

# 32-Line Digital I/O for PC/104 MPC132



The MPC132 TTL I/O Adapter adds 32 TTL I/O lines to any computer that supports PC/104 I/O modules. The card is organized as four groups of 8 bits each. Each group can be user-configured as an 8-bit input port or an 8-bit output port. In addition, each port can be configured as inverting or non-inverting. Output ports include "readback" capability for simplified bit-oriented control software.

The high current drive of the MPC132 is a major advantage over "unbuffered 8255-type" cards.

# Features

- ✓ 32 TTL-level I/O lines
- ✓ High current: 64mA sink, 15mA source per line
- ✓ 24 lines 50-pin with OPTO 22 pinout
- ✓ 8 lines on 20-pin connector
- Inverting and non-inverting versions
- Input/output selectable in four 8-bit groups
- Two external interrupt inputs
- ✓ PC/104 format

The MPC132 can directly drive OPTO 22 solid state relay racks, or other high current requirement loads. Standard connectors and pinouts simplify system wiring. Direct cabling to OPTO 22 racks with up to 24 modules (PB24) is provided by the MPC132's 50-pin connector. The remaining 8 TTL lines are available on a separate 20-pin connector.

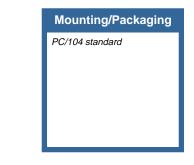
The MPC132 supports interrupt generation from two external sources. Resistive pull-ups are included on all lines.

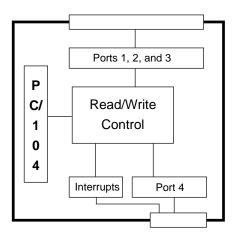
# Software Support

Sample Drivers Included

### **Compatible Hardware**

Any Micro/sys CPU with PC/104 expansion connector [See Section 1] Digital racks, PB8H, PB16H, PB24 Terminal Boards, TB5001, TB5002 [Items above in section 4] Custom interfacing





# Specifications:

#### Mechanical:

- PC/104 standard
- □ 3.55" (plus I/O region) x 3.775" x .6"

#### **Power Requirements:**

□ +5V ± 5% at 90mA max

# **Environmental:**

- □ 0° +70°C operating
- □ -25° +85°C storage
- □ 5%-95% relative humidity, non-condensing

# PC/104 Interface:

- □ 8-bit PC/104 module
- □ 6 sequential I/O ports, jumper settable
- IRQ jumpers

#### **Digital I/O Lines:**

- □ 32 total in four 8-bit groups
- Outputs sink 64mA and source 15mA
- Default: non-inverting Optional: inverting
- 22K pull-ups on all lines
- Port D supports strobed inputs

#### Interrupts:

- **D** Two external interrupts latched on-board
- Jumpers to IRQ2 IRQ7, (IRQ10 IRQ15 if PC/104 J2 is installed)
- □ Support for PC/104 shared interrupts

# **External Connections:**

- □ 50-pin header with 24 I/O lines
- 20-pin header with 8 I/O lines, 2 IRQ inputs, and input strobe

# **Ordering Information:**

MPC132 32-line TTL I/O card, noninverting (OPTO 22 rack compatible) MPC132-INV 32-line TTL I/O card, inverting (OPTO 22 rack compatible) MPC132-KIT Set of 4 inverting ICs. Use to modify standard MPC132 to create custom mix of inverting

and non-inverting ports.

#### **Related Products:**

CA5049	Cable to PB8H, PB16H
PB8H	8-postion OPTO rack
PB16H	16-position OPTO rack
PB24	24-position OPTO rack
TB5001	50-terminal breakout board
CA5044	Cable to PB24