



335-2030-500 High Power Discrete I/O Card

Features

- When configured for an input mode, each channel acts as a tri-level discrete detector
- When configured for an output mode, each channel acts as a bi-level discrete source

Summary

Phillips' High Power Discrete I/O Card (referred to as the HPDIO card from here on) is a daughtercard module that plugs into a Phillips ICX carrier card. As such, the HPDIO card is one of several plug-in modules that change the type and function of the ICX card in order to support different test interfaces.

The HPDIO card supports 16 channels of I/O. Each channel can be configured as an input, output, input and output, and high impedance. The high Power HPDIO card configuration identifier is 0x07.

Specifications

I/O Control:
 Configuration: 48 discrete I/O channels
 Individual and independent direction and control per channel
 Output range: 60V
 Input tri-level threshold detection range, 0.1V to 60V via onboard potentiometers
 Modes per channel: Discrete output, discrete input, discrete I/O (self-monitor) or high impedance
 I/O ESD Protection: 2kV per Method 3015.7

Discrete Outputs:

Configuration: 16
 Max Output current: 5A
 Configurable dual SPST per channel (support V/GND, V1/V2, OPEN/GRD, etc.)
 Output Range: 60V
 Output Resistance: 0.10hm max
 High Impedance Leakage current: 1uAdc max
 Channel at reset: high impedance
 Break-before-make operation
 Setting time: 5ms typical
 Throughput rate: >150 Hz, all output channels simultaneously updated

Discrete Inputs:

Channels: 16
 Input range: 60V
 Bi-level detection range: 0.1 to 60V (via onboard potentiometers or fixed resistors)
 Read Status: HI-above upper threshold
 MID-between upper and lower thresholds
 LOW-below lower threshold
 Input resistance: 106.8kOhm (unless operating in I/O self-monitor mode)
 Integrated software selectable pull-up to +17V at 36mA
 High impedance leakage current: 1uAdc max
 Channel at reset: High impedance
 Throughput rate: >300 Hz, all output channels simultaneously updated

Environmental:

Operating temperature: 0 to 70 deg C
 Storage temperature: -55 to 100 deg C
 Relative humidity: 5 to 95% non-condensing

Ordering Information

Hardware
 335-2030-500