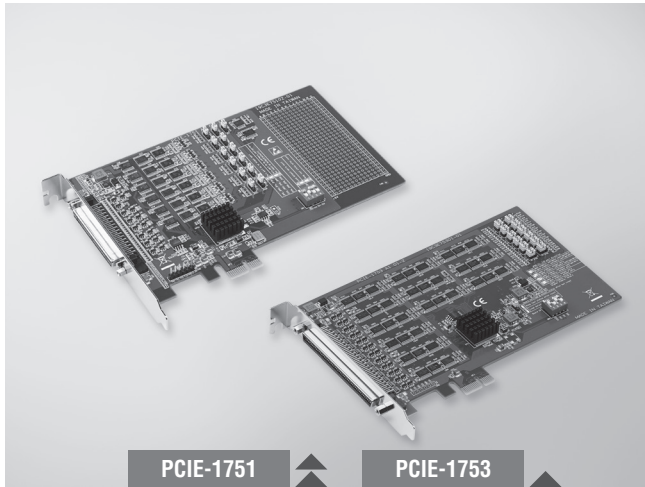# PCIE-1751

48-ch Digital I/O and 3-ch Counter PCI Express Card

PCIE-1753

96-ch Digital I/O PCI Express Card

Features

- Emulates mode 0 of 8255 PPI (every port with nibble)
- 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
- Pattern match interrupt function for DI
- "Change of state" interrupt function for DI
- Programmable digital filter function for DI
- Output status read back

PCIE-1751   PCIE-1753

FCC CE **RoHS** COMPLIANT 2002/95/EC

Introduction

PCIE-1751 is a 48-bit digital I/O card for the PCI Express bus. Its 48 channels are divided into six 8-bit I/O ports and users can configure each 4-channel per port (nibble) as input or output via software. PCIE-1751 also provides three 32-bit counters..

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.**	6

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: 15 mA @ 0.8 V
	Source: 15 mA @ 2.0 V

Counter/Timer

▪ **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**	1 x 68-pin SCSI female connector
▪ **Dimensions (L x H)**	168 x 100 mm (6.6" x 3.9")
▪ **Power Consumption**	Typical: 3.3 V @ 850 mA
	Max.: 3.3V @ 2.63 A
	Note: The maximum power consumption includes power consumption for +5 V output (on pin 34 and pin 68, with 0.5 A)
▪ **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**	48-ch Digital I/O and 3-ch Counter PCI Express

Accessories

▪ **PCL-10168-1E**	68-pin SCSI Shielded Cable, 1 m
▪ **PCL-10168-2E**	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 Assignment

P00	1	35	P30
P01	2	36	P31
P02	3	37	P32
P03	4	38	P33
P04	5	39	P34
P05	6	40	P35
P06	7	41	P36
P07	8	42	P37
GND	9	43	GND
P10	10	44	P40
P11	11	45	P41
P12	12	46	P42
P13	13	47	P43
P14	14	48	P44
P15	15	49	P45
P16	16	50	P46
P17	17	51	P47
GND	18	52	GND
P20	19	53	P50
P21	20	54	P51
P22	20	55	P52
P23	22	56	P53
P24	23	57	P54
P25	24	58	P55
P26	25	59	P56
P27	26	60	P57
GND	27	61	GND
CNT0_OUT	28	62	CNT0_CLK
GND	29	63	GNT0_G
CNT1_OUT	30	64	CNT1_CLK
GND	31	65	GNT1_G
CNT2_OUT	32	66	CNT2_CLK
INT_OUT	33	67	CN2_G
VCC (5V)	34	68	VCC (5V)