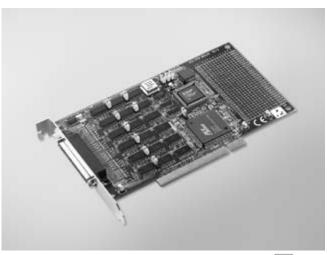# PCI-1751

48-ch Digital I/O and 2-ch Counter PCI Card

Features

- 48 TTL digital I/O lines
- Emulates mode 0 of 8255 PPI
- Buffered circuits for higher driving capacity than the 8255
- Interrupt handling capability
- Timer/Counter interrupt capability
- Supports both dry and wet contact
- Keeps the I/O port setting and DO state after system reset
- BoardID switch

Introduction

PCI-1751 is a 48-bit digital I/O card for the PCI bus. Its 48 bits are divided into six 8-bit I/O ports and users can configure each port as input or output via software. PCI-1751 also provides one event counter and two 16-bit timers, which can be cascaded to become a 32-bit timer.

Specifications

Digital Input

- **Channels**   48 (shared with output)
- **Compatibility**   5 V/TTL
- **Input Voltage**   Logic 0: 0.8 V max.
  Logic 1: 2 V min.
- **Interrupt Capable Ch.**   4

Digital Output

- **Channels**   48 (shared with input)
- **Compatibility**   5 V/TTL
- **Output Voltage**   Logic 0: 0.4 V max.
  Logic 1: 2.4 V min.
- **Output Capability**   Sink: 0.4 V @ 24 mA
  Source: 2.4 V @ 15 mA

Counter/Timer

- **Channels**   3
- **Resolution**   2 x 16-bit counters, or 1 x 32-bit counter (jumper selectable)
  1 x 16-bit event counter
- **Compatibility**   5 V/TTL
- **Max. Input Frequency**   10 MHz
- **Reference Clock**   Internal: 10 MHz
  External Clock Frequency: 10 MHz
  External Voltage Range: 5 V/TTL

General

- **Bus Type**   Universal PCI V2.2
- **I/O Connectors**   1 x 68-pin SCSI female connector
- **Dimensions (L x H)**   175 x 100 mm (6.9" x 3.9")
- **Power Consumption**   Typical: 5 V @ 850 mA
  Max.: 5 V @ 1.0 A
- **Operating Temperature**   0 ~ 70° C (32 ~ 158° F)
- **Storage Temperature**   -20 ~ 80° C (-4 ~ 176° F)
- **Storage Humidity**   5 ~ 95% RH, non-condensing (refer to IEC 68-2-3)

Ordering Information

- **PCI-1751**   48-ch Digital I/O and Counter PCI Card
- **PCL-10168-1**   68-pin SCSI Shielded Cable, 1 m
- **PCL-10168-2**   68-pin SCSI Shielded Cable, 2 m
- **ADAM-3968**   68-pin DIN-rail SCSI Wiring Board
- **ADAM-3968/20**   68-pin SCSI to 3 20-pin Box Header Board
- **ADAM-3968/50**   68-pin SCSI to 2 50-pin Box Header Board
- **PCLD-8751**   48-ch Isolated Digital Input Board
- **PCLD-8761**   24-ch Replay/ Isolated Digital Input Board
- **PCLD-8762**   48-ch Relay Board

Pin Assignments

PA00	1	35	PA10
PA01	2	36	PA11
PA02	3	37	PA12
PA03	4	38	PA13
PA04	5	39	PA14
PA05	6	40	PA15
PA06	7	41	PA16
PA07	8	42	PA17
GND	9	43	GND
PB00	10	44	PB10
PB01	11	45	PB11
PB02	12	46	PB12
PB03	13	47	PB13
PB04	14	48	PB14
PB05	15	49	PB15
PB06	16	50	PB16
PB07	17	51	PB17
GND	18	52	GND
PC00	19	53	PC10
PC01	20	54	PC11
PC02	21	55	PC12
PC03	22	56	PC13
PC04	23	57	PC14
PC05	24	58	PC15
PC06	25	59	PC16
PC07	26	60	PC17
GND	27	61	GND
CNT0_OUT	28	62	CNT0_CLK.
GND	29	63	CNT0_G
CNT1_OUT	30	64	CNT1_CLK.
GND	31	65	CNT1_G
CNT2_OUT	32	66	CNT2_CLK.
INT_OUT	33	67	CNT2_G
VCC	34	68	VCC