

PCI-DIO24/S

Specifications



**MEASUREMENT
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Specifications

Typical for 25 °C unless otherwise specified.

Specifications in *italic text* are guaranteed by design.

Digital input/output

Table 1. Digital I/O specifications

Digital type	82C55
Number of I/O	24 (Port A0 through Port C7)
Configuration	2 banks of 8 and 2 banks of 4 or
	3 banks of 8 or
	2 banks of 8 with handshake
<i>Input low voltage</i>	<i>0.8 V max</i>
<i>Input high voltage</i>	<i>2.2 V min</i>
<i>Output low voltage (IOL = 2.5 mA)</i>	<i>0.5 V max</i>
<i>Output high voltage (IOH = -2.5 mA)</i>	<i>2.4 V min</i>
<i>Absolute maximum input voltage</i>	<i>-0.5 V, +6 V</i>
<i>Power-up / reset state</i>	<i>Input mode (high impedance)</i>
Pull-up/pull-down resistors	Dual footprint allows pull-up or pull-down configuration.

Interrupts

Table 2. Interrupt specifications

Interrupts	INTA# - mapped to IRQn via PCI BIOS at boot-time
Interrupt enable	External (IRQ_ENABLE) active low, disabled by default through internal resistor to TTL high and programmable through PLX9030
Interrupt sources	External source (IRQ_INPUT) Polarity programmable through PLX9030 Edge or level triggered programmable through PLX9030 Assertion time: 40 ns min

Power consumption

Table 3. Power consumption specifications

+5 V operating	240 mA typical, 350 mA max. Does not include power consumed through the I/O connector.
+5 V available at I/O connector	300 mA max, protected with a resettable fuse
Resettable fuse	Raychem type <i>miniSMDC110</i> . Hold current: 1.1 A max Series resistance 0.21 Ohms max.

Environmental

Table 4. Environmental specifications

Operating temperature range	0 to 70°C
Storage temperature range	-40 to 100°C
Humidity	0 to 95% non-condensing

Mechanical

Table 5. Mechanical specifications

Card dimensions	PCI length: 131.8 mm (L) x 106.7 mm (W) x 18.4 mm (H)
Form factor	Universal PCI keying. Compatible with either 3.3 V or 5 V PCI signaling environments.

I/O pins protection

Table 6. Static discharge protection specifications

DIO lines protected	Port A[7:0], Port B[7:0], Port C[7:0], IRQIN, IRQEN
On board chip	SEMTECH SMDA05C-8, SD05
ESD protection level	± 15 kV (air), ± 8 kV (contact)
DIO maximum voltage	6V

Connector and pin out

Table 7. Connector specifications

I/O connector type	CONN37DR male
Compatible cables	C37FF-x, C37FFS-x, x = Length in feet.
Compatible accessories	CIO-MINI37, CIO-MINI37/DST SCB-37 CIO-ERB24 CIO-ERB08 SSR-RACK24 SSR-RACK08

Table 8. Connector pin out

Pin	Signal Name	Pin	Signal Name
1	IRQ_INPUT	20	+5V
2	IRQ_ENABLE	21	GND
3	Port B7	22	Port C7
4	Port B6	23	Port C6
5	Port B5	24	Port C5
6	Port B4	25	Port C4
7	Port B3	26	Port C3
8	Port B2	27	Port C2
9	Port B1	28	Port C1
10	Port B0	29	Port C0
11	GND	30	Port A7
12	N/C	31	Port A6
13	GND	32	Port A5
14	-12V	33	Port A4
15	GND	34	Port A3
16	+12V	35	Port A2
17	GND	36	Port A1
18	+5V	37	Port A0
19	GND		

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