

NOTE TO USERS

NI 78xxR and NI 78xx Pinout Labels for the SCB-68A

Reconfigurable I/O R Series Modules/Devices Using the 68-Pin Shielded Connector Block

If you are using an NI 78xxR or NI 78xx (formerly referred to as R Series) reconfigurable I/O 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 labels for the following models:

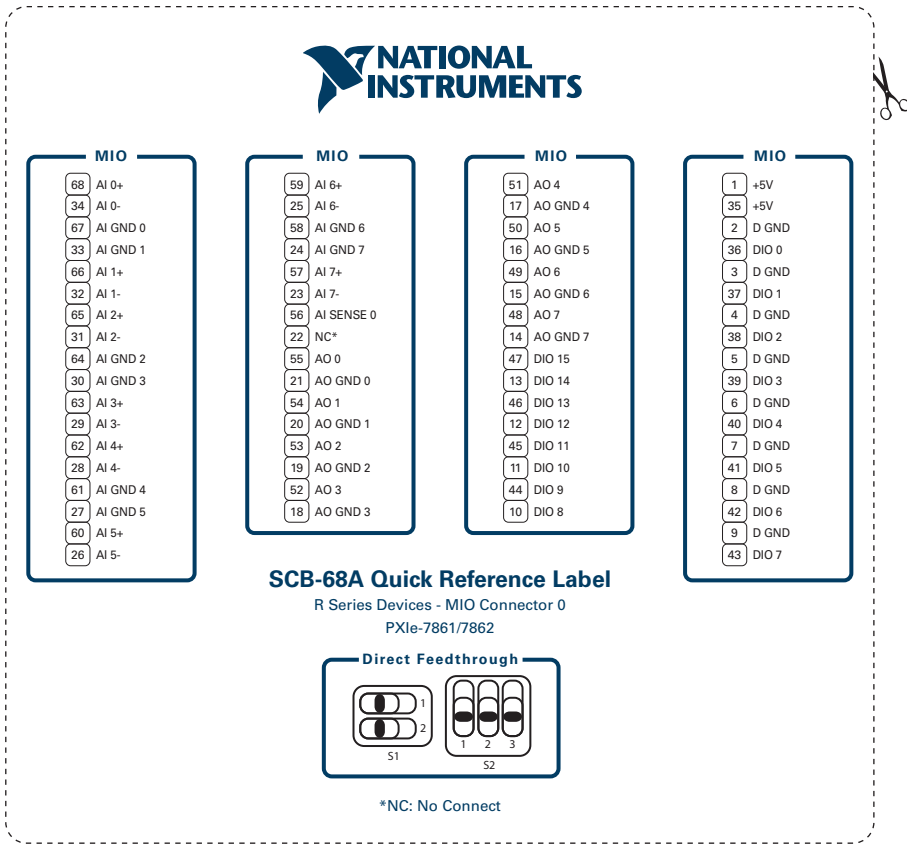
- NI PCI-7811R
- NI PCI-7813R
- NI PCI-7830R
- NI PCI-7831R
- NI PCI-7833R
- NI PCIe-7841R
- NI PCIe-7842R
- NI PCIe-7846
- NI PCIe-7856
- NI PCIe-7857
- NI PCIe-7858
- NI PCIe-7851R
- NI PCIe-7852R
- NI PXI-7811R
- NI PXI-7813R
- NI PXI-7830R
- NI PXI-7831R
- NI PXI-7833R
- NI PXI-7841R
- NI PXI-7842R
- NI PXI-7851R
- NI PXI-7852R
- NI PXI-7853R
- NI PXI-7854R
- NI PXIe-7846R
- NI PXIe-7847R
- NI PXIe-7856R
- NI PXIe-7857R
- NI PXIe-7858R
- NI PXIe-7861
- NI PXIe-7862
- NI PXIe-7865
- NI PXIe-7866
- NI PXIe-7867R
- NI PXIe-7868R
- NI USB-7845R
- NI USB-7846R
- NI USB-7855R
- NI USB-7856R



Note To find the appropriate cable for your device, go to ni.com/info and enter Info Code `scb68acables`.

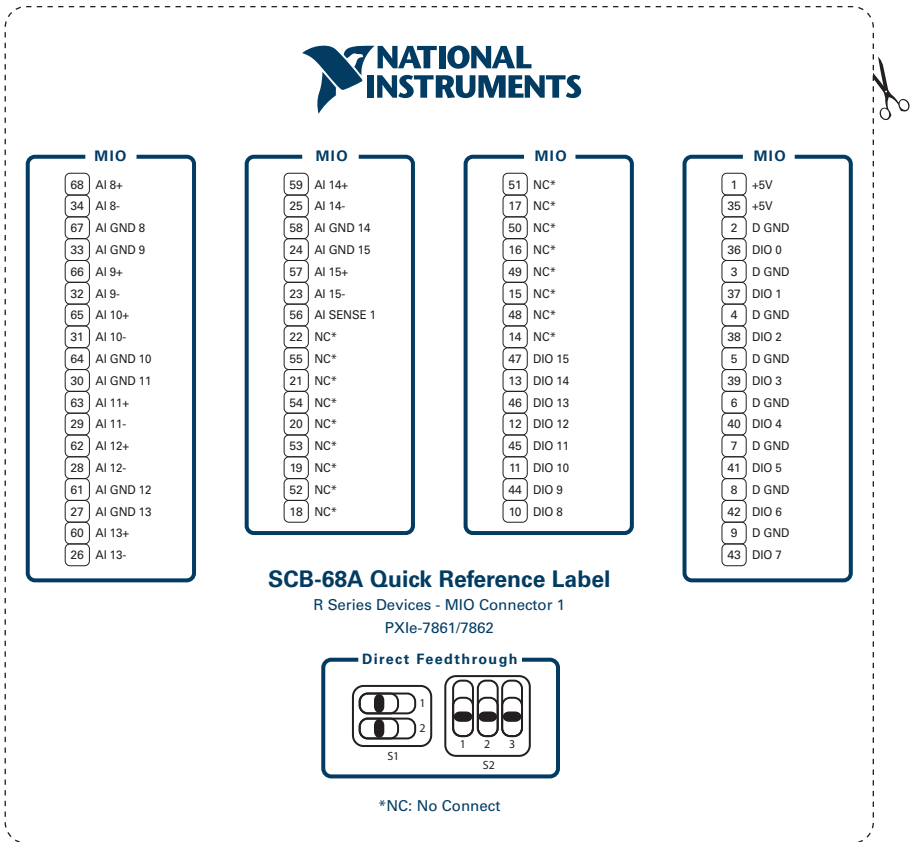
Use the following label in Figure 1 if you are connecting the SCB-68A to the MIO Connector 0 on NI PXIe-7861/7862 models.

Figure 1. MIO Connector 0 for NI PXIe-7861/7862



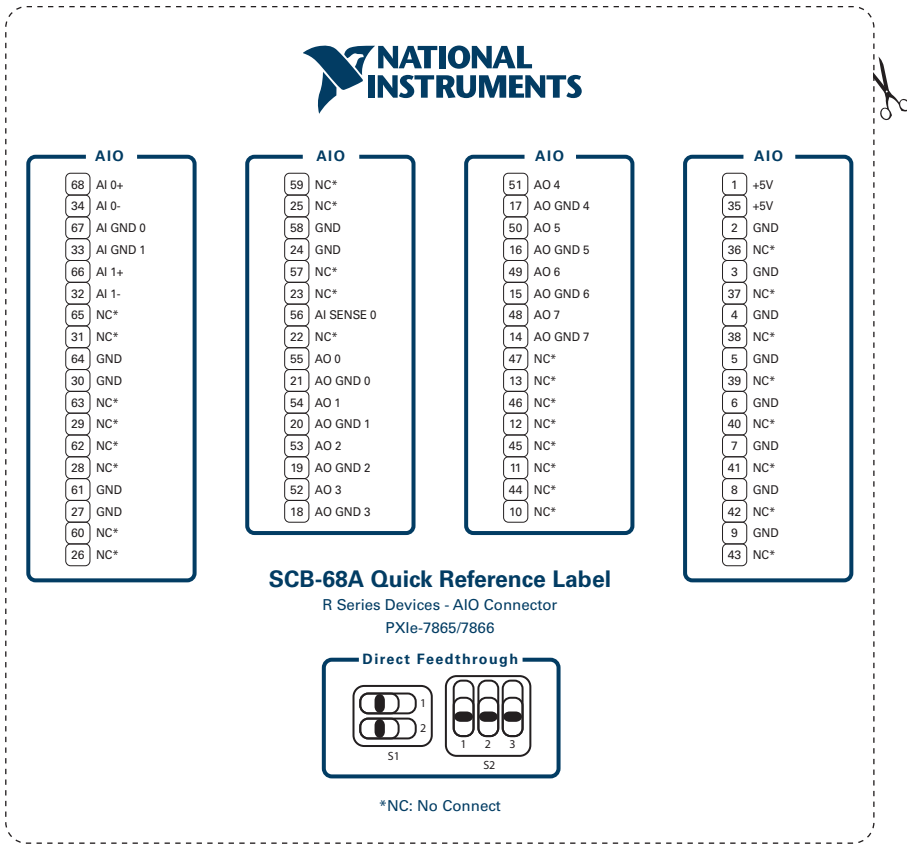
Use the following label in Figure 2 if you are connecting the SCB-68A to the MIO Connector 1 on NI PXIe-7861/7862 models.

Figure 2. MIO Connector 1 for NI PXIe-7861/7862




Use the following label in Figure 3 if you are connecting the SCB-68A to the AIO Connector on NI PXIe-7865/7866 models.

Figure 3. AIO Connector for NI PXIe-7865/7866



Use the following label in Figure 4 if you are connecting the SCB-68A to the AO Connector on NI PXIe-7865/7866 models.

Figure 4. AO Connector for NI PXIe-7865/7866



AO	
68	AO 16
34	AO GND 16
67	NC*
33	NC*
66	AO 17
32	AO GND 17
65	AO 18
31	AO GND 18
64	NC*
30	NC*
63	AO 19
29	AO GND 19
62	AO 20
28	AO GND 20
61	NC*
27	NC*
60	AO 21
26	AO GND 21

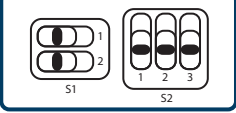
AO	
59	AO 22
25	AO GND 22
58	NC*
24	NC*
57	AO 23
23	AO GND 23
56	NC*
22	NC*
55	AO 8
21	AO GND 8
54	AO 9
20	AO GND 9
53	AO 10
19	AO GND 10
52	AO 11
18	AO GND 11

AO	
51	AO 12
17	AO GND 12
50	AO 13
16	AO GND 13
49	AO 14
15	AO GND 14
48	AO 15
14	AO GND 15
47	NC*
13	NC*
46	NC*
12	NC*
45	NC*
11	NC*
44	NC*
10	NC*

AO	
1	NC*
35	NC*
2	NC*
36	NC*
3	NC*
37	NC*
4	NC*
38	NC*
5	NC*
39	NC*
6	NC*
40	NC*
7	NC*
41	NC*
8	NC*
42	NC*
9	NC*
43	NC*

SCB-68A Quick Reference Label
 R Series Devices - AO Connector
 PXIe-7865/7866

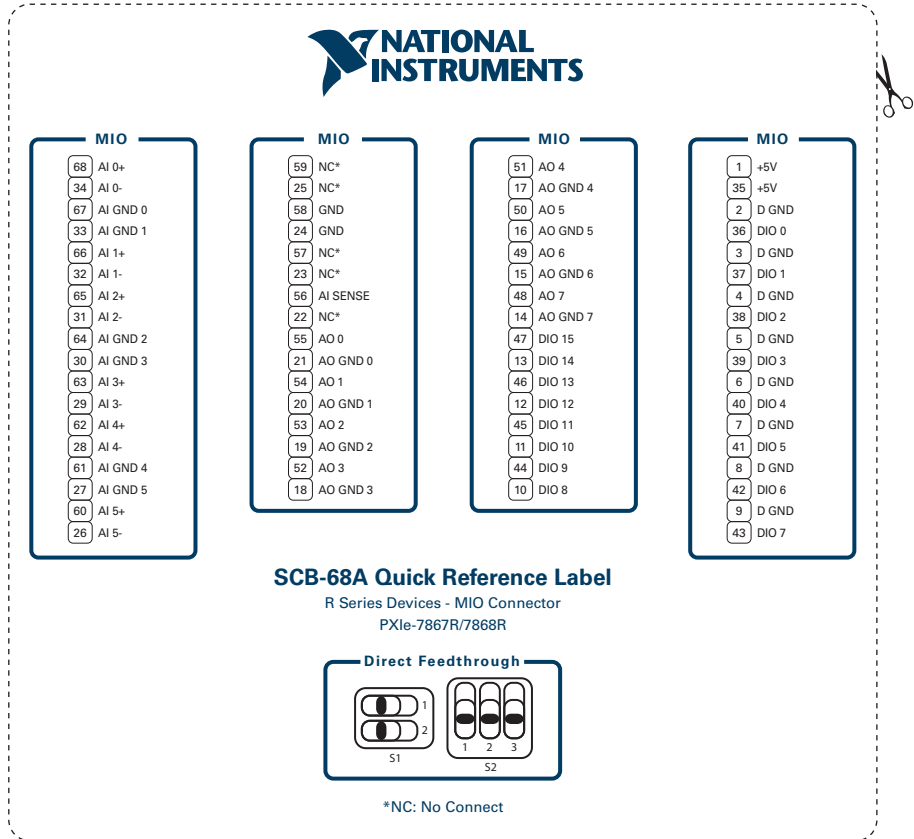
Direct Feedthrough



*NC: No Connect

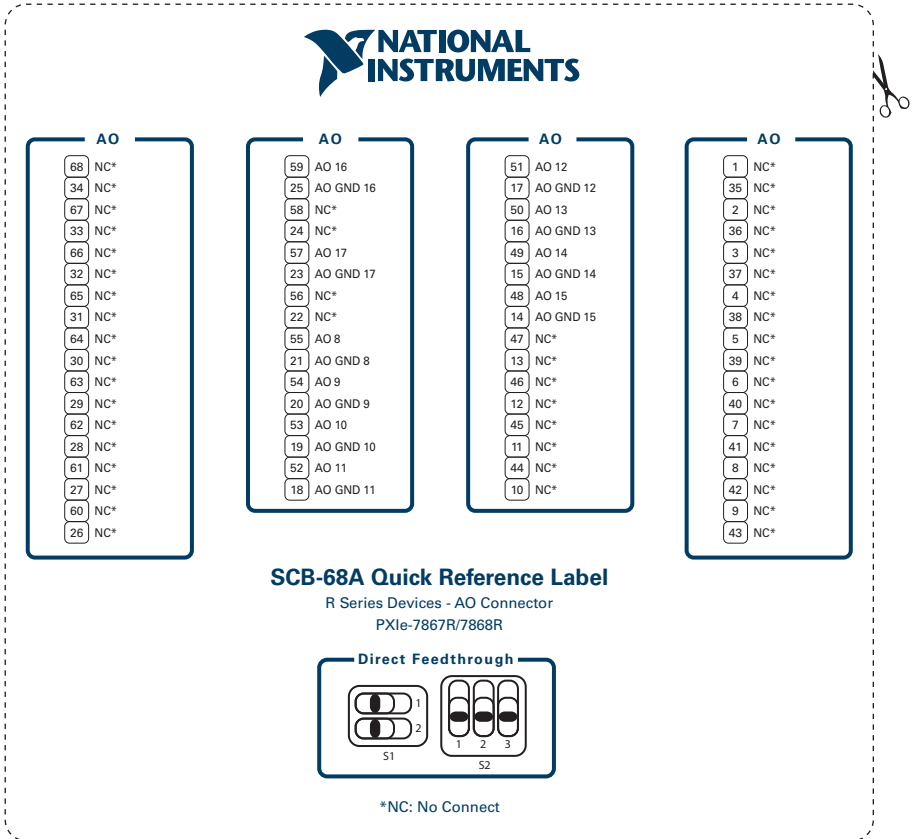
Use the following label in Figure 5 if you are connecting the SCB-68A to the MIO connector on NI PXIe-7867R/7868R models.

Figure 5. MIO Connector for NI PXIe-7867R/7868R




Use the following label in Figure 6 if you are connecting the SCB-68A to the AO connector on NI PXIe-7867R/7868R models.

Figure 6. AO Connector for NI PXIe-7867R/7868R



Use the following label in Figure 7 if you are connecting the SCB-68A to the MIO connector on NI 7830R models.

Figure 7. MIO Connector for NI 7830R



MIO	
68	AI 0+
34	AI 0-
67	AI GND 0
33	AI GND 1
66	AI 1+
32	AI 1-
65	AI 2+
31	AI 2-
64	AI GND 2
30	AI GND 3
63	AI 3+
29	AI 3-
62	NC
28	NC
61	AI GND 4
27	AI GND 5
60	NC
26	NC

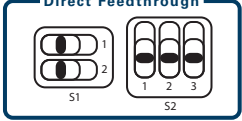
MIO	
59	NC
25	NC
58	AI GND 6
24	AI GND 7
57	NC
23	NC
56	AI SENSE
22	NC
55	AO 0
21	AO GND 0
54	AO 1
20	AO GND 1
53	AO 2
19	AO GND 2
52	AO 3
18	AO GND 3

MIO	
51	NC
17	AO GND 4
50	NC
16	AO GND 5
49	NC
15	AO GND 6
48	NC
14	AO GND 7
47	DIO 15
13	DIO 14
46	DIO 13
12	DIO 12
45	DIO 11
11	DIO 10
44	DIO 9
10	DIO 8

MIO	
1	+5V
35	+5V
2	D GND
36	DIO 0
3	D GND
37	DIO 1
4	D GND
38	DIO 2
5	D GND
39	DIO 3
6	D GND
40	DIO 4
7	D GND
41	DIO 5
8	D GND
42	DIO 6
9	D GND
43	DIO 7

SCB-68A Quick Reference Label
 R Series Devices - MIO Connector
 NI 7830R


Direct Feedthrough



*NC: No Connect

Use the following label in Figure 8 if you are connecting the SCB-68A to the MIO connector on NI 783xR/784x/784xR/785x/785xR models.

Figure 8. MIO Connector for NI 783xR/784x/784xR/785x/785xR



MIO	
68	AI 0+
34	AI 0-
67	AI GND 0
33	AI GND 1
66	AI 1+
32	AI 1-
65	AI 2+
31	AI 2-
64	AI GND 2
30	AI GND 3
63	AI 3+
29	AI 3-
62	AI 4+
28	AI 4-
61	AI GND 4
27	AI GND 5
60	AI 5+
26	AI 5-

MIO	
59	AI 6+
25	AI 6-
58	AI GND 6
24	AI GND 7
57	AI 7+
23	AI 7-
56	AI SENSE
22	NC*
55	AO 0
21	AO GND 0
54	AO 1
20	AO GND 1
53	AO 2
19	AO GND 2
52	AO 3
18	AO GND 3

MIO	
51	AO 4
17	AO GND 4
50	AO 5
16	AO GND 5
49	AO 6
15	AO GND 6
48	AO 7
14	AO GND 7
47	DIO 15
13	DIO 14
46	DIO 13
12	DIO 12
45	DIO 11
11	DIO 10
44	DIO 9
10	DIO 8

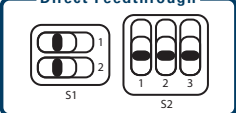
MIO	
1	+5V
35	+5V
2	D GND
36	DIO 0
3	D GND
37	DIO 1
4	D GND
38	DIO 2
5	D GND
39	DIO 3
6	D GND
40	DIO 4
7	D GND
41	DIO 5
8	D GND
42	DIO 6
9	D GND
43	DIO 7

SCB-68A Quick Reference Label

R Series Devices - MIO Connector

NI 783xR/784x/784xR/785x/785xR

Direct Feedthrough



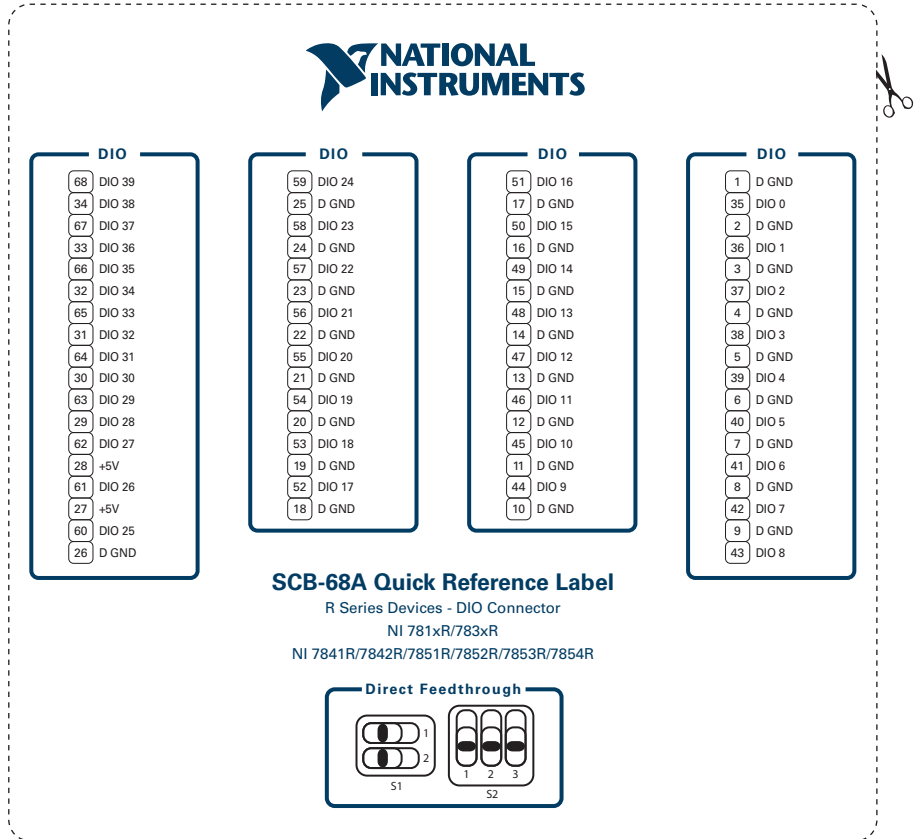
*NC: No Connect



Note To connect to the MIO connector on NI 7830R models, instead use the label in Figure 7.

Use the following label in Figure 9 if you are connecting the SCB-68A to the DIO connector on NI 781xR/783xR/7841R/7842R/7851R/7852R/7853R/7854R models.

Figure 9. DIO Connector for NI 781xR/783xR/7841R/7842R/7851R/7852R/7853R/7854R



Note To connect to the DIO connector on the following models, instead use the SCB-68 HSDIO Shielded Connector Block.

- NI PCIe-7846/7856/7857/7858
- NI PXIe-7846R/7847R/7856R/7857R/7858R/7865/7866/7867R/7868R
- NI USB-7845R/7846R/7855R/7856R

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