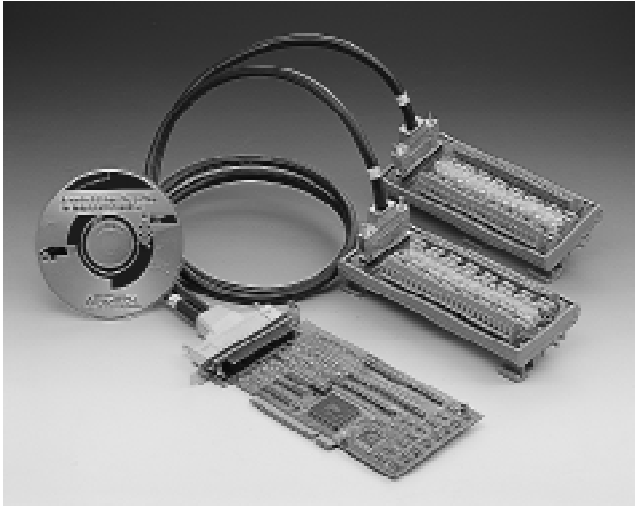


PCI-1754

64-channel Isolated Digital Input Card



Features

- 64 isolated digital input channels
- High-voltage isolation on input channels (2,500 V_{DC})
- High ESD protection (2,000 V_{DC})
- High over-voltage protection (70 V_{DC})
- Wide input range (10 ~ 50 V_{DC})
- Interrupt handling capability
- Provides convenient wiring terminal module with LED indicators for DIN-rail mounting
- High-density 100-pin SCSI connector

Introduction

The PCI-1754 card offers 64 isolated, bi-directional digital input channels with 2,500 V_{DC} of isolation protection. The PCI-1754 is ideal for industrial applications where high-voltage isolation is required. In addition, the PCI-1754 also offers four digital input interrupt sources to the PC, and users can configure them through software easily.

Robust Protection

The PCI-1754 features a robust isolation protection for industrial, lab and machinery automation applications. It durably withstands voltage up to 2,500 V_{DC}, preventing your host system from any incidental harms. If connected to an external input source with surge-protection, the PCI-1754 can offer up to a maximum of 2,000 V_{DC} ESD (Electrostatic Discharge) protection. Even with an input voltage rising up to 70 V_{DC}, the PCI-1754 can still manage to work properly albeit only for short period of time.

Wide Input Range

The PCI-1754 has a wide range of input voltage from 10 to 50 V_{DC}, and it is suitable for most industrial applications with 12 V_{DC}, 24 V_{DC} and 48 V_{DC} input voltage. In the mean time, we are also ready to serve your special needs for specific input voltage range. Do not hesitate to ask us about tailoring our standard products to meet your specifications. All these merits make PCI-1754 the best choice for customers in industrial applications.

Board ID

The PCI-1754 has a built-in DIP switch that helps user define each card's ID when there are multiple PCI-1754 cards on the same PC chassis. The function is very useful when users build their system with multiple PCI-1754 cards. Setting your Board IDs correctly, you can easily identify and access each card during hardware configuration and software programming.

Applications

- Industrial ON/OFF control
- Switch status sensing
- BCD interfacing
- Digital I/O control
- Industrial and lab automation
- SMT/PCB machinery
- Semi-conductor machinery
- PC-based Industrial Machinery
- Testing & Measurement
- Laboratory & Education

Ordering Information

- PCI-1754: 64-channel isolated digital input card
- PCL-10250: 100-pin SCSI to two 50-pin SCSI cable, 1m
- ADAM-3951: Wiring terminal module with LED indicators for DIN-rail mounting

64-channel Isolated Digital Input Card

Specifications

Isolated Digital Input

Number of Input Channel	64	
Interrupt Inputs	4 (IDI0, IDI16, IDI32, IDI48)	
Optical Isolation	2500 V _{DC}	
Opto-isolator response time	25 μs	
Over-voltage Protect	70 V _{DC}	
ESD (ElectroStatic Discharge)	2,000 V _{DC}	
Input Voltage	VIH (max.)	50 V _{DC}
	VIH (min.)	10 V _{DC}
	VIL (max.)	3 V _{DC}
Input Current	10 V _{DC}	1.70 mA (typical)
	12 V _{DC}	2.10 mA (typical)
	24 V _{DC}	4.40 mA (typical)
	48 V _{DC}	9.00 mA (typical)
	50 V _{DC}	9.40 mA (typical)

General

I/O Connector Type	100-pin SCSI-II female	
Dimensions	175 mm x 100 mm (6.9" x 3.9")	
Power Consumption	Typical	+5V @ 340 mA
	Max.	+5V @ 450 mA
Temperature	Operation	0 ~ +60° C (32 ~ 140° F) (refer to IEC 68-2-1,2)
	Storage	-20 ~ +70° C (-4 ~ 158° F)
Relative Humidity	5 - 95 % RH non-condensing (refer to IEC 68-2-3)	

Pin Assignments

IDI00 ~ IDI15 : Isolated digital input of Group 0	1	51	IDI01
	2	52	IDI03
	3	53	IDI05
	4	54	IDI07
	5	55	IDI09
	6	56	IDI11
	7	57	IDI13
	8	58	IDI15
	9	59	ECOM0
	10	60	ECOM0
	11	61	NC
	12	62	NC
	13	63	IDI17
	14	64	IDI19
	15	65	IDI21
	16	66	IDI23
	17	67	IDI25
	18	68	IDI27
	19	69	IDI29
	20	70	IDI31
	21	71	ECOM1
	22	72	ECOM1
	23	73	NC
	24	74	NC
	25	75	NC
	26	76	IDI33
	27	77	IDI35
	28	78	IDI37
	29	79	IDI39
	30	80	IDI41
	31	81	IDI43
	32	82	IDI45
	33	83	IDI47
	34	84	ECOM2
	35	85	ECOM2
	36	86	NC
	37	87	NC
	38	88	IDI49
	39	89	IDI51
	40	90	IDI53
	41	91	IDI55
	42	92	IDI57
	43	93	IDI59
	44	94	IDI61
	45	95	IDI63
	46	96	ECOM3
	47	97	ECOM3
	48	98	NC
	49	99	NC
	50	100	NC

NC : No connection

Block Diagram

