

CIO-DIO192

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. DIO specifications

Digital type	82C55
Configuration	16 banks of 8, 16 banks of 4, programmable by bank as input or output
Number of channels	192 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)

Power consumption

Table 2. Power consumption specifications

+5V quiescent	170 mA typical, 220 mA max
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Environmental

Table 3. Environmental specifications

<i>Operating temperature range</i>	0 to 50 °C
<i>Storage temperature range</i>	-40 to +100 °C
<i>Humidity</i>	0 to 90% non-condensing

Main connectors and pin out

Table 4. Connector specifications

Connector type	(4) 50-pin shrouded male header connectors: P1, P2, P3, P4
Compatible cables	C50FF-x
Compatible accessory products with the C50FF-x	CIO-TERM100 CIO-SPADE50 CIO-MINI50 SSR-RACK24, SSR-RACK48 CIO-ERB24, CIO-ERB48

Table 5. P1 pin out

Pin	Signal name	Pin	Signal name
50	GND	49	+5V
48	FIRSTPORTC Bit 0	47	FIRSTPORTC Bit 1
46	FIRSTPORTC Bit 2	45	FIRSTPORTC Bit 3
44	FIRSTPORTC Bit 4	43	FIRSTPORTC Bit 5
42	FIRSTPORTC Bit 6	41	FIRSTPORTC Bit 7
40	FIRSTPORTB Bit 0	39	FIRSTPORTB Bit 1
38	FIRSTPORTB Bit 2	37	FIRSTPORTB Bit 3
36	FIRSTPORTB Bit 4	35	FIRSTPORTB Bit 5
34	FIRSTPORTB Bit 6	33	FIRSTPORTB Bit 7
32	FIRSTPORTA Bit 0	31	FIRSTPORTA Bit 1
30	FIRSTPORTA Bit 2	29	FIRSTPORTA Bit 3
28	FIRSTPORTA Bit 4	27	FIRSTPORTA Bit 5
26	FIRSTPORTA Bit 6	25	FIRSTPORTA Bit 7
24	SECONDPORC Bit 0	23	SECONDPORC Bit 1
22	SECONDPORC Bit 2	21	SECONDPORC Bit 3
20	SECONDPORC Bit 4	19	SECONDPORC Bit 5
18	SECONDPORC Bit 6	17	SECONDPORC Bit 7
16	SECONDPORB Bit 0	15	SECONDPORB Bit 1
14	SECONDPORB Bit 2	13	SECONDPORB Bit 3
12	SECONDPORB Bit 4	11	SECONDPORB Bit 5
10	SECONDPORB Bit 6	9	SECONDPORB Bit 7
8	SECONDPORC Bit 0	7	SECONDPORC Bit 1
6	SECONDPORC Bit 2	5	SECONDPORC Bit 3
4	SECONDPORC Bit 4	3	SECONDPORC Bit 5
2	SECONDPORC Bit 6	1	SECONDPORC Bit 7

Table 6. P2 pin out

Pin	Signal name	Pin	Signal name
50	GND	49	+5V
48	THIRDPORC Bit 0	47	THIRDPORC Bit 1
46	THIRDPORC Bit 2	45	THIRDPORC Bit 3
44	THIRDPORC Bit 4	43	THIRDPORC Bit 5
42	THIRDPORC Bit 6	41	THIRDPORC Bit 7
40	THIRDPORB Bit 0	39	THIRDPORB Bit 1
38	THIRDPORB Bit 2	37	THIRDPORB Bit 3
36	THIRDPORB Bit 4	35	THIRDPORB Bit 5
34	THIRDPORB Bit 6	33	THIRDPORB Bit 7
32	THIRDPORC Bit 0	31	THIRDPORC Bit 1
30	THIRDPORC Bit 2	29	THIRDPORC Bit 3
28	THIRDPORC Bit 4	27	THIRDPORC Bit 5
26	THIRDPORC Bit 6	25	THIRDPORC Bit 7
24	FOURTHPORC Bit 0	23	FOURTHPORC Bit 1
22	FOURTHPORC Bit 2	21	FOURTHPORC Bit 3
20	FOURTHPORC Bit 4	19	FOURTHPORC Bit 5
18	FOURTHPORC Bit 6	17	FOURTHPORC Bit 7
16	FOURTHPORB Bit 0	15	FOURTHPORB Bit 1
14	FOURTHPORB Bit 2	13	FOURTHPORB Bit 3
12	FOURTHPORB Bit 4	11	FOURTHPORB Bit 5
10	FOURTHPORB Bit 6	9	FOURTHPORB Bit 7
8	FOURTHPORC Bit 0	7	FOURTHPORC Bit 1
6	FOURTHPORC Bit 2	5	FOURTHPORC Bit 3
4	FOURTHPORC Bit 4	3	FOURTHPORC Bit 5
2	FOURTHPORC Bit 6	1	FOURTHPORC Bit 7

Table 7. P3 pin out

Pin	Signal name	Pin	Signal name
50	GND	49	+5V
48	FIFTHPORTC Bit 0	47	FIFTHPORTC Bit 1
46	FIFTHPORTC Bit 2	45	FIFTHPORTC Bit 3
44	FIFTHPORTC Bit 4	43	FIFTHPORTC Bit 5
42	FIFTHPORTC Bit 6	41	FIFTHPORTC Bit 7
40	FIFTHPORTB Bit 0	39	FIFTHPORTB Bit 1
38	FIFTHPORTB Bit 2	37	FIFTHPORTB Bit 3
36	FIFTHPORTB Bit 4	35	FIFTHPORTB Bit 5
34	FIFTHPORTB Bit 6	33	FIFTHPORTB Bit 7
32	FIFTHPORTA Bit 0	31	FIFTHPORTA Bit 1
30	FIFTHPORTA Bit 2	29	FIFTHPORTA Bit 3
28	FIFTHPORTA Bit 4	27	FIFTHPORTA Bit 5
26	FIFTHPORTA Bit 6	25	FIFTHPORTA Bit 7
24	SIXTHPORTC Bit 0	23	SIXTHPORTC Bit 1
22	SIXTHPORTC Bit 2	21	SIXTHPORTC Bit 3
20	SIXTHPORTC Bit 4	19	SIXTHPORTC Bit 5
18	SIXTHPORTC Bit 6	17	SIXTHPORTC Bit 7
16	SIXTHPORTB Bit 0	15	SIXTHPORTB Bit 1
14	SIXTHPORTB Bit 2	13	SIXTHPORTB Bit 3
12	SIXTHPORTB Bit 4	11	SIXTHPORTB Bit 5
10	SIXTHPORTB Bit 6	9	SIXTHPORTB Bit 7
8	SIXTHPORTA Bit 0	7	SIXTHPORTA Bit 1
6	SIXTHPORTA Bit 2	5	SIXTHPORTA Bit 3
4	SIXTHPORTA Bit 4	3	SIXTHPORTA Bit 5
2	SIXTHPORTA Bit 6	1	SIXTHPORTA Bit 7

Table 8. P4 pin out

Pin	Signal name	Pin	Signal name
50	GND	49	+5V
48	SEVENTHPORTC Bit 0	47	SEVENTHPORTC Bit 1
46	SEVENTHPORTC Bit 2	45	SEVENTHPORTC Bit 3
44	SEVENTHPORTC Bit 4	43	SEVENTHPORTC Bit 5
42	SEVENTHPORTC Bit 6	41	SEVENTHPORTC Bit 7
40	SEVENTHPORTB Bit 0	39	SEVENTHPORTB Bit 1
38	SEVENTHPORTB Bit 2	37	SEVENTHPORTB Bit 3
36	SEVENTHPORTB Bit 4	35	SEVENTHPORTB Bit 5
34	SEVENTHPORTB Bit 6	33	SEVENTHPORTB Bit 7
32	SEVENTHPORTA Bit 0	31	SEVENTHPORTA Bit 1
30	SEVENTHPORTA Bit 2	29	SEVENTHPORTA Bit 3
28	SEVENTHPORTA Bit 4	27	SEVENTHPORTA Bit 5
26	SEVENTHPORTA Bit 6	25	SEVENTHPORTA Bit 7
24	EIGHTHPORTC Bit 0	23	EIGHTHPORTC Bit 1
22	EIGHTHPORTC Bit 2	21	EIGHTHPORTC Bit 3
20	EIGHTHPORTC Bit 4	19	EIGHTHPORTC Bit 5
18	EIGHTHPORTC Bit 6	17	EIGHTHPORTC Bit 7
16	EIGHTHPORTB Bit 0	15	EIGHTHPORTB Bit 1
14	EIGHTHPORTB Bit 2	13	EIGHTHPORTB Bit 3
12	EIGHTHPORTB Bit 4	11	EIGHTHPORTB Bit 5
10	EIGHTHPORTB Bit 6	9	EIGHTHPORTB Bit 7
8	EIGHTHPORTA Bit 0	7	EIGHTHPORTA Bit 1
6	EIGHTHPORTA Bit 2	5	EIGHTHPORTA Bit 3
4	EIGHTHPORTA Bit 4	3	EIGHTHPORTA Bit 5
2	EIGHTHPORTA Bit 6	1	EIGHTHPORTA Bit 7

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