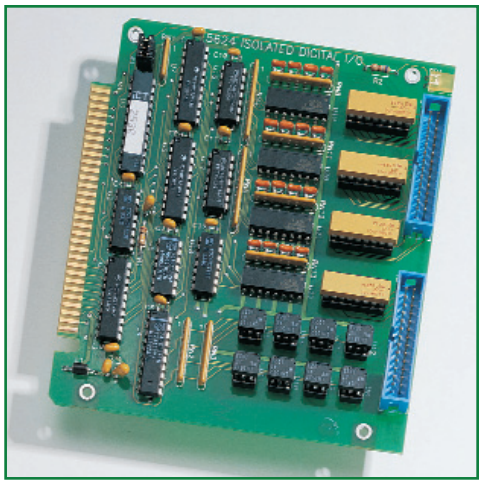
Isolated digital I/O expansion card

The 5624 card accepts switch closures, PLC and 12V logic inputs and other voltages that can not be used with standard TTL logic. The card supports 16 input channels and eight output channels. The inputs have 500V of isolation to ground and 100V between channels. The eight output channels will drive relays, lamps, small motors, and solenoids. Each channel can switch loads up to 200 mA and 50V. Signals may be AC or DC. Each output is isolated from each other and the system. As shipped, the 5624 will accept signals from 2.7–14V DC. Plug–in resistor packs allows the user to accommodate ranges from 3V to 84V.

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 5624 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:

- 24 high–voltage I/O lines; 16 input lines, 8 output lines
- Protected from accidental reverse polarity
- Noise filtering, protecting from spikes up to 200V
- LED indicates card access
- 500V of optical isolation to ground and 100V between channels

Inputs:

- Accepts voltages from 2.7–14V, DC to 4 KHz. Plug–in resistor packs allows ranges from 3V to 84V, configurable in groups of four inputs
- Requires 1 mA current at threshold voltage to register logic high, accepts up to 5 mA
- RC network provides debounce from switch and relay contacts

Outputs:

- Eight isolated solid–state relays for outputs
- Outputs can switch loads up to 200 mA and 50V, AC or DC
- Switch resistance 3Ω maximum
- Each output is isolated from each other & the system

Connectors:

- Two 26–position, straight I/O connectors
- Mates with Octagon CMA–26 cable, for direct connection to opto module racks or termination blocks

Base address:

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

Environmental & power:

- –40° to 70° 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
- 5V ± 5% at 100 mA maximum

Ordering information

#3703 5624 opto isolator digital I/O card

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