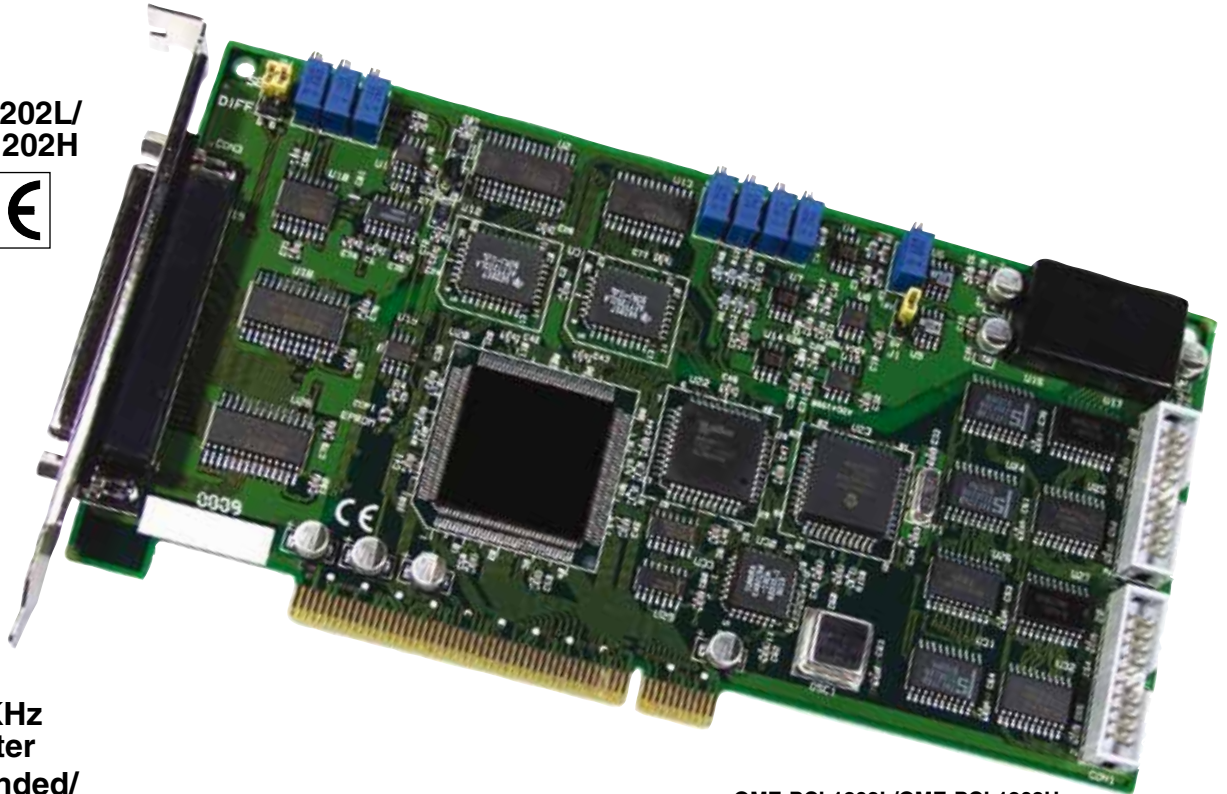


110 KS/s 12-Bit High Performance Analog and Digital I/O Boards

OME-PCI-1202L/
OME-PCI-1202H



- ✓ PCI Bus
- ✓ 12-Bit 110 KHz A/D Converter
- ✓ 32 Single-Ended/16 Differential Inputs
- ✓ 2 K Word FIFO Buffer
- ✓ 110 KS/s Maximum Sampling Rate:
OME-PCI-1202H-40KS/s;
OME-PCI-1202L-110KS/s
(Single Channel or Multiple Channels)
- ✓ Trigger Methods:
Software Trigger, Pacer Trigger, External Trigger
- ✓ External Triggers:
Post-Trigger, Pre-Trigger, External Pacer Trigger
- ✓ 16 Digital Input/16 Digital Output Channels
- ✓ OME-PCI-1202L Provides Programmable Low Gain: 0.5, 1, 2, 4, 8
- ✓ OME-PCI-1202H Provides Programmable High Gain: 0.5, 1, 5, 10, 50, 100, 500, 1000
- ✓ Two 12-Bit Independent Programmable DACs
- ✓ 2.7 M Word/High Speed Data Transfer Rate

The OME-PCI-1202 series is a family of high performance data acquisition boards for the PCI bus. They feature a continuous, 110 KHz, gap-free data acquisition under DOS and Windows. The OME-PCI-1202 provides 32 single-ended or 16 differential analog inputs.

Both the OME-PCI-1202L and OME-PCI-1202H provide software programmable input ranges. The OME-PCI-1202L offers low gain settings of 0.5/1/2/4/8. The OME-PCI-1202H offers high gain ranges of 0.5/1/5/10/50/100/500/1000. The OME-PCI-1202 contains two 12-bit D/A converts that can generate output voltages in the range of ± 5 or ± 10 V. Sixteen channels of digital input and 16 channels of digital output are also available.

Software Development Kit

All data acquisition boards are supplied with a standard software development kit for Windows XP/Vista/7. 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.

OME-PCI-1202L/OME-PCI-1202H shown smaller than actual size.

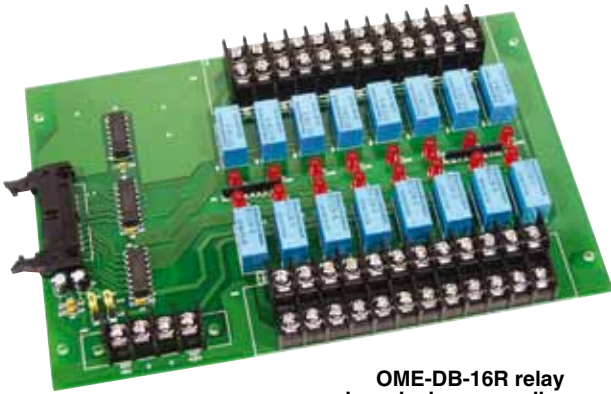
Specifications

ANALOG INPUT SPECIFICATIONS FOR OME-PCI-1202L AND OME-PCI-1202H

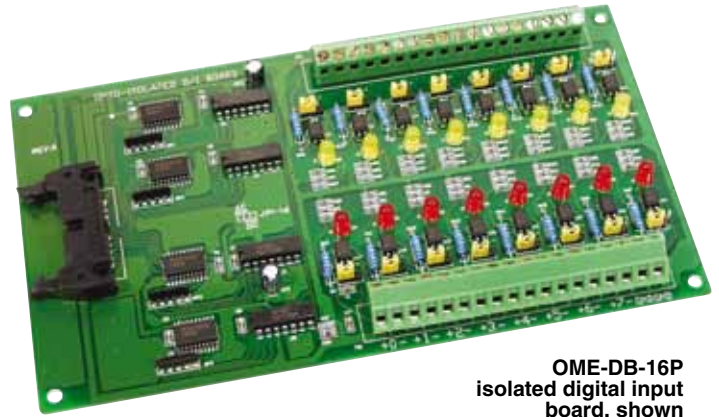
Input Channels: 32 S.E./16 Diff (jumper setting)
Input Ranges: See range table on next page
Resolution: 12-bits
Max Conversion Rate:
 OME-PCI-1202L: 110 KS/s
 OME-PCI-1202H: 40 KS/s
Input Impedance: 10,000M Ω // 6pf
Overvoltage Protection: ± 35 V
Linearity: ± 1 bit
On Board FIFO: 2 K
Programmable Gain: 0.5/1/2/4/8 (OME-PCI-1202L); 0.5/1/5/10/50/100/500/1000 (OME-PCI-1202H)

D/A OUTPUTS

Channels: 2
Type: 12 bit double buffers
Linearity: 0.06% FS
Settling Time: 0.4 mS
Output Range: ± 5 or ± 10 V
Output Current: ± 5 mA



OME-DB-16R relay board, shown smaller than actual size



OME-DB-16P isolated digital input board, shown smaller than actual size

DIGITAL I/O

Input: 16 channels; TTL levels

Input Low:

$V_{IL} = 0.8V$ max,
 I_{IL} low = 4 mA

Input High:

$V_{IH} = 2.0V$ min,
 $I_{IH} = -20 \mu A$ max

Output: 16 channels; TTL levels

Output Low:

V_{OL} low = 0.33V max,
 I_{OL} low = 4 mA max

Output High:

$V_{OH} = 3.84V$ min,
 $I_{OH} = -400 \mu A$ max

TIMER

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:

200 L x 105 mm H

(7.9 x 4.1")

OME-PCI-1202L Analog Input Ranges

Gains:	Bipolar(V):	Unipolar(V):	Throughput:
0.5	±10V	0 to 10V	110 KS/s
1	±5V	0 to 10V	110 KS/s
2	±2.5V	0 to 5V	110 KS/s
4	±1.25V	0 to 2.5V	110 KS/s
8	±0.625V	0 to 1.25V	110 KS/s

OME-PCI-1202H Analog Input Ranges

Gains:	Bipolar(V):	Unipolar(V):	Throughput:
0.5	±10V	0 to 10V	40 KS/s
1	±5V	0 to 10V	40 KS/s
5	±1V	0 to 1V	40 KS/s
10	±0.5V	0 to 1V	40 KS/s
50	±0.1V	0 to 0.1V	10 KS/s
100	±0.05V	0 to 0.1V	10 KS/s
500	±0.01V	0 to 0.01V	1 KS/s
1000	±0.005V	0 to 0.01V	1 KS/s

To Order

Model No.	Description
OME-PCI-1202H	32-channel high gain 12-bit A/D board
OME-PCI-1202L	32-channel low gain 12-bit A/D board
OME-DB-1825/1	Screw terminal board for analog input channels with 1 m (3.3') 37-pin D-Sub cable
OME-DB-1825/2	Screw terminal board for analog input channels with 2 m (6.6') 37-pin D-Sub cable
OME-DB-8025	Screw terminal board for digital I/O, includes two 1 m (3.3') cables
OME-DB-16P	16-channel isolated digital input board, includes 1 m (3.3') cable
OME-DB-16R	16-channel SPDT relay board, includes 1 m cable
OME-ADP-20/PCI	20-pin extender extender (extends the dual 20-pin digital I/O flat cable connectors on the board to the PC slot window, includes two 20-pin cables)
OME-DN-20	20-pin DIN rail mount I/O connector board (two 20-pin headers) for digital I/O, includes two 1 m (3.3') cables
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 (3.3') cable