

INTERCONNECTING PRODUCTS AND CABLES

ME8200

HIGH-POWER DIGITAL SIGNAL BOARDS AND USB MODULE

Description

The ME8200 Series Digital I/O Boards provide optically isolated high-power digital input and output signals. The ME8200 boards are available with 8 isolated inputs/8 isolated outputs or with 16 isolated inputs/16 isolated outputs, plus 16 standard TTL IO lines. Both versions are available as a PCI board or as a compact PCI board. A USB controlled version is also available in a robust metal case.

Applications

Designed to meet requirements that exceed the average Digital I/O board, the ME8200's isolated outputs can drive 3 to 45 volt loads and source up to 700 mA per channel. All outputs are short circuit protected and current limited. -S versions sink up to 700 mA. All outputs are guaranteed stable during power turn-on and turn-off.

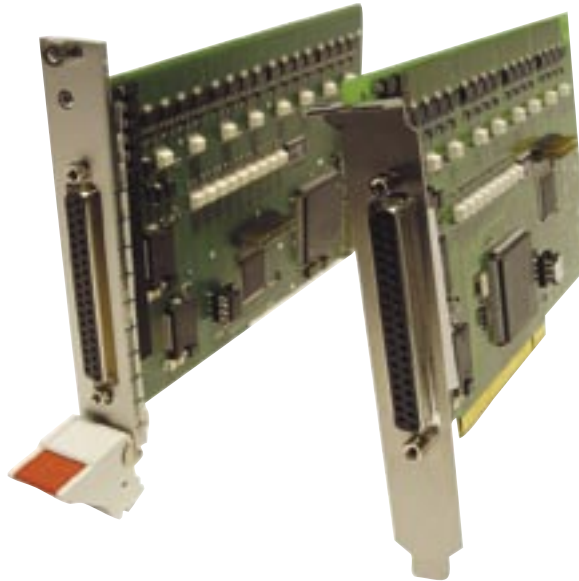
The isolated inputs accept 3.3 to 45 volt inputs and incorporate transient protection. Isolation is up to 500 volts for all inputs and outputs.

The 16 standard TTL lines are two 8-bit ports that can be used for general purpose I/O. PCI and PXI/compact PCI Boards include an interrupt generator that can generate interrupts on a bit pattern, status change or thermionic input. Any input is selectable as an interrupt source via a mask register.

The ME8200 is the ideal Digital I/O Board for any test application where the high signal levels or high current loads are anticipated. The ME8200's inputs and outputs are so versatile that it may be the only Digital IO board you will ever need in your test system.

Software Support

The ME8200 Series Serial I/O Boards include a full set of drivers and a configuration tool for Windows 2K, XP and GNU Linux 2.6. Visual C/C++, VEE Pro (Windows), LabVIEW (Windows, Linux), Python, and Java are also supported.



ME-8200 PCI and compact PCI Boards

PCI Express

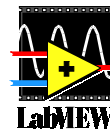
A ME8200 PCI Express version will be available in December, 2007



ME8200-USB (November 2007)

- Isolated high power 45 volt output signals source/sink up to 700 mA per channel. *Heavy load drive capability without ground loops.*
- Isolated 3-45 volt inputs. *Accepts virtually any digital signal.*
- Monitoring function interrupts PC on word or bit changes. *Monitoring without tying up the PC in tight polling loops.*
- 500 V Isolation *Eliminates ground loops.*
- Available in PCI, compact PCI and USB versions *Fits most test systems.*
- Plug&Play Compatible *Easy installation - no switches to set.*
- Included drivers support Visual Basic, C++, Delphi, Linux, LabVIEW and Agilent's VEE. *Works with virtually any test program.*

CE Approved



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ME8200 SPECIFICATIONS

Digital Interfaces

Isolated Inputs

Signals	8 or 16
Logic '0'	0 to 2.2 V
Logic '1'	3.0 to 45 V
Impedance	4.3 Kohms @ 24V
I in	6 mA @ 24 V
Isolation	500 V
Transient Protection	

Isolated Outputs

Signals	8 or 16
Logic '0'	0 to 3 V
Logic '1'	10.5 to 45 V as source
I out	700 mA max/channel
On Resistance	0.3 ohms @ 500 mA
Isolation	500 V
Power Source	10.5 to 45 V external

General Purpose I/O

Signals	16
Organized	2 8-bit bytes
Logic '0'	0 to 0.8 V
Logic '1'	2.4 to 5 V
Iout lo	24 mA
Iout hi	24 mA
Isolation	none

Interrupt Generation

(on PCI/PXI/cPCI Boards only)

Interrupts	Bit pattern, status change or temperature increase due to an overcurrent condition.
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Mask Register Selects any bit as interrupt source

PC Compatibility

5 V PCI bus interface is PCI 2.1 compliant. Works with all Intel type PCs

USB Bus

Full Speed, USB 1.1 interface

Compatible Software

Graphical Programs

VEE Pro (Windows)
LabVIEW (Windows)

Languages

Visual C/C++, Python, and Java

Systems

Windows 2K/XP and GNU Linux 2.6

Physical - PCI/compact PCI Models

Size (without mounting brackets)

PCI card	174 x 98 mm
cPCI card	3U cPCI board

Connectors (PCI cards)

Isolated I/O	37pin D-Sub female
16-bit TTL I/O	25pin D-Sub female

Power consumption

Type A	300 mA @ 5 V no-load
Type B	500 mA @ 5 V no-load

Physical - USB Models

Size (without mounting brackets)

7.28 L x 4.49 W x 2.12 H in
(185 L x 114 W x 54 H mm)

Connectors (USB)

Isolated I/O	37pin D-Sub female
16-bit TTL I/O	25pin D-Sub female
USB	Type B
Power	3.5 mm jack

Power consumption

Type A 350 mA @ 7.5 V typ no load
Type B 650 mA @ 7.5 V typ no load

Common Specifications

Internal fuses

F1 Fuse socketed (only USB models),
type: Littlefuse 370, 1Amp
F3 SMD fuse, Littlefuse 451, 8 Amp
F4 SMD fuse, Littlefuse 451, 8 Amp

Temperature

Operating	0 to +70 °C
Storage	-10 to +70°C

Relative humidity

20 to 55% (not condensing)

CE Certification

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

Included Items

PCI board, cPCI board or USB module
Manual and programs on CD-ROM
ME Intelligent Drivers included for
Windows 2K/XP, and GNU Linux 2.6.
Power Adapter - USB Module Only

ORDERING INFORMATION

	Part Number
ME8200 PCI Board with 8 isolated inputs, 8 isolated outputs and 16 IO lines	ME8200A
ME8200 PCI Board with 16 isolated inputs, 16 isolated outputs and 16 IO lines	ME8200B
ME8200 cPCI Board with 8 isolated inputs, 8 isolated outputs and 16 IO lines	ME8200AC
ME8200 cPCI Board with 16 isolated inputs, 16 isolated outputs and 16 IO lines	ME8200BC
ME8200 USB Module with 8 isolated inputs, 8 isolated outputs and 16 IO lines	ME8200AU
ME8200 USB Module with 16 isolated inputs, 16 isolated outputs and 16 IO lines	ME8200BU
Sink version, add -S to above model numbers i.e. ME8200BU-S	