

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

Digital I/O in three modes

The 5660 is a Micro PC expansion card with 48 channels of digital I/O. The 48 channels are configured as two ports of 24 terminated, bidirectional lines. The 5660 offers three different operating modes that allow configurations as inputs, inputs with event edge sensing, delta sensing, outputs, and outputs with readback. The register-controlled debounce ensures that the 5660 does not recognize spurious signals as events or transitions. Each port has an independently-protected 5V, 0.3A power line and 0.1-in. 50-pin connector.

The digital I/O lines are TTL compatible. These lines will interface with logic devices, switch inputs, LEDs, and industry-standard opto module racks. The 48 lines are grouped into six ports of eight lines each. 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. The lower four bits of these two ports are event sensing lines that can be programmed to recognize either high-to-low or low-to-high transitions. There are a variety of opto modules and termination boards available for easy access for field wiring.

Micro PC cards plug into any ISA expansion slot or a 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 5660 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

I/O:

- ◆ 48 lines of TTL digital I/O
- ◆ Separate ground for each line for increased shielding
- ◆ Jumper block pulls all lines per port (8 lines) high, low, or floating with a 4.7 K Ω resistor
- ◆ Register-controlled debounce to filter spurious signals. The available debounce times are 4 ms, 64 ms, 1 ms, and 8 ms
- ◆ Each data line has a 4.7 K Ω termination/resistor, diode/ESD, and over/under shoot protection and is interleaved with the ground lines for shielding.

CONNECTORS:

- ◆ Two male 50–position, straight I/O connectors
- ◆ Mates with industry–standard cables, for direct connection to opto modules or termination blocks
- ◆ One LED for each connector, to show when that connector is accessed

ADDRESSING & INTERRUPTS:

- ◆ Jumper–selectable base addresses of 100h, 120h, 140h, 160h, 180h, 1A0h, 1C0h, 1E0h, 300h, 320h, or 340h.
- ◆ Interrupts 3, 4, 5, 7, or 9 can be selected via jumpers for event sense notification

ENVIRONMENTAL & POWER:

- ◆ –40° to 85° C operating
- ◆ –55° to 90° C nonoperating
- ◆ 5% to 95%, RH, noncondensing)
- ◆ 40g shock, 5g vibration, 3 axis
- ◆ Size: 4.5" x 4.9", Micro PC form factor
- ◆ Power: 120 mA @ +5V at 25° C with no load
- ◆ Output power (to 50–pin connectors): 5V, 0.3A fused

ORDERING INFORMATION

#5240 5660 digital I/O card