PC-CARD-D24/CTR3

Specifications

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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*
Configuration	*2 banks of 8, 2 banks of 4, programmable by bank as input or output*
Number of channels	*24 I/O*
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)*
Interrupts	Programmable levels 2-15
Interrupt enable	Programmable
Interrupt sources	Programmable: ▪ External (Ext Int) ▪ Internal (counter 1 output, counter 2 output, counter 3 output, 82C55 port C bit C0 or bit C3)

Counter

Table 2. Counter specifications

Counter type	*82C54*	
Configuration	3 down counters per 82C54, 16 bits each	
Counter 1 - Independent user counter	Source:	Programmable internal 10 MHz or external (CTR1 CLK)
	Gate:	External (CTR1 Gate), pulled high (enabled) by 10 k resistor
	Output:	Available at user connector (CTR1 Out), may also be programmed to connect to counter 2 clock.
Counter 2 - Independent user counter	Source:	Programmable internal 10 MHz , external (CTR2 CLK) or CTR1 Out
	Gate:	External (CTR2 Gate), pulled high (enabled) by 10 k resistor
	Output:	Available at user connector (CTR2 Out), may be programmed to connect to counter 3 clock
Counter 3 - Independent user counter	Source:	Programmable internal 1 MHz , external (CTR3 CLK) or CTR2 Out
	Gate:	External (CTR3 Gate), pulled high (enabled) by 10k resistor
	Output:	Available at user connector (CTR3 Out)
Clock input frequency	*10 MHz max*	
High pulse width (clock input)	*30 ns min*	
Low pulse width (clock input)	*50 ns min*	
Gate width high	*50 ns min*	
Gate width low	*50 ns min*	
Input low voltage	*0.8 V max*	
Input high voltage	*2.0 V min*	
Output low voltage	*0.4 V max*	
Output high voltage	*3.0 V min*	
Crystal oscillator	Frequency:	10 MHz
	Frequency accuracy:	50 ppm
	Miscellaneous:	Available (divided by 10) at user connector (1 MHz Out)

Power consumption

Table 3. Power consumption specifications

+5V operating	45 mA typical, 65 mA max

Miscellaneous

Table 4. Miscellaneous specifications

+5 Volts DC	Available at I/O connector (+5V Power)
	Protected by resettable fuse: ▪ Hold current: 350 mA ▪ Trip current: 700 mA ▪ *Trip and recovery time: 100 mS*

Environmental

Table 5. Environmental specifications

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

Connector and pin out

Table 6. Connector specifications

Connector type	50-pin connector
Compatible cables	CPCC-50F-39: 50-pin Micro connector to 50-pin female IDC, one-meter cable (39 inches).
	▪ CPCC-50M-4: 50-pin Micro connector to 50-pin male IDC, 4 inch adapter cable. and ▪ C50FF-x: 50-pin IDC female to female cable. x = length in feet.
Compatible accessory products	CIO-MINI50 CI-SPADE50 CIO-TERM100 SCB-50 SSR-RACK24 CIO-ERB24 CIO-SERB24

Table 7. Connector pin out

Pin	Signal Name	Pin	Signal Name
1	Ext Int	26	A6
2	GND	27	A5
3	Int Enable	28	A4
4	GND	29	A3
5	CTR1 CLK	30	A2
6	GND	31	A1
7	CTR1 Gate	32	A0
8	GND	33	B7
9	CTR1 Out	34	B6
10	GND	35	B5
11	CTR2 CLK	36	B4
12	GND	37	B3
13	CTR2 Gate	38	B2
14	GND	39	B1
15	CTR2 Out	40	B0
16	GND	41	C7
17	CTR3 CLK	42	C6
18	GND	43	C5
19	CTR3 Gate	44	C4
20	GND	45	C3
21	CTR3 Out	46	C2
22	GND	47	C1
23	1 MHz Out	48	C0
24	GND	49	+5V
25	A7	50	GND

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