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PCI-DIO96

Specifications



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Specifications

Typical for 25 °C unless otherwise specified.

Specifications in *italic text* are guaranteed by design.

Power consumption

Table 1. Power consumption specifications

+5V quiescent	150 mA max

Digital input/output

Table 2. Digital input/output specifications

Digital type	Four 82C55
Number of I/O	96
Configuration per 82C55	2 banks of 8 and 2 banks of 4 or 3 banks of 8 or 2 banks of 8 with handshake
Output high	*3.0 volts min @ -2.5 mA*
Output low	*0.4 volts max @ 2.5 mA*
Input high	*2.0 volts min, 5.5 volts absolute max*
Input low	*0.8 volts max, -0.5 volts absolute min*
Power-up / reset state	Input mode (high impedance)
Pull-up/pull-down resistors	User installed. Dual footprint allows pull-up or pull-down configuration

Counters

Table 3. Counters specifications

Counter type	82C54	
Configuration	3 counters, 16 bits each	
Counter 1	Source:	2 MHz (xtal /8)
	Gate:	Tied to +5V
	Output:	Selectable Interrupt source
Counter 2	Source:	Counter 1 OUT
	Gate:	Tied to +5V
	Output:	Selectable interrupt source
Counter 3 - Not used	Source	
	Gate	
	Output	

Interrupts

The interrupt control registers allow the four 82C55 devices and the 8254 counter timer to be used as interrupt sources.

Table 4. Interrupt specifications

Interrupt	INTA# - mapped to IRQn via PCI BIOS at boot-time
PCI Interrupt enable	Programmable through PLX9052 INTCSR register (INTCSR 4Ch)
Interrupt polarity	High or low level. Programmable through PLX9052
	Rising or falling edge. Programmable through PLX9052

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Interrupt sources	82C55 in Mode 1 or Mode 2 interrupt configuration: First Port C0 First Port C3 Second Port C0 Second Port C3 Third Port C0 Third Port C3 Fourth Port C0 Fourth Port C3 Note: Any interrupt source above may be individually enabled. 82C54 Counter Counter 1 OUT Counter 2 OUT Note: Counter 1 and 2 interrupts are exclusive. Only one counter may be enabled as an interrupt source at one time.

Crystal oscillator

Table 5. Crystal oscillator specifications

Oscillator type	AT-cut crystal
Frequency	16 MHz
Frequency stability	±100 ppm

Environmental

Table 6. Environmental specifications

Operating temperature range	0 to 70 °C
Storage temperature range	-40 to 70 °C
Humidity	0 to 95% non-condensing

Mechanical

Table 7. Mechanical specifications

Card dimensions	PCI short card: 136.0 mm (L) x 100.6 mm (W) x11.00 mm (H)

Main connector and pin out

Table 8. Board connectors, cables, and accessory equipment

Connector type	100 pin high-density Robinson-Nugent.
Compatibility	Pinout identical to PCI-DIO96H. Compatible with CIO-DIO96H using C100FF-x.
Compatible cables	C100FF-x
Compatible accessory products	SCB50 CIO-MINI50 CIO-TERM100 CIO-SPADE50 CIO-ERB24 CIO-ERB48 SSR-RACK24 SSR-RACK48

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Table 9. Main connector pin out

Signal name	Pin		Pin	Signal name
GND	100	●●	50	GND
+5V	99	●●	49	+5V
THIRDPORTC Bit 0	98	●●	48	FIRSTPORTC Bit 0
THIRDPORTC Bit 1	97	●●	47	FIRSTPORTC Bit 1
THIRDPORTC Bit 2	96	●●	46	FIRSTPORTC Bit 2
THIRDPORTC Bit 3	95	●●	45	FIRSTPORTC Bit 3
THIRDPORTC Bit 4	94	●●	44	FIRSTPORTC Bit 4
THIRDPORTC Bit 5	93	●●	43	FIRSTPORTC Bit 5
THIRDPORTC Bit 6	92	●●	42	FIRSTPORTC Bit 6
THIRDPORTC Bit 7	91	●●	41	FIRSTPORTC Bit 7
THIRDPORTB Bit 0	90	●●	40	FIRSTPORTB Bit 0
THIRDPORTB Bit 1	89	●●	39	FIRSTPORTB Bit 1
THIRDPORTB Bit 2	88	●●	38	FIRSTPORTB Bit 2
THIRDPORTB Bit 3	87	●●	37	FIRSTPORTB Bit 3
THIRDPORTB Bit 4	86	●●	36	FIRSTPORTB Bit 4
THIRDPORTB Bit 5	85	●●	35	FIRSTPORTB Bit 5
THIRDPORTB Bit 6	84	●●	34	FIRSTPORTB Bit 6
THIRDPORTB Bit 7	83	●●	33	FIRSTPORTB Bit 7
THIRDPORTA Bit 0	82	●●	32	FIRSTPORTA Bit 0
THIRDPORTA Bit 1	81	●●	31	FIRSTPORTA Bit 1
THIRDPORTA Bit 2	80	●●	30	FIRSTPORTA Bit 2
THIRDPORTA Bit 3	79	●●	29	FIRSTPORTA Bit 3
THIRDPORTA Bit 4	78	●●	28	FIRSTPORTA Bit 4
THIRDPORTA Bit 5	77	●●	27	FIRSTPORTA Bit 5
THIRDPORTA Bit 6	76	●●	26	FIRSTPORTA Bit 6
THIRDPORTA Bit 7	75	●●	25	FIRSTPORTA Bit 7
FOURTHPORTC Bit 0	74	●●	24	SECONDPORTC Bit 0
FOURTHPORTC Bit 1	73	●●	23	SECONDPORTC Bit 1
FOURTHPORTC Bit 2	72	●●	22	SECONDPORTC Bit 2
FOURTHPORTC Bit 3	71	●●	21	SECONDPORTC Bit 3
FOURTHPORTC Bit 4	70	●●	20	SECONDPORTC Bit 4
FOURTHPORTC Bit 5	69	●●	19	SECONDPORTC Bit 5
FOURTHPORTC Bit 6	68	●●	18	SECONDPORTC Bit 6
FOURTHPORTC Bit 7	67	●●	17	SECONDPORTC Bit 7
FOURTHPORTB Bit 0	66	●●	16	SECONDPORTB Bit 0
FOURTHPORTB Bit 1	65	●●	15	SECONDPORTB Bit 1
FOURTHPORTB Bit 2	64	●●	14	SECONDPORTB Bit 2
FOURTHPORTB Bit 3	63	●●	13	SECONDPORTB Bit 3
FOURTHPORTB Bit 4	62	●●	12	SECONDPORTB Bit 4
FOURTHPORTB Bit 5	61	●●	11	SECONDPORTB Bit 5
FOURTHPORTB Bit 6	60	●●	10	SECONDPORTB Bit 6
FOURTHPORTB Bit 7	59	●●	9	SECONDPORTB Bit 7
FOURTHPORTA Bit 0	58	●●	8	SECONDPORTA Bit 0
FOURTHPORTA Bit 1	57	●●	7	SECONDPORTA Bit 1
FOURTHPORTA Bit 2	56	●●	6	SECONDPORTA Bit 2
FOURTHPORTA Bit 3	55	●●	5	SECONDPORTA Bit 3
FOURTHPORTA Bit 4	54	●●	4	SECONDPORTA Bit 4
FOURTHPORTA Bit 5	53	●●	3	SECONDPORTA Bit 5
FOURTHPORTA Bit 6	52	●●	2	SECONDPORTA Bit 6
FOURTHPORTA Bit 7	51	●●	1	SECONDPORTA Bit 7

PCI slot ↓

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