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NOTE TO USERS

NI 66xx Pinout Labels for the SCB-68A

Counter/Timer Modules/Devices Using the 68-Pin Shielded Connector Block

If you are using an NI 66xx (formerly referred to as TIO) counter/timer device or module with the SCB-68A, you can print and attach a connector-specific pinout label to the cover of the connector block for easy connection reference. This document provides the label for the following models:

- NI 6601
- NI 6602
- NI 6608
- NI 6612
- NI 6614

NATIONAL INSTRUMENTS

Use the following label if you are connecting the SCB-68A to NI 6601, NI 6602, and NI 6608 models.

Figure 1. NI 660x

NATIONAL INSTRUMENTS

DIO/CTR

68	D GND
34	PFI 31/P0.31/CTR 2 SOURCE
67	PFI 30/P0.30/CTR 2 GATE
33	D GND
66	PFI 29/P0.29/CTR 2 AUX
32	PFI 28/P0.28/CTR 2 OUT
65	D GND
31	PFI 27/P0.27/CTR 3 SOURCE
64	PFI 26/P0.26/CTR 3 GATE
30	D GND
63	PFI 25/P0.25/CTR 3 AUX
29	PFI 24/P0.24/CTR 3 OUT
62	D GND
28	PFI 23/P0.23/CTR 4 SOURCE
61	PFI 22/P0.22/CTR 4 GATE
27	D GND
60	PFI 21/P0.21/CTR 4 AUX
26	PFI 20/P0.20/CTR 4 OUT

DIO/CTR

59	D GND
25	PFI 19/P0.19/CTR 5 SOURCE
58	PFI 18/P0.18/CTR 5 GATE
24	D GND
57	PFI 17/P0.17/CTR 5 AUX
23	PFI 16/P0.16/CTR 5 OUT
56	R GND
22	PFI 15/P0.15/CTR 6 SOURCE
55	D GND
21	PFI 14/P0.14/CTR 6 GATE
54	PFI 13/P0.13/CTR 6 AUX
20	D GND
53	PFI 12/P0.12/CTR 6 OUT
19	R GND
52	PFI 11/P0.11/CTR 7 SOURCE
18	D GND

DIO/CTR

51	PFI 10/P0.10/CTR 7 GATE
17	PFI 9/P0.9/CTR 7 AUX
50	D GND
16	PFI 8/P0.8/CTR 7 OUT
49	D GND
15	PFI 7/P0.7
48	PFI 6/P0.6
14	D GND
47	PFI 5/P0.5
13	PFI 4/P0.4
46	D GND
12	PFI 3/P0.3
45	PFI 2/P0.2
11	D GND
44	PFI 1/P0.1
10	PFI 0/P0.0

DIO/CTR

1	+5 V
35	R GND
2	PFI 39/CTR 0 SOURCE
36	D GND
3	PFI 38/CTR 0 GATE
37	RESERVED
4	RESERVED
38	RESERVED
5	PFI 36/CTR 0 OUT
39	D GND
6	PFI 33/CTR 1 AUX
40	PFI 37/CTR 0 AUX
7	PFI 35/CTR 1 SOURCE
41	D GND
8	PFI 34/CTR 1 GATE
42	D GND
9	PFI 32/CTR 1 OUT
43	R GND

SCB-68A Quick Reference Label

NI 660x Counter/Timer (TIO) Models

R GND: These terminals are routed to RESERVED when using the product with a SH68-68-D1 shielded cable or routed to D GND when using the product with a R68-68 ribbon cable.

Direct Feedthrough

S1   1   2

S2   1   2   3

Use the following label if you are connecting the SCB-68A to NI 6612 and NI 6614 models.

Figure 2. NI 661x

NATIONAL INSTRUMENTS

DIO/CTR

68	D GND
34	PFI 31/P0.31/CTR 2 SOURCE
67	PFI 30/P0.30/CTR 2 GATE
33	D GND
66	PFI 29/P0.29/CTR 2 AUX
32	PFI 28/P0.28/CTR 2 OUT
65	D GND
31	PFI 27/P0.27/CTR 3 SOURCE
64	PFI 26/P0.26/CTR 3 GATE
30	D GND
63	PFI 25/P0.25/CTR 3 AUX
29	PFI 24/P0.24/CTR 3 OUT
62	D GND
28	PFI 23/P0.23/CTR 4 SOURCE
61	PFI 22/P0.22/CTR 4 GATE
27	D GND
60	PFI 21/P0.21/CTR 4 AUX
26	PFI 20/P0.20/CTR 4 OUT

DIO/CTR

59	D GND
25	PFI 19/P0.19/CTR 5 SOURCE
58	PFI 18/P0.18/CTR 5 GATE
24	D GND
57	PFI 17/P0.17/CTR 5 AUX
23	PFI 16/P0.16/CTR 5 OUT
56	R GND
22	PFI 15/P0.15/CTR 6 SOURCE
55	PFI 14/P0.14/CTR 6 GATE
21	D GND
54	PFI 13/P0.13/CTR 6 AUX
20	PFI 12/P0.12/CTR 6 OUT
53	R GND
19	PFI 11/P0.11/CTR 7 SOURCE
52	D GND
18	

DIO/CTR

51	PFI 10/P0.10/CTR 7 GATE
17	PFI 9/P0.9/CTR 7 AUX
50	D GND
16	PFI 8/P0.8/CTR 7 OUT
49	D GND
15	PFI 7/P0.7
48	PFI 6/P0.6
14	D GND
47	PFI 5/P0.5
13	PFI 4/P0.4
46	D GND
12	PFI 3/P0.3
45	PFI 2/P0.2
11	D GND
44	PFI 1/P0.1
10	PFI 0/P0.0

DIO/CTR

1	+5 V
35	R GND
2	PFI 39/P1.7/CTR 0 SOURCE
36	R GND
3	PFI 38/P1.6/CTR 0 GATE
37	RESERVED
4	RESERVED
38	RESERVED
5	PFI 36/P1.4/CTR 0 OUT
39	D GND
6	PFI 33/P1.1/CTR 1 AUX
40	PFI 37/P1.6 0 AUX
7	PFI 35/P1.3/CTR 1 SOURCE
41	D GND
8	PFI 34/P1.2/CTR 1 GATE
42	D GND
9	PFI 32/P1.0/CTR 1 OUT
43	R GND

SCB-68A Quick Reference Label

NI 661x Counter/Timer (TIO) Models

R GND: These terminals are routed to RESERVED when using the product with a SH68-68-D1 shielded cable or routed to D GND when using the product with a R68-68 ribbon cable.

Direct Feedthrough

S1   1   2   1   2   3   S2