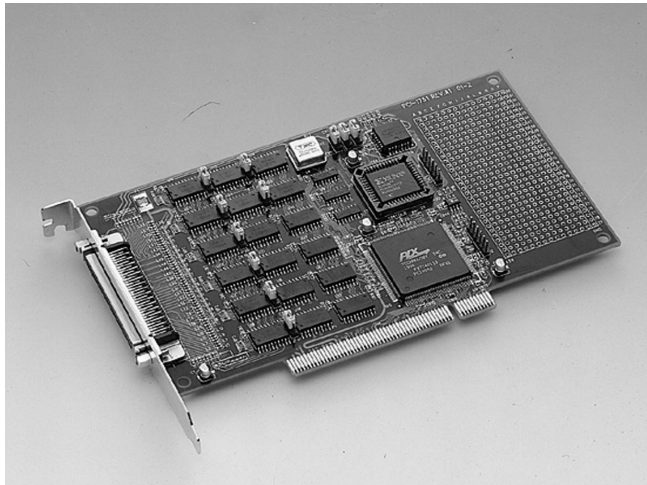


PCI-1751

48-bit Digital I/O and Counter Card



CE

Features

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

Introduction

The PCI-1751 is a 48-bit digital I/O card based on a 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. The PCI-1751 also provides one event counter and two 16-bit timers, which can be cascaded to become a 32-bit timer.

Fulfilling the True Requirements of Industrial Applications

With two practical functions, the PCI-1751 fulfills the true requirements of industrial applications. When the system is hot reset, (power is not shut off), the PCI-1751 can either retain the last I/O port setting and output value, or reset to its default configuration, depending on jumper settings. This function protects the system from wrong operations during unexpected system resets. Additionally, the PCI-1751 supports both dry and wet contacts so that it can easily interface with other devices.

Interrupt Handling Capability

Two lines in each I/O port (C0 and C4) and two of the three counter outputs (Timer 1 and Counter 2) are connected to the interrupt circuitry. Two interrupt request signals can be generated at the same time and the software can service the two request signals by ISR. Moreover, a pin in the connector can output a digital signal simultaneously with the card generating an interrupt, and users can utilize this function to trigger external devices with the interrupt.

Specifications

- **I/O Channels** 48 digital I/O lines
- **Programming Mode** 8255 PPI mode 0
- **Digital Output**
 - **Logic Level 0** 0.4 V max. @ 24 mA (sink)
 - **Logic Level 1** 2.4 V min. @ 15 mA (source)
- **Digital Input**
 - **Logic Level 0** 0 ~ 0.8 V
 - **Logic Level 1** 2 ~ 5.25 V
- **Programmable timer/counter**
 - **Frequency Range** 0 ~ 10 MHz
 - **Counters** Two 16-bit counters or one 32-bit counter
One 16-bit event counter

General

- **Power Consumption** 5 V @ 850 mA (typical)
5 V @ 1.0 A (max.)
- **Operating Temperature** 0 ~ 70° C (32 ~ 158° F)
- **Storage Temperature** -20 ~ 80° C (-4 ~ 176° F)
- **Operating Humidity** 5 ~ 95% RH non-condensing (refer to IEC 68-2-3)
- **Connectors** 68-pin SCSI-II female connector (Centronics type)
- **Dimensions (L x H)** 175 x 100 (6.9" x 3.9")

Applications

- Industrial AC/DC I/O monitoring and controlling
- Relay and switch monitoring and controlling
- Parallel data transfer
- TTL, DTL and CMOS logic signal sensing
- Indicator LED driving

Ordering Information

- **PCI-1751** 48-bit digital I/O card and Counter Card, user's manual and driver CD-ROM. (cable not included)
- **PCL-10168** 68-pin SCSI cable, 1 and 2 m
- **ADAM-3968** 68-pin SCSI cable wiring terminal for DIN-rail mounting
- **ADAM-3968/20** 68-pin SCSI-II to three 20-pin Wiring Terminal Module for DIN-Rail Mounting
- **ADAM-3968/50** 68-pin SCSI to 2 x 50-pin box headers converter module

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_C
CNT1_OUT	30	64	CNT1_CLK
GND	31	65	CNT1_C
CNT2_OUT	32	66	CNT2_CLK
INT_OUT	33	67	CNT2_C
VCC	34	68	VCC