

- Embedded rugged computers
- -40° to 85° C
- Embedded operating systems
- COTS—high reliability

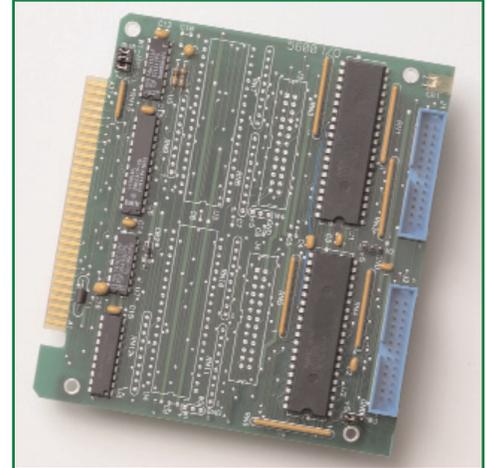
## Digital I/O expansion card for Micro PC

The 5600 is a low-power Micro PC expansion card that provides 48 or 96 channels of digital I/O. All channels are TTL compatible, and are implemented with selected 82C55 chips. These lines will interface with logic devices, switch inputs, LEDs, and industry-standard opto module racks. The lines are grouped into six or twelve ports of eight lines each. For the 5600-48, four of those ports can be programmed as inputs or outputs on a port-wide basis. Two of the ports can be programmed as four lines of inputs and four lines of outputs each. These numbers are doubled for the 5600-96.

Octagon has a variety of opto modules and termination boards for easy access for field wiring. Use isolator modules when driving or receiving signals from high voltage and/or high current devices. Opto-isolation also eliminates ground loops and significantly reduces the chance that noise will invade the system.

Micro PC cards plug into any ISA expansion slot or Micro PC card cage. The Octagon family of Micro PC controllers, expansion cards, and card cages provide a complete solution for applications in transportation, security, military, communications, distributed control, point-of-sale, ticketing machines, weighing equipment, and other similar applications.

The 5600 will withstand high shock and vibration, and operates in temperature ranges from -40° to +85° C. This rugged expansion card will provide years of reliable service in the most challenging environments.



*Octagon products are designed and manufactured under the supervision of an ISO 9001-2000 certified quality management system.*

## Features

### DIGITAL I/O:

- ◆ 48 or 96 lines of TTL level digital I/O (5600-48 or 5600-96)
- ◆ Input low: -0.3V to +0.8V
- ◆ Input high: 2V to Vcc
- ◆ Output low: 0.4V maximum
- ◆ Output high: 2.4V minimum
- ◆ In output mode, can sink 2.5 mA at 0.4V and can source over 2.5 mA at 2.4V
- ◆ When driving opto modules, the output can sink 15 mA at 1.0V
- ◆ Jumper blocks pull all lines per connector (24 lines) high or low with a 10K $\Omega$  resistor
- ◆ All 96 lines may be nonlatched inputs or latched outputs.
- ◆ Up to 64 lines may be latched inputs.

## CONNECTORS:

- ◆ Two or four male 26-position, straight I/O connectors
- ◆ Mates with Octagon CMA-26 cable, for direct connection to opto modules or termination blocks
- ◆ On-board LED to show when a connector is accessed

## BASE ADDRESS:

- ◆ Jumper-selectable base addresses of 100h, 110h, 120h, 130h, 140h, 150h, 160h, or 170h.

## ENVIRONMENTAL & POWER:

- ◆ -40° to 85° C operating
- ◆ -50° to 85° C nonoperating
- ◆ 5% to 95%, RH, noncondensing)
- ◆ 40g shock, 5g vibration, 3 axis
- ◆ Size: 4.5" x 4.9", Micro PC form factor
- ◆ Power: 5V ± 5% at 35 mA typical, 75 mA maximum

## ORDERING INFORMATION

#3336 5600-48 digital I/O card

#2536 5600-96 digital I/O card

## Typical configurations

The illustration shows typical configurations for the 5600 using an interface board, a keypad, an LCD display, an STB terminal block, and an opto rack. Octagon offers a wide variety of cables and interfaces for digital I/O products.

