100 KS/s & 200 KS/s 16-Bit High Performance Analogue and Digital I/O Boards OME-PCI-1602/OME-PCI-1602F





- ✓ PCI Bus
- ✓ OME-PCI-1602 16-Bit 100 KHz A/D Converter
- OME-PCI-1602F 16-Bit 200 KHz A/D Converter
- 32 Single-Ended/16 Differential Inputs8 K Word FIFO Buffer
- Trigger Methods: Software Trigger, Pacer Trigger, External Triggers
- External Triggers: Post-Trigger, Pre-Trigger, External Pacer Trigger

- ✓ 16 Digital Input/16 Digital Output Channels
- ✓ Programmable Low Gain: 0.5, 1, 2, 4, 8
- ✓ Internal/External Trigger
- ✓ Two 12-Bit Independent Programmable DAC's; 2 MHz Throughput per Channel (max)
- ✓ 2.7 M Word/High Speed Data Transfer Rate

The OME-PCI-1602/1602F series is a family of high performance and high resolution data acquisition board for the PCI bus. They feature a continuous, 100/200 KHz, gapfree data acquisition under DOS and Windows. The OME-PCI-1602 Series provides 32-channel single-ended or 16-channel differential analogue inputs, 2 analogue outputs, 16 digital input and 16 digital output channels.

Software Development Kit

All data acquisition 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. OME-PCI Series data acquisition boards are also compatible with the Dasylab Windows software.

Specifications

ANALOGUE INPUT SPECIFICATIONS

Input Channel: 32 S.E./16 Diff

Resolution: 16-bits Conversion Rate:

OME-PCI-1602: 100 KS/s max. OME-PCI-1602F: 200 KS/s max.

Range: ±10 V, ±5 V, ±2.5, ±1.25 V, ±.625 V

Input Impedance: 10,000 M Ω // 6pf ON Board FIFO: 8K

D/A OUTPUTS Channels: 2

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

DIGITAL I/O

Inputs: 16-channels; TLL levels

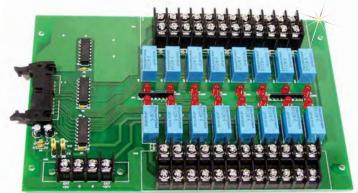
Input Low:

 V_{IL} low = 0.8 V max, I_{IL} low = 4 mA Input High:

 V_{IH} high = 2.0 V min, I_{IH} high = -20 μ A max

Outputs: 16-channels; TLL levels

Outputs: 16-channels; TLL Output Low: $V_{OL} = 0.33 \text{ V max}$, $I_{OL} = 4 \text{ mA max}$ Output High: $V_{OH} = 3.84 \text{ V min}$, $I_{OH} = -400 \text{ }\mu\text{A max}$



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

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
Power Requirements:
+5 V @ 350 mA (max)
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: 190 L x 105 mm H

(7.5 x 4.1")

Overvoltage Protection:

± 35 V

Linearity: ± 1.5 LSB Programable Gain:

0.5, 1, 2, 4, 8

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



OME-DB-16P, shown smaller than actual size

MOST POPULAR MODEL HIGHLIGHTED!

To Order (Specify Model Number)	
Model Number	Description
OME-PCI-1602/8K	100 KS/s 32-channel 16-bit A/D board
OME-PCI-1602F/8K	200 KS/s 32 channel 16-bit A/D board
OME-DB-1825/1	Screw terminal board for analog input channels with 1 m 37-pin D-Sub cable
OME-DB-1825/2	Screw terminal board for analog input channels with 2 m 37-pin D-Sub cable
OME-DB-8025	Screw terminal board for for digital I/O, includes two 1 m cables
OME-DB-16P	16-channel isolated digital input board, includes 1 m cable
OME-DB-16R	16-channel SPDT relay board, includes 1 m cable
OME-ADP-20/PCI	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 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 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 cable

Each OME-PCI-1602 and OME-PCI-1602F data acquisition boards include complete operator's manual on CD ROM, and software development kit.

Ordering Example: OME-PCI-1602/8K 100 KS/s 32-channel data acquisition board, OME-DB-1825/1 screw terminal board and OMEGACARE[™] 1 year extended warranty for OME-PCI-1602/8K (adds 1 year to standard 1 year warranty).

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Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters