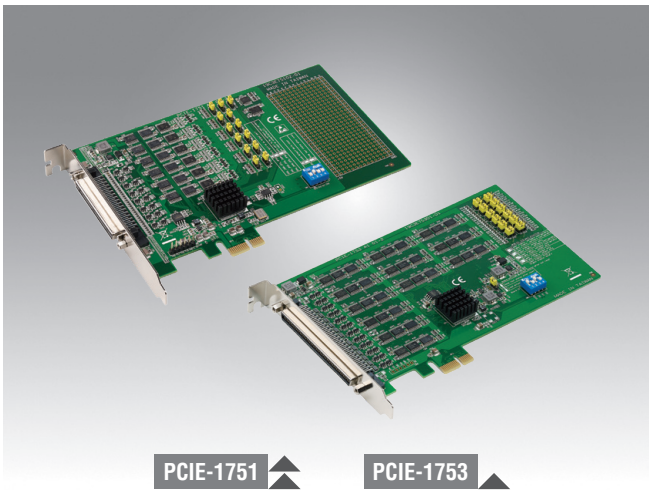
PCIE-1751
PCIE-1753

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

96-Ch Digital I/O PCI Express Card



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

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-10268-2E** 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

All product specifications are subject to change without notice.
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