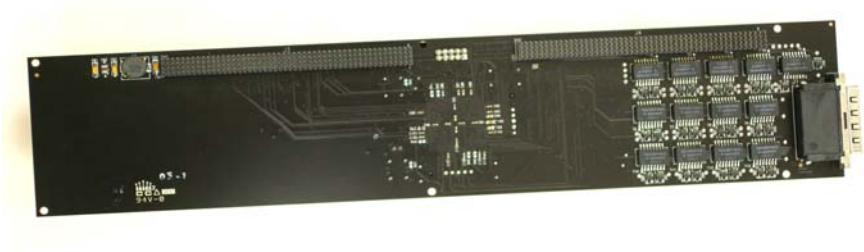
LPD I/O Card



335-2020-500
Low Power Discrete I/O Card

Features

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

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Summary

Phillips' Low Power Discrete I/O Card (referred to as the LPDIO card from here on) is a daughtercard module that plugs into a Phillips ICX carrier card. As such, the LPDIO 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 LPDIO card supports 48 channels if 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 0x06.

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: 48
Max Output current: 1.5A
Min output current: 10uA
Configurable dual SPST per channel (support V/GND, V1/V2, OPEN/GRD, etc.)
Output Range: 60V
Output Resistance: 0.1Ohm max
High Impedance Leakage current: 1uAdc max
Channel at reset: high impedance
Break-before-make operation
Setting time: 2ms typical
Throughput rate: >300 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 to100 deg C
Relative humidity: 5 to 95% non-condensing

Ordering Information

Hardware

335-2020-500