# MSI PC/104 Embedded PC Series

# MSI-AX10420 48-Line Digital I/O CARD

#### **FEATURES**

- Forty-eight digital I/O lines in two groups of 24.
- Emulates a 8255 Programmable Peripheral Interface in mode 0.
- Buffered I/O lines for higher drive capacity.
- Interrupt capability selectable on bits 3 and 7 of Port C .
- Output status readback.
- Two output connectors are pin-compatible with OPTO-22 module racks.
- ◆ Small size PC/104 form factor (90 mm x 96 mm).
- ♦ One-year warranty from date of shipment.

# **DESCRIPTION**

The MSI-AX10420 provides 48 TTL level I/O lines arranged in two 24-bit digital I/O groups. Each group emulates a 8255 PPI (programmable peripheral interface) operating in mode 0 with a higher output drive capacity than a standard 8255 device. Each group is divided into three 8bit ports which can be configured to function as an input or an output. Bits 3 and 7 of port C can be configured to generate an interrupt on IRQ 5, 9(2), 10, 11, 12 or 15 with triggering on either the rising or falling edge. I/O is provided by two 50-pin connectors that are OPTO-22 compatible. The unit is an 8-bit stackthrough PC/104 with I/O mapped 16-bit addressing for which addresses A3 thru A9 are switch selectable.



#### **SPECIFICATIONS**

### Digital I/O

Two groups of 24 emulating a 8255 PPI in mode 0. Each 24 line group is divided into three 8-bit ports, each port selectable as input or output.

## **Digital Inputs**

Logic level 0: 0.8V max. Logic level 1: 2.0V min.

#### **Digital Outputs**

Logic level 0: 0.5V max @ 24mA sink. Logic level 1: 2.4V min @ 15mA source.

# Interrupts

Bit 3 and 7 of Port C selectable for interrupt capability on IRQ 5, 9(2), 10, 11, 12 or 15 with triggering on rising or falling edges.

#### Status

Output status readback on output ports.

#### **Environmental**

Storage Temperature -25 to 80° C. Operating Temperature 0 to 60° C.

#### System Power Requirement

DC Voltage: +5V @ 400mA typical.

# Size and Weight

90 mm x 96 mm, 0.1 Kg.



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