# **Specifications**

# 6K-SSR-RACK08



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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

5 V PC auxiliary power / PCI bus	All modules off	200 mA typical, 230 mA max.
power	All modules on	260 mA typical, 320 mA max.
External (9 V to 15 V) unregulated	All modules off	210 mA typical, 240 mA max.
supply	All modules on	270 mA typical, 330 mA max.

#### **Environmental**

Table 2. Environmental specifications

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

#### Mechanical

Table 3. Mechanical specifications

Card dimensions with modules	248 mm (L) x 102 mm (W) x 41 mm (H)
(without standoffs)	9.75" (L) x 4.0" (W) x 1.625" (H)

# **Relay screw terminals**

Table 4. Relay screw terminal specifications

Wire gauge range	12 AWG to 22 AWG

Table 5. Screw terminal pin out

Pin	Signal Name
1+	Module 1+
1-	Module 1-
2+	Module 2+
2-	Module 2-
3+	Module 3+
3-	Module 3-
4+	Module 4+
4-	Module 4-
5+	Module 5+
5-	Module 5-
6+	Module 6+
6-	Module 6-
7+	Module 7+
7-	Module 7-
8+	Module 8+
8-	Module 8-

# Power in jumper (JP1)

Table 6. JP1 specifications

+5PC	Use cable C-PCPOWER-10
+9V EXT	Use Adapter CB-PWR-9
+5 BD (default)	Powered from 100-pin connector

# I/O module type selection (JP2, JP3)

Table 7. JP2 and JP3 specifications

Modules 1-4	Selectable via JP2 as either input modules or output (default) modules. Do not mix input and output modules within this bank of four.
Modules 5-8	Selectable via JP3 as either input modules or output (default) modules. Do not mix input and output modules within this bank of four.
Pull-up/pull-down on digital I/O lines	Configurable at RN1 with 2.2 K resistor network. Not populated by default.

## I/O module polarity selection (JP5, JP6)

Table 8. JP5 and JP6 specifications

Modules 1-4	Inverted (active high) or non-inverted (active low, default), selectable via JP5.
Modules 5-8	Inverted (active high) or non-inverted (active low, default), selectable via JP6.

## **Bypass resistors**

Table 9. Bypass resistor specifications

Resistors R1 – R8	Transceiver bypass resistors for bit-wise I/O configuration. NOT populated by default. Bypass
(Normally $0 \Omega$ )	resistors are mutually exclusive of 74LS245 and 74LS640 transceivers.

# **Compatible products**

Table 10. Compatible product specifications

Analog input boards	■ PCI-DAS6013
	■ PCI-DAS6014
	■ PCI-DAS6030
	■ PCI-DAS6031
	■ PCI-DAS6032
	■ PCI-DAS6033
	■ PCI-DAS6034
	■ PCI-DAS6035
	■ PCI-DAS6036
	■ PCI-DAS6052
	■ PCI-DAS6023
	■ PCI-DAS6025
	■ PCI-DAS6040
	■ PCI-DAS6070
	■ PCI-DAS6071
Analog output boards	■ PCI-DAC6702
	■ PCI-DAC6703

**Note 1:** The 6K-SSR-RACK08 requires external power (for all products above) when used with the C100HD50 (pins 51-100) ribbon cable.

# Main connectors and pin out

Table 11. Connector P11 specifications

Connector type	Shielded SCSI 100 D-type
Compatible cables	C100MMS-x, shielded round cable. $x = 1, 2 \text{ or } 3 \text{ meters}$

Table 12. P11 pin out

Pin	Signal name	Pin	Signal name
1	P12 Pass Through 1	51	P12 Pass Through 51
2	P12 Pass Through 2	52	P12 Pass Through 52
3	P12 Pass Through 3	53	P12 Pass Through 53
4	P12 Pass Through 4	54	P12 Pass Through 54
5	P12 Pass Through 5	55	P12 Pass Through 55
6	P12 Pass Through 6	56	P12 Pass Through 56
7	P12 Pass Through 7	57	P12 Pass Through 57
8	P12 Pass Through 8	58	P12 Pass Through 58
9	P12 Pass Through 9	59	P12 Pass Through 59
10	P12 Pass Through 10	60	P12 Pass Through 60
11	P12 Pass Through 11	61	P12 Pass Through 61
12	P12 Pass Through 12	62	P12 Pass Through 62
13	P12 Pass Through 13	63	P12 Pass Through 63
14	P12 Pass Through 14	64	P12 Pass Through 64
15	P12 Pass Through 15	65	P12 Pass Through 65
16	P12 Pass Through 16	66	P12 Pass Through 66
17	P12 Pass Through 17	67	P12 Pass Through 67
18	P12 Pass Through 18	68	P12 Pass Through 68
19	P12 Pass Through 19	69	P12 Pass Through 69
20	P12 Pass Through 20	70	P12 Pass Through 70
21	P12 Pass Through 21	71	P12 Pass Through 71
22	P12 Pass Through 22	72	P12 Pass Through 72
23	P12 Pass Through 23	73	P12 Pass Through 73
24	P12 Pass Through 24	74	P12 Pass Through 74
25	P12 Pass Through 25	75	P12 Pass Through 75
26	P12 Pass Through 26	76	P12 Pass Through 76
27	P12 Pass Through 27	77	P12 Pass Through 77
28	P12 Pass Through 28	78	P12 Pass Through 78
29	P12 Pass Through 29	79	P12 Pass Through 79
30	P12 Pass Through 30	80	P12 Pass Through 80
31	P12 Pass Through 31	81	P12 Pass Through 81
32	P12 Pass Through 32	82	P12 Pass Through 82
33	P12 Pass Through 33	83	P12 Pass Through 83
34	P12 Pass Through 34	84	P12 Pass Through 84
35	P12 Pass Through 35	85	DIO0
36	P12 Pass Through 36	86	DIO1
37	P12 Pass Through 37	87	DIO2
38	P12 Pass Through 38	88	DIO3
39	PC +5V	89	DIO4
40	P12 Pass Through 40	90	DIO5
41	P12 Pass Through 41	91	DIO6
42	P12 Pass Through 42	92	DIO7
43	P12 Pass Through 43	93	P12 Pass Through 93
44	P12 Pass Through 44	94	P12 Pass Through 94
45	P12 Pass Through 45	95	P12 Pass Through 95
46	P12 Pass Through 46	96	P12 Pass Through 96
47	P12 Pass Through 47	97	P12 Pass Through 97
48	P12 Pass Through 48	98	P12 Pass Through 98
49	P12 Pass Through 49	99	P12 Pass Through 99
50	GND	100	GND

Table 13. Connector P12 specifications

Connector type	Shielded SCSI 100 D-type
Compatible cables	C100MMS-x, shielded round cable. $x = 1, 2 \text{ or } 3 \text{ meters}$

Table 14. P12 pin out

Pin	Signal name	Pin	Signal name
1	P11 Pass Through 1	51	P11 Pass Through 51
2	P11 Pass Through 2	52	P11 Pass Through 52
3	P11 Pass Through 3	53	P11 Pass Through 53
4	P11 Pass Through 4	54	P11 Pass Through 54
5	P11 Pass Through 5	55	P11 Pass Through 55
6	P11 Pass Through 6	56	P11 Pass Through 56
7	P11 Pass Through 7	57	P11 Pass Through 57
8	P11 Pass Through 8	58	P11 Pass Through 58
9	P11 Pass Through 9	59	P11 Pass Through 59
10	P11 Pass Through 10	60	P11 Pass Through 60
11	P11 Pass Through 11	61	P11 Pass Through 61
12	P11 Pass Through 12	62	P11 Pass Through 62
13	P11 Pass Through 13	63	P11 Pass Through 63
14	P11 Pass Through 14	64	P11 Pass Through 64
15	P11 Pass Through 15	65	P11 Pass Through 65
16	P11 Pass Through 16	66	P11 Pass Through 66
17	P11 Pass Through 17	67	P11 Pass Through 67
18	P11 Pass Through 18	68	P11 Pass Through 68
19	P11 Pass Through 19	69	P11 Pass Through 69
20	P11 Pass Through 20	70	P11 Pass Through 70
21	P11 Pass Through 21	71	P11 Pass Through 71
22	P11 Pass Through 22	72	P11 Pass Through 72
23	P11 Pass Through 23	73	P11 Pass Through 73
24	P11 Pass Through 24	74	P11 Pass Through 74
25	P11 Pass Through 25	75	P11 Pass Through 75
26	P11 Pass Through 26	76	P11 Pass Through 76
27	P11 Pass Through 27	77	P11 Pass Through 77
28	P11 Pass Through 28	78	P11 Pass Through 78
29	P11 Pass Through 29	79	P11 Pass Through 79
30	P11 Pass Through 30	80	P11 Pass Through 80
31	P11 Pass Through 31	81	P11 Pass Through 81
32	P11 Pass Through 32	82	P11 Pass Through 82
33	P11 Pass Through 33	83	P11 Pass Through 83
34	P11 Pass Through 34	84	P11 Pass Through 84
35	P11 Pass Through 35	85	DIO0
36	P11 Pass Through 36	86	DIO1
37	P11 Pass Through 37	87	DIO2
38	P11 Pass Through 38	88	DIO3
39	PC +5V	89	DIO4
40	P11 Pass Through 40	90	DIO5
41	P11 Pass Through 41	91	DIO6
42	P11 Pass Through 42	92	DIO7
43	P11 Pass Through 43	93	P11 Pass Through 93
44	P11 Pass Through 44	94	P11 Pass Through 94
45	P11 Pass Through 45	95	P11 Pass Through 95
46	P11 Pass Through 46	96	P11 Pass Through 96
47	P11 Pass Through 47	97	P11 Pass Through 97
48	P11 Pass Through 48	98	P11 Pass Through 98
49	P11 Pass Through 49	99	P11 Pass Through 99
50	GND	100	GND

Table 15. Connector P9 specifications

Connector type	Unshielded 50-pin ribbon connector - male
Compatible cables	C100HD50-x, C50FF-x, unshielded ribbon cable. $x = 3$ or 6 feet.

Table 16. P9 pin out

Pin	Signal name	Pin	Signal name
1	P10 Pass Through 51	26	P10 Pass Through 76
2	P10 Pass Through 52	27	P10 Pass Through 77
3	P10 Pass Through 53	28	P10 Pass Through 78
4	P10 Pass Through 54	29	P10 Pass Through 79
5	P10 Pass Through 55	30	P10 Pass Through 80
6	P10 Pass Through 56	31	P10 Pass Through 81
7	P10 Pass Through 57	32	P10 Pass Through 82
8	P10 Pass Through 58	33	P10 Pass Through 83
9	P10 Pass Through 59	34	P10 Pass Through 84
10	P10 Pass Through 60	35	DIO0
11	P10 Pass Through 61	36	DIO1
12	P10 Pass Through 62	37	DIO2
13	P10 Pass Through 63	38	DIO3
14	P10 Pass Through 64	39	DIO4
15	P10 Pass Through 65	40	DIO5
16	P10 Pass Through 66	41	DIO6
17	P10 Pass Through 67	42	DIO7
18	P10 Pass Through 68	43	P10 Pass Through 93
19	P10 Pass Through 69	44	P10 Pass Through 94
20	P10 Pass Through 70	45	P10 Pass Through 95
21	P10 Pass Through 71	46	P10 Pass Through 96
22	P10 Pass Through 72	47	P10 Pass Through 97
23	P10 Pass Through 73	48	P10 Pass Through 98
24	P10 Pass Through 74	49	P10 Pass Through 99
25	P10 Pass Through 75	50	GND

Table 17. Connector P10 specifications

Connector type	Unshielded 50-pin ribbon connector - male
Compatible cables	C100HD50-x, C50FF-x, unshielded ribbon cable. $x = 3$ or 6 feet

Table 18. P10 pin out

Pin	Signal name	Pin	Signal name
1	P9 Pass Through 51	26	P9 Pass Through 76
2	P9 Pass Through 52	27	P9 Pass Through 77
3	P9 Pass Through 53	28	P9 Pass Through 78
4	P9 Pass Through 54	29	P9 Pass Through 79
5	P9 Pass Through 55	30	P9 Pass Through 80
6	P9 Pass Through 56	31	P9 Pass Through 81
7	P9 Pass Through 57	32	P9 Pass Through 82
8	P9 Pass Through 58	33	P9 Pass Through 83
9	P9 Pass Through 59	34	P9 Pass Through 84
10	P9 Pass Through 60	35	DIO0
11	P9 Pass Through 61	36	DIO1
12	P9 Pass Through 62	37	DIO2
13	P9 Pass Through 63	38	DIO3
14	P9 Pass Through 64	39	DIO4
15	P9 Pass Through 65	40	DIO5
16	P9 Pass Through 66	41	DIO6
17	P9 Pass Through 67	42	DIO7
18	P9 Pass Through 68	43	P9 Pass Through 93
19	P9 Pass Through 69	44	P9 Pass Through 94
20	P9 Pass Through 70	45	P9 Pass Through 95
21	P9 Pass Through 71	46	P9 Pass Through 96
22	P9 Pass Through 72	47	P9 Pass Through 97
23	P9 Pass Through 73	48	P9 Pass Through 98
24	P9 Pass Through 74	49	P9 Pass Through 99
25	P9 Pass Through 75	50	GND

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