Specifications

PCI-INT32

Specifications

Typical for 25 °C unless otherwise specified.

Specifications in *italic text* are guaranteed by design.

Power consumption

Table 1. Power consumption specifications

+5V operating	620 mA typical, 925 mA max

Counter/timer and parallel I/O

Table 2. Counter/timer and parallel I/O specifications

Device	Zilog Z85C36 (2)
Output high	2.4 volts minimum @ -250 uA
Output low	0.5 volts maximum @ +3.2 mA
Input high	2.0 volts minimum, 7 volts absolute max
Input low	0.8 volts maximum, -0.3 volts absolute min
Power-up / reset state	Input mode (high impedance)
Configured as digital input/output ports:	
Digital configuration	4 banks of 8 (Ports A and B), 2 banks of 4 (Port C), programmable by bit or bank as input or output
Number of channels	40 I/O
Configured as counter/timers: (Port A is a digital I/O port only)	
Counter type	Zilog Z85C36
Counter configuration	Six 16-bit counter/timers (Port B - High and Low nibble - and Port C) All Trigger (C1-C3 TRIG), Source (C1-C3 IN), Gate (C1-C3 GATE), and Output (C1-C3 OUT) for each chip are available at the user connector.
Clock input frequency	3 MHz max
High pulse width (clock input)	150 ns min
Low pulse width (clock input)	150 ns min
Trigger pulse width (high, low)	130 ns min

Interrupts

The Z8536 is programmable to generate interrupts based on bit change, pattern recognition, level or edge triggered, whether configured as a digital I/O port or counter port. Refer to the ZILOG *Z8036/Z8536 Product Specification* for further options. This document is available on our web site at www.mccdaq.com/PDFmanuals/Z8536.pdf.

Table 3. Interrupt specifications

Interrupts	INTA# - mapped to IRQn via PCI BIOS at boot-time
Interrupt enable	Programmable (enabled by default) and external (INT ENABLE), active low (pulled high through resistor).
Interrupt sources	Programmable: 8536A interrupt output, 8536B interrupt output, 8536A OR'ed with 8536B, external (INT INPUT, active low) or None.
Interrupt output	Buffered output for each chip available at user connector (INTA OUT, INTB OUT).
Interrupt priority	Programmable: No priority or 8536A interrupt has priority over 8536B interrupt.

Environmental

Table 4. Environmental specifications

Operating temperature range	0 to 50 °C
Storage temperature range	-20 to 70°C
Humidity	0 to 90% non-condensing

Main connector and pin out

Table 5. Main connector specifications

Connector type	50-pin, high-density IDC header connector
Compatible cables	C50FF-x
Compatible accessory products	CIO-MINI50

Table 6. Main connector pin out

Signal name	Pin		Pin	Signal name	
GND	50	••	49	+5V	
C3 OUT C0	48	••	47	C1 C3 IN	
C3 TRIG	46	••	45	C3 C3 GATE	
INT INPUT	44	••	43	INT ENABLE	
NC	42	••	41	NC	
C2 OUT B0	40	••	39	B1 C2 IN	**First Z8536**
C2 TRIG	38	••	37	B3 C2 GATE	
C1 OUT B4	36	••	35	B5 C1 IN	**BADR + 0, 1, 2**
C1 TRIG	34	••	33	B7 C1 GATE	
A0	32	••	31	A1	
A2	30	••	29	A3	
A4	28	••	27	A5	
A6	26	••	25	A7	
C3 OUT C0	24	••	23	C1 C3 IN	
C3 TRIG	22	••	21	C3 C3 GATE	
2.5 MHz	20	••	19	5 MHz	
INTA OUT	18	••	17	INTB OUT	**Second Z8536**
C2 OUT B0	16	••	15	B1 C2 IN	
C2 TRIG	14	••	13	B3 C2 GATE	**BADR + 4, 5, 6**
C1 OUT B4	12	••	11	B5 C1 IN	
C1 TRIG	10	••	9	B7 C1 GATE	
A0	8	••	7	A1	
A2	6	••	5	A3	
A4	4	••	3	A5	
A6	2	••	1	A7	

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