NOTE TO USERS

NI 78xxR 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 (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:
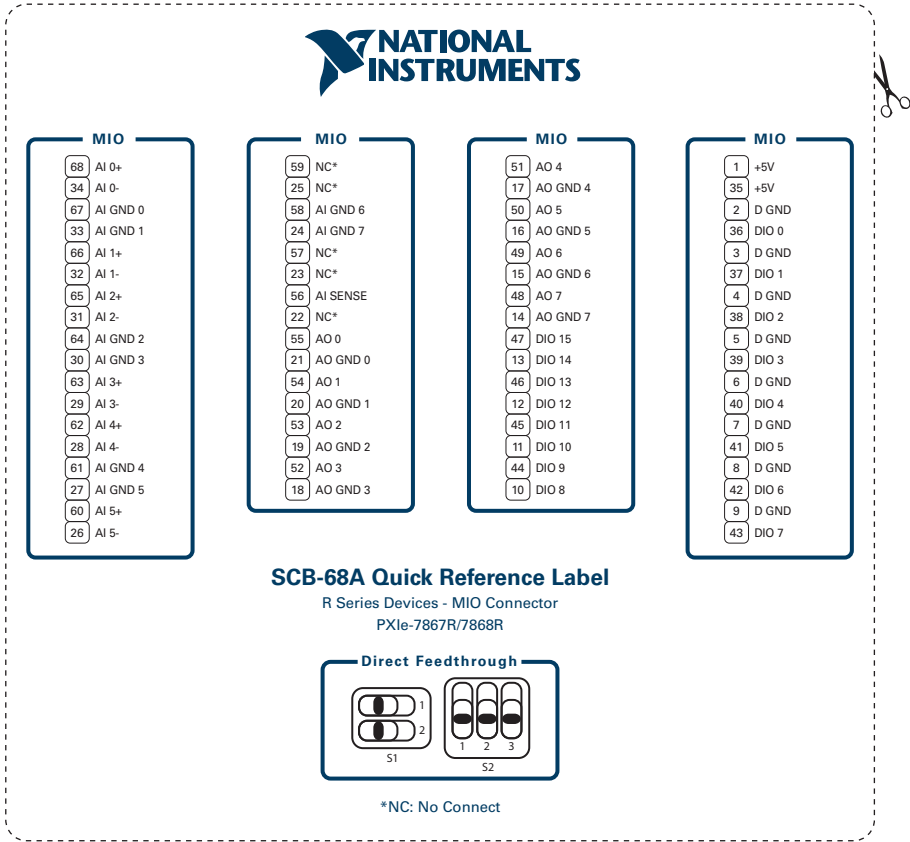
- NI PCI-7811R
- NI PXI-7811R
- NI PCI-7813R
- NI PXI-7813R
- NI PCI-7830R
- NI PXI-7830R
- NI PCI-7831R
- NI PXI-7831R
- NI PCI-7833R
- NI PXI-7833R
- NI PCIe-7841R
- NI PXI-7841R
- NI PCIe-7842R
- NI PXI-7842R
- NI USB-7845R
- NI PXIe-7846R

- NI USB-7846R
- NI PXIe-7847R
- NI PCIe-7851R
- NI PXI-7851R
- NI PCIe-7852R
- NI PXI-7852R
- NI PXI-7853R
- NI PXI-7854R
- NI USB-7855R
- NI PXIe-7856R
- NI USB-7856R
- NI PXIe-7857R
- NI PXIe-7858R
- NI PXIe-7867R
- NI PXIe-7868R

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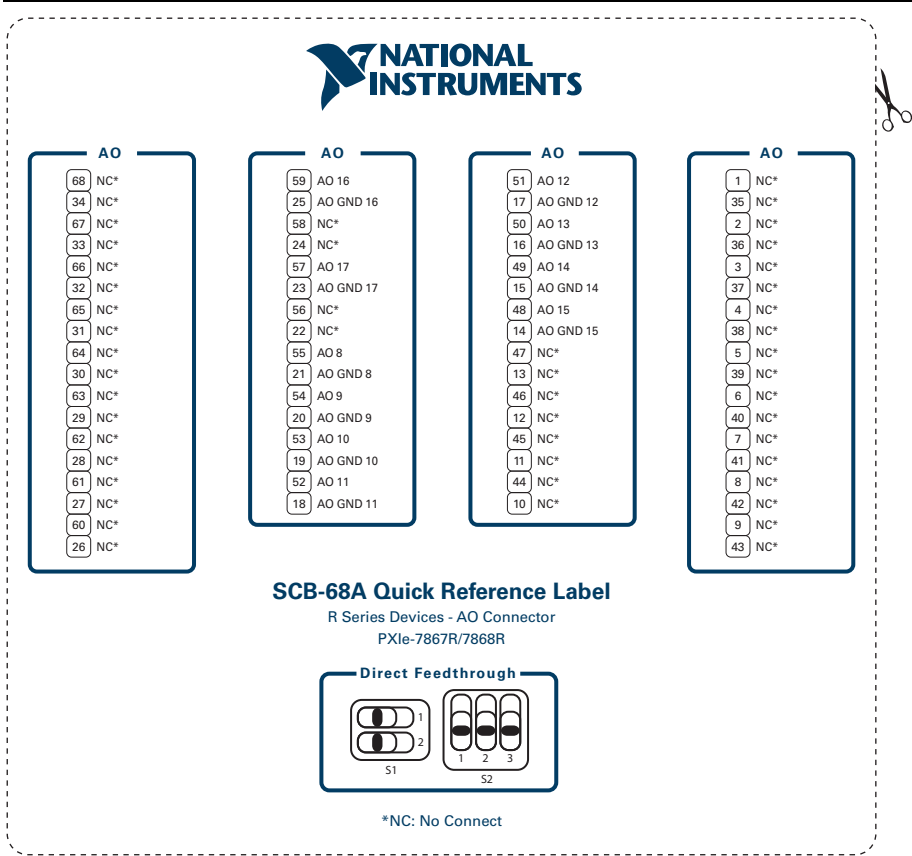
NATIONAL INSTRUMENTS™

Use the following label in Figure 1 if you are connecting the SCB-68A to the MIO connector on NI PXIe-7867R/7868R models.

Figure 1. MIO Connector for NI PXIe-7867R/7868R

MIO		MIO		MIO		MIO	
68	AI 0+	59	NC*	51	AO 4	1	+5V
34	AI 0-	25	NC*	17	AO GND 4	35	+5V
67	AI GND 0	58	AI GND 6	50	AO 5	2	D GND
33	AI GND 1	24	AI GND 7	16	AO GND 5	36	DIO 0
66	AI 1+	57	NC*	49	AO 6	3	D GND
32	AI 1-	23	NC*	15	AO GND 6	37	DIO 1
65	AI 2+	56	AI SENSE	48	AO 7	4	D GND
31	AI 2-	22	NC*	14	AO GND 7	38	DIO 2
64	AI GND 2	55	AO 0	47	DIO 15	5	D GND
30	AI GND 3	21	AO GND 0	13	DIO 14	39	DIO 3
63	AI 3+	54	AO 1	46	DIO 13	6	D GND
29	AI 3-	20	AO GND 1	12	DIO 12	40	DIO 4
62	AI 4+	53	AO 2	45	DIO 11	7	D GND
28	AI 4-	19	AO GND 2	11	DIO 10	41	DIO 5
61	AI GND 4	52	AO 3	44	DIO 9	8	D GND
27	AI GND 5	18	AO GND 3	10	DIO 8	42	DIO 6
60	AI 5+					9	D GND
26	AI 5-					43	DIO 7

SCB-68A Quick Reference Label

R Series Devices - MIO Connector

PXIe-7867R/7868R

Direct Feedthrough
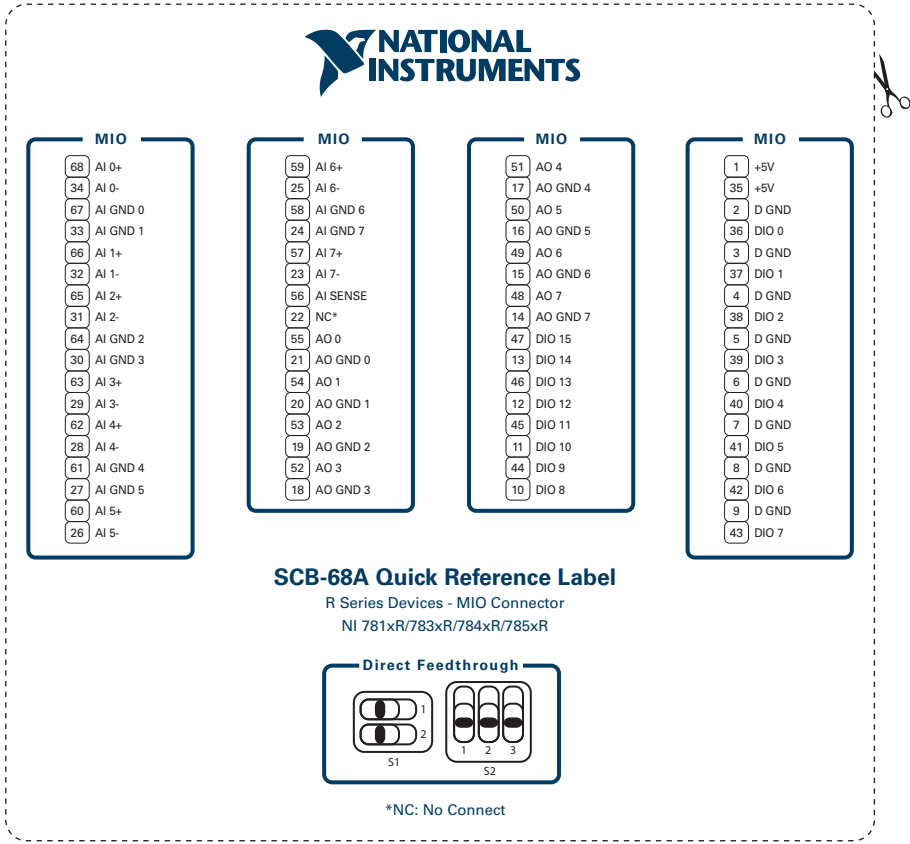
S1   S2

*NC: No Connect

Use the following label in Figure 2 if you are connecting the SCB-68A to the AO connector on NI PXIe-7867R/7868R models.
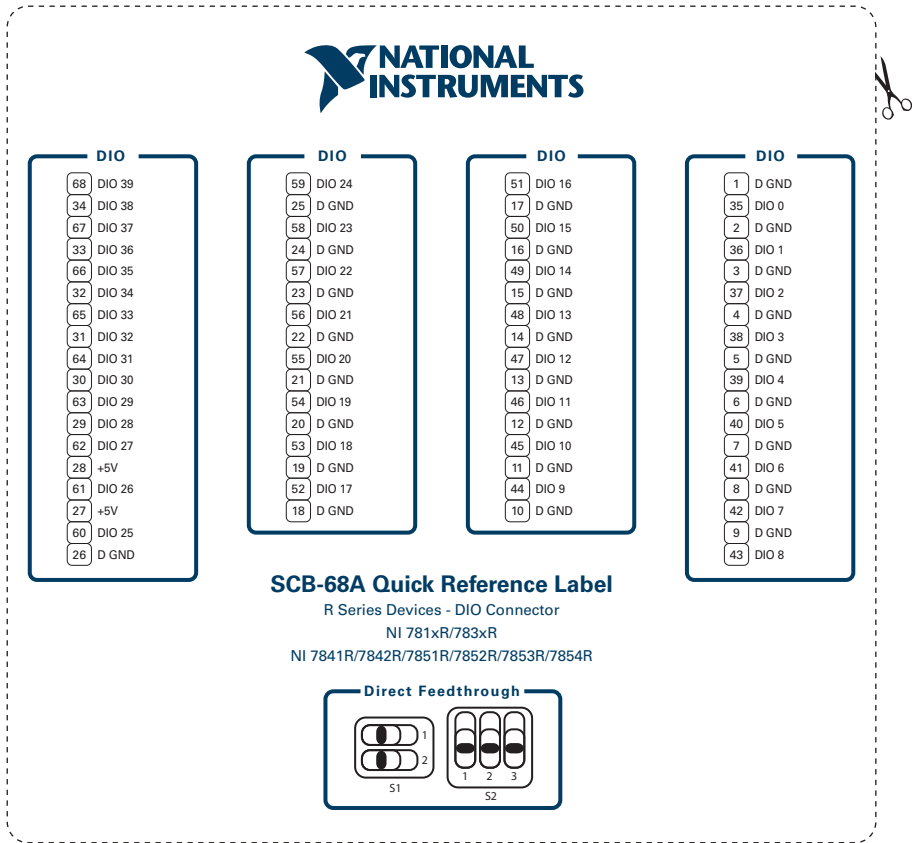
Figure 2. AO Connector for NI PXIe-7867R/7868R

NATIONAL INSTRUMENTS

AO		AO		AO		AO	
68	NC*	59	AO 16	51	AO 12	1	NC*
34	NC*	25	AO GND 16	17	AO GND 12	35	NC*
67	NC*	58	NC*	50	AO 13	2	NC*
33	NC*	24	NC*	16	AO GND 13	36	NC*
66	NC*	57	AO 17	49	AO 14	3	NC*
32	NC*	23	AO GND 17	15	AO GND 14	37	NC*
65	NC*	56	NC*	48	AO 15	4	NC*
31	NC*	22	NC*	14	AO GND 15	38	NC*
64	NC*	55	AO 8	47	NC*	5	NC*
30	NC*	21	AO GND 8	13	NC*	39	NC*
63	NC*	54	AO 9	46	NC*	6	NC*
29	NC*	20	AO GND 9	12	NC*	40	NC*
62	NC*	53	AO 10	45	NC*	7	NC*
28	NC*	19	AO GND 10	11	NC*	41	NC*
61	NC*	52	AO 11	44	NC*	8	NC*
27	NC*	18	AO GND 11	10	NC*	42	NC*
60	NC*					9	NC*
26	NC*					43	NC*

SCB-68A Quick Reference Label
R Series Devices - AO Connector
PXIe-7867R/7868R

Direct Feedthrough

1
2
S1

1 2 3
S2

*NC: No Connect

Use the following label in Figure 3 if you are connecting the SCB-68A to the MIO connector on NI 781xR/783xR/784xR/785xR models.

Figure 3. MIO Connector for NI 781xR/783xR/784xR/785xR

SCB-68A Quick Reference Label
R Series Devices - MIO Connector
NI 781xR/783xR/784xR/785xR

*NC: No Connect

Use the following label in Figure 4 if you are connecting the SCB-68A to the DIO connector on NI 781xR/783xR/7841R/7842R/7851R/7852R/7853R/7854R models.

Figure 4. DIO Connector for NI 781xR/783xR/7841R/7842R/7851R/7852R/7853R/7854R

Note To connect to the DIO connector on NI PXIe-7846R/7847R/7856R/7857R/7858R/7867R/7868R models, instead use the SCB-68 HSDIO Shielded Connector Block.