

COMPREHENSIVE SERVICES

We offer competitive repair and calibration services, as well as easily accessible documentation and free downloadable resources.

SELL YOUR SURPLUS

We buy new, used, decommissioned, and surplus parts from every NI series. We work out the best solution to suit your individual needs.

 Sell For Cash  Get Credit  Receive a Trade-In Deal

OBSOLETE NI HARDWARE IN STOCK & READY TO SHIP

We stock **New**, **New Surplus**, **Refurbished**, and **Reconditioned** NI Hardware.



Bridging the gap between the manufacturer and your legacy test system.

 1-800-915-6216

 www.apexwaves.com

 sales@apexwaves.com

All trademarks, brands, and brand names are the property of their respective owners.

Request a Quote

 **CLICK HERE**

PCI-6602

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

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

Figure 1. NI 660x



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	+5V
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 38/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



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

Figure 2. NI 661x



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	+5V
35	R GND
2	PFI 39/P1.7/CTR 0 SOURCE
36	D 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/CTR 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



Refer to the *NI Trademarks and Logo Guidelines* at ni.com/trademarks for more information on NI trademarks. Other product and company names mentioned herein are trademarks or trade names of their respective companies. For patents covering NI products/technology, refer to the appropriate location: **Help»Patents** in your software, the `patents.txt` file on your media, or the *National Instruments Patents Notice* at ni.com/patents. You can find information about end-user license agreements (EULAs) and third-party legal notices in the `readme` file for your NI product. Refer to the *Export Compliance Information* at ni.com/legal/export-compliance for the NI global trade compliance policy and how to obtain relevant HTS codes, ECCNs, and other import/export data. NI MAKES NO EXPRESS OR IMPLIED WARRANTIES AS TO THE ACCURACY OF THE INFORMATION CONTAINED HEREIN AND SHALL NOT BE LIABLE FOR ANY ERRORS. U.S. Government Customers: The data contained in this manual was developed at private expense and is subject to the applicable limited rights and restricted data rights as set forth in FAR 52.227-14, DFAR 252.227-7014, and DFAR 252.227-7015.

© 2017 National Instruments. All rights reserved.