

## PCI AND cPCI BOARDS

# ME630

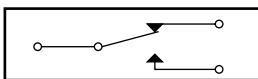
### Description

The ME630 Series Relay Boards are an all in one digital I/O card for PCs with a PCI bus. The boards provide 8 or 16 form 'C' relay contacts, TTL I/O signals, 8 optically isolated inputs and 2 interrupt inputs. Status readback lets the user verify each relays' position. Drivers are supplied for Agilent VEE, LabView, Linux, VxWorks, QNX, and Windows. Applications include industrial switching, test systems, control of power to the UUT, and to monitor digital signals.

The Compact PCI versions include optical isolation.

### Relay Contacts

The ME630 Series Relay Boards are available with 8 or 16 'C' SPDT relay contacts that open one circuit while closing another. The relay contacts are designed for low level signals yet switch high currents. The gold plating over silver contacts has an initial on resistance of 30 milliohms. This is ideal for switching low level analog or digital signals. When used with high currents up to 2 amperes, the gold burns off, exposing the high current silver contacts.



**Form C Relay Contacts**

For signals up to 100 mA use the standard ME-AKD78 Cables and MEAB-D78 Terminal Strip Box with Spring Clips. For currents over 100 mA, use the heavy duty MEAK-D78HQ Cable and ME-ABD78MSH Terminal Strip Box.

### Software Support

The ME630 Relay Boards include a full set of drivers for Windows NT, 2K and XP. Win 95/98 and Me are not supported. The drivers support Visual Basic, Visual C++, Delphi, Borland C/C++ Builder and Linux. C source code is available for Linux Kernels 2.2-2.4 and QNX kernels. Drivers are also available for LabVIEW, and Agilent VEE.



**ME630 Compact PCI and PCI Cards**

### Digital I/O

The ME630 Series Relay Boards have four types of digital input and output circuits for standard TTL and 24V industrial signals.

8 TTL input lines. Standard TTL levels.

16 TTL input/output lines organized as two 8-bit ports. Each port may be set as an input or output port.

8 optically isolated inputs that handle up to 24 volts. Isolation from PCI bus is >500 V

2 TTL interrupt inputs.



**ME630 PCI Card and ME-ABD78MSH Heavy Duty Terminal Box with Spring Clips**

### General Purpose PCI Relay Boards for PCs and compact PCI chassis.

- Adds 8 or 16 SPDT Relays to your computer. *Switch signals or control power.*
- Flexible Digital Lines *Sence, monitor and control digital signals.*
- Available Terminal Strips for connecting external signals. *Easy signal connection.*
- Plug&Play drivers support Visual Basic, C++, Delphi, Linux, LabVIEW and Agilent's VEE. *Works with virtually any test program.*

**CE** Approved



**ICSDataCom**  
division of Systems West Inc.

7034 Commerce Circle  
Pleasanton, CA 94588

▶ Phone: 925.416.1000  
Fax: 925.416.0105  
[www.icsdatacom.com](http://www.icsdatacom.com)

## ME630 SPECIFICATIONS

### Relay Contacts

Switch low level signals or high currents. Board includes relay status readback.

Type	Form C (SPDT)
Number	8 or 16 relays
Contacts	gold plated silver contacts
Initial res	30 milliohms
Current	2 A maximum
Voltage	30 V
Life	5 x 10 <sup>6</sup> cycles

### Digital I/O

Each board has the following types of digital signals.

#### 8 TTL Inputs

Logic '0' = 0 to 0.8 V at ± 10 μA  
 Logic 1 = >2.4 V at ± 10 μA

#### 16 TTL Input/Output lines

2 8-bit ports individually assigned as inputs or outputs

#### 8 optical isolated inputs

Logic '0' = 0 to 12 V  
 Logic '1' = 13 to 24 V  
 Isolation >500 V  
 Rate up to 1 KHz.  
 Filters usec transients

#### 2 TTL Interrupt Inputs

### PC Compatibility

PCI 32-bit, 33 MHz Standard PCI bus or compact PCI bus. PCI local bus is PCI 2.1 compliant. Works with all Intel type PCs with 5V PCI buses.

### Compatible Driver Software

#### Graphical Programs

Agilent VEE, LabVIEW

#### Languages

Visual C/C++, Visual Basic 6, Delphi, Borland C/C++ Builder

#### Systems

Windows NT/2K and XP  
 Linux Source for kernel 2.0 to 2.4  
 QNX Source for x87 systems  
 VxWorks 5.4.2

### CE Certification

EMC Directive 89/336/EMC  
 Emission EN 55022  
 Noise immunity EN 50082-2C

### Physical

#### Power consumption

5V at 850 mA for 16 relay card

#### Size

PCI 174 x 98 mm  
 cPCI 160 x 100 mm (3U hi)

#### Connector

Relay 78-pin D-Sub female connector  
 16 dig I/O 25-pin D-sub female connector on separate PC card bracket.

#### Temperature

Operating 0 to +70 °C  
 Storage 0 to +85 °C

#### Relative humidity

20 to 55% (not condensing)

### Included Items

8 or 16 Relay Board  
 Bracket with 25-pin connector  
 Manual on CD-ROM  
 Drivers for Windows NT/2K and XP  
 Drivers for VxWorks 5.4.2  
 Source code for Linux and QNX



**ME-ABD78M Terminal Box with Spring Clips**

## ORDERING INFORMATION

	Part Number
8 Relay PCI Board with 8 TTL inputs, 16 TTL I/O, 8 opto inputs and 2 IRQ inputs	ME630/8
16 Relay PCI Board with TTL and isolated digital lines	ME630
8 Relay cPCI Board with 8 TTL inputs, 16 TTL I/O, 8 opto inputs and 2 IRQ inputs	ME630C/8
16 Relay cPCI Board with TTL and isolated digital lines	ME630C
Cable, D78 male to D78 female connector, 1 meter long. 0.1 A current capacity	MEAK-D78/1
Cable, D78 male to D78 female connector, 2 meter long. 0.1 A current capacity	MEAK-D78
Terminal Box D78 male connector to spring terminals, 0.1 A current capacity	ME-ABD78M
Cable, D78 male to D78 female connector, 1 meter long. 2 A current capacity	MEAK-D78 HQ/1
Cable, D78 male to D78 female connector, 2 meter long. 2 A current capacity	MEAK-D78 HQ
Terminal Box D78 male connector to spring terminals, 2 A current capacity	ME-ABD78MSH