**PCIE-1751 PCIE-1753**

# 48-Ch Digital I/O, 3-Ch Counter PCI Express Card

**96-Ch Digital I/O PCI Express Card**

 **PCIE-1751**

 **PCIE-1753**

RoHS

**COMPLIANT 2002/95/EC**

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| **Features** |
|  | Emulates Mode 0 of the Intel® 8255 PPI chip (every port with nibbles) |
|  | Buffered circuits for a higher driving capacity compared to the Intel® 8255 |
|  | PPI chip |
|  | Interrupt handling capability |
|  | Timer/counter interrupt capability |
|  | Supports both dry and wet contact |
|  | Retains I/O port settings and DO configuration after system reset |
|  | Board ID switch |
|  | Pattern match interrupt function for DI |
|  | Change-of-state interrupt function for DI |
|  | Programmable digital filter function for DI |
|  | Output status read back |
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# Introduction

PCIE-1751 is a 48-channel digital I/O card for the PCI Express bus. The channels are divided into six 8-bit I/O ports. Users can configure 4 channels per port (nibbles) to serve as input or output channels via software. PCIE-1751 also provides three 32-bit counters. PCIE-1753 is a 96-channel digital I/O card that emulates Mode 0 of the Intel® 8255 PPI chip. However, the buffered circuits offer a higher driving capability than that of the 8255 PPI chip. The 96 I/O channels are divided into twelve 8-bit I/O ports: A0, B0, C0, A1, B1, C1, A2, B2, C2, A3, B3 and C3. Users can configure every port to serve as input or output ports via software.

# Specifications

## Digital Input

* **Channels** PCIE-1751: 48 (shared with output) PCIE-1753: 96 (shared with output)
* **Compatibility** 5 V/TTL
* **Input Voltage** Logic 0: 0.8 V max. Logic 1: 2 V min.
* **Interruptible Channels** PCIE-1751: 6

PCIE-1753: 12

## Digital Output

* **Channels** PCIE-1751: 48 (shared with input) PCIE-1753: 96 (shared with input)
* **Compatibility** 5 V/TTL
* **Output Voltage** Logic 0: 0.4 V max. Logic 1: 2.4 V min.
* **Output Capability** Sink: 24mA @ 0.4 V

Source: 15mA @ 2.4 V

## Counter/Timer (PCIE-1751 only)

* **Channels** 3
* **Resolution** 3 x 32-bit counter
* **Compatibility** 5 V/TTL
* **Max. Input Frequency** 10 MHz
* **Reference Clock** Internal: 20K / 200K / 2M / 20MHz

External Clock Frequency: 10 MHz External Voltage Range: 5 V/TTL

## General

* **Bus Type** Universal PCI Express
* **I/O Connectors** PCIE-1751: 1 x 68-pin SCSI, female

PCIE-1753: 1 x 100-pin SCSI, female

 **Dimensions (L x H)** 168 x 100 mm (6.6" x 3.9")

* **Power Consumption** Typical: PCIE-1751: 5 V @ 400 mA

PCIE-1753: 3.3 V @ 850 mA Max.: PCIE-1751: 5 V @ 2.63 A

PCIE-1753: 3.3V @ 2.7 A

Note: Maximum power consumption includes the consumption for a +5 V output.

* **Operating Temperature** 0 ~ 60 °C (32 ~ 140 °F)
* **Storage Temperature** -20 ~ 70 °C (-4 ~ 158 °F)
* **Storage Humidity** 5 ~ 95% RH, non-condensing

# Ordering Information

* **PCIE-1751-AE** 48-ch digital I/O and 3-ch counter PCI Express card
* **PCIE-1753-AE** 96-ch digital I/O PCI card

## Accessories

* **PCL-10168-1E** 68-pin SCSI shielded cable, 1 m
* **PCL-10168-2E** 68-pin SCSI shielded cable, 2 m
* **PCL-10268-1E** 100-pin to 2 x 68-pin SCSI cables, 1 m
* **PCL-10168-2E** 100-pin to 2 x 68-pin SCSI cables, 2 m
* **ADAM-3968-AE** 68-pin DIN rail SCSI wiring board
* **ADAM-3968/20-AE** 68-pin SCSI to 3 x 20-pin box header board
* **ADAM-3968/50-AE** 68-pin SCSI to 2 x 50-pin box header board
* **PCLD-8751-AE** 48-ch isolated digital input board
* **PCLD-8761-AE** 24-ch replay/ isolated digital input board
* **PCLD-8762-AE** 48-ch relay board

 **Industrial I/O**

All product specifications are subject to change without notice. Last updated: 27-Jun-2018