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## NOTE TO USERS

# NI 67xx Pinout Labels for the SCB-68

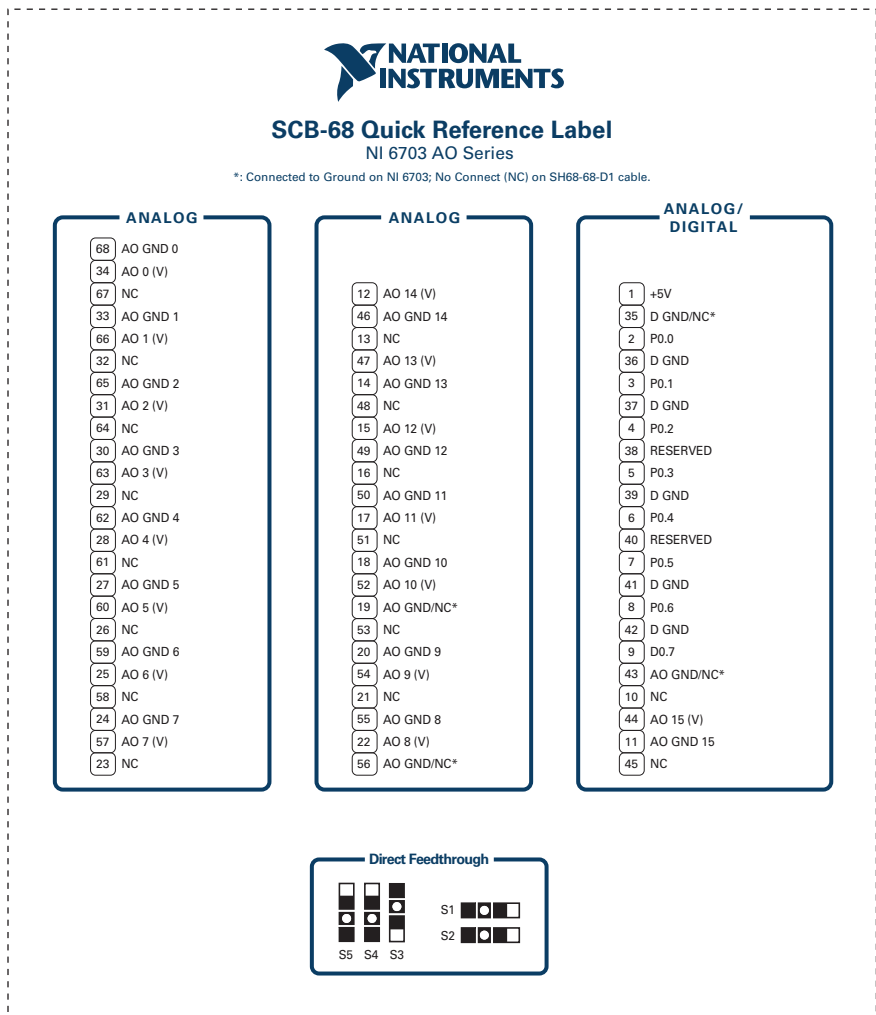
## Analog Output Modules/Devices Using the 68-Pin Shielded Connector Block

If you are using an NI 67xx (formerly referred to as AO Series) analog output device or module with the SCB-68, 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 6703
- NI 6704
- NI 6711
- NI 6713
- NI 6715
- NI 6722
- NI 6723
- NI 6731
- NI 6733
- NI 6738
- NI 6739

Use the following label if you are connecting the SCB-68/SCB-68 to the NI 6703 model.

**Figure 1. NI 6703**



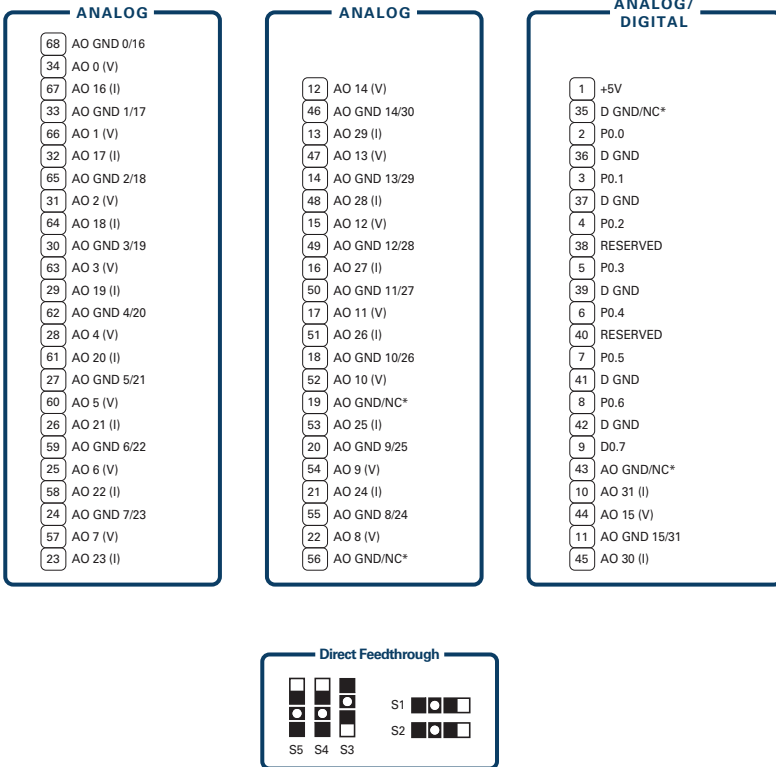
Use the following label if you are connecting the SCB-68 to the NI 6704 model.

**Figure 2. NI 6704**



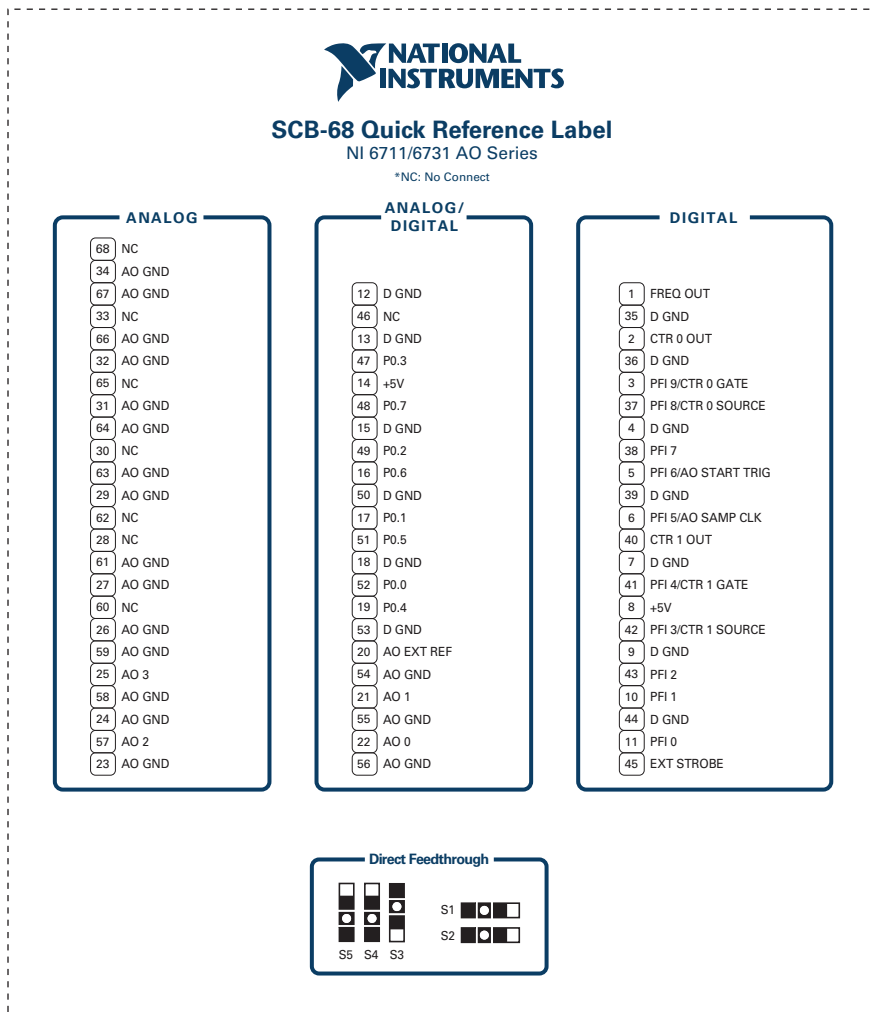
**SCB-68 Quick Reference Label**  
NI 6704 AO Series

\*: Connected to Ground on NI 6704; No Connect (NC) on SH68-68-D1 cable.



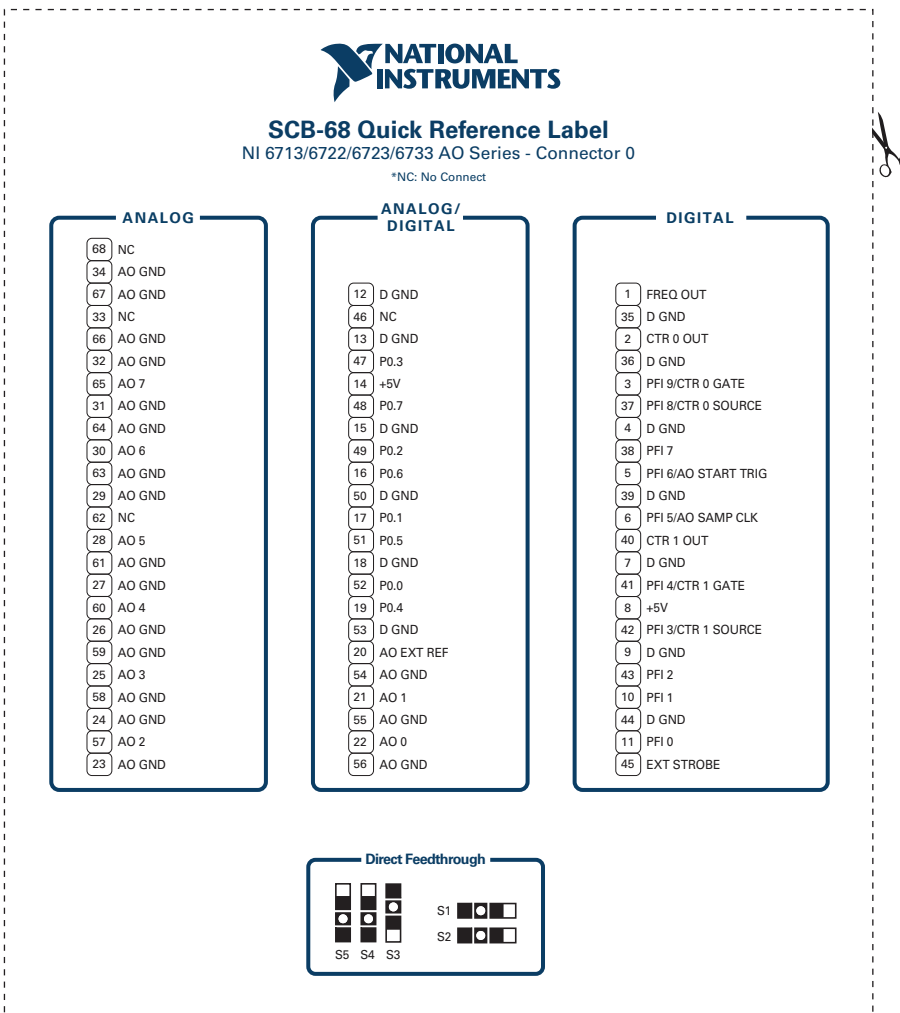
Use the following label if you are connecting the SCB-68 to the NI 6711/6731 models.

**Figure 3. NI 6711/6731**



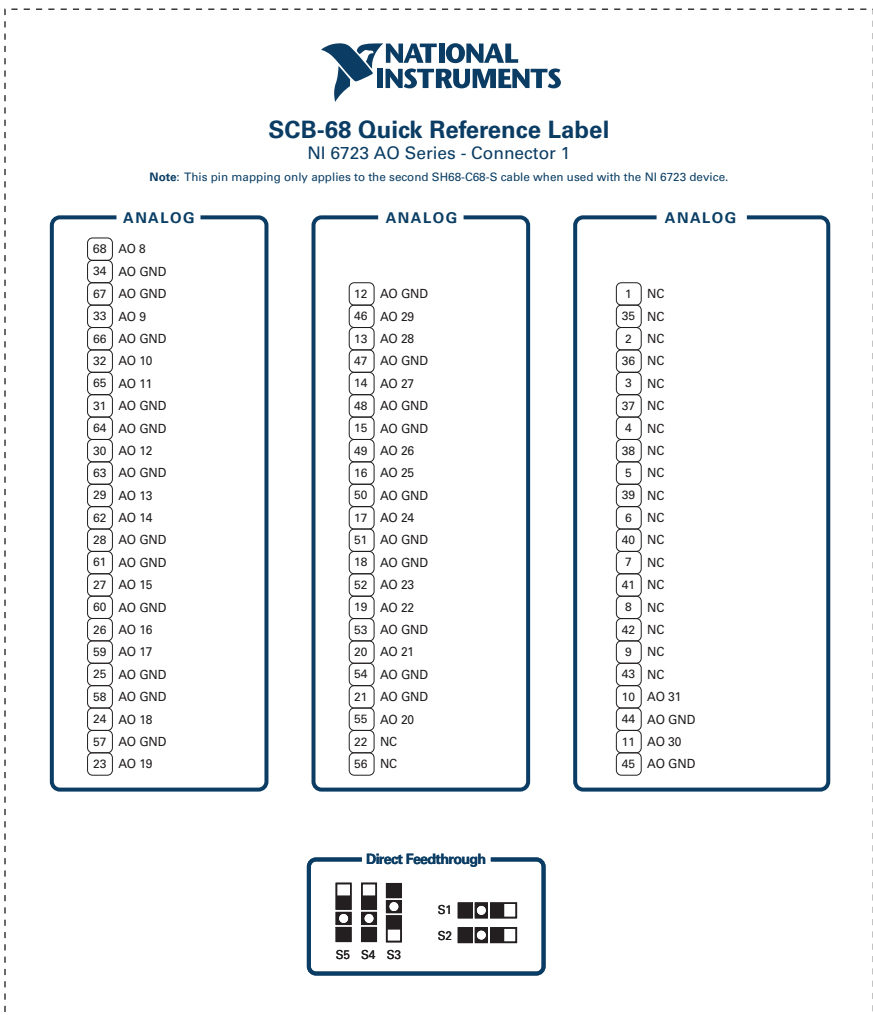
Use the following label if you are connecting the SCB-68 to Connector 0 of the NI 6713/6722/6723/6733 models.

**Figure 4.** NI 6713/6722/6723/6733 Connector 0




Use the following label if you are connecting the SCB-68 to Connector 1 of the NI 6723 model.

**Figure 5. NI 6723 Connector 1**



Use the following label if you are connecting the SCB-68 to Connector 0 of the NI 6738/6739 models with the SHC68-68-A2 cable.<sup>1</sup>

**Figure 6. NI 6738/6739 Connector 0 with SHC68-68-A2 Cable**



### SCB-68 Quick Reference Label

NI 6738/6739 AO Series with SHC68-68-A2 Cable - Connector 0

\*NC: No Connect

Note: Refer to the NI 6738/6739 User Manual for AO bank information.

**ANALOG**

68	AO GND 30/31
34	AO 31
67	AO 30
33	AO GND 28/29
66	AO 29
32	AO 28
65	AO GND 26/27
31	AO 27
64	AO 26
30	AO GND 24/25
63	AO 25
29	AO 24
62	AO GND 22/23
28	AO 23
61	AO 22
27	AO GND 20/21
60	AO 21
26	AO 20
59	AO GND 18/19
25	AO 19
58	AO 18
24	AO GND 16/17
57	AO 17
23	AO 16

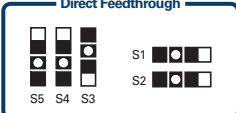
**ANALOG**

12	AO 3
46	AO GND 2/3
13	AO 4
47	AO 5
14	AO GND 4/5
48	AO 6
15	AO 7
49	AO GND 6/7
16	AO 8
50	AO GND 8/9/10
17	AO 9
51	AO 10
18	AO GND 11
52	AO 11
19	NC
53	AO 12
20	AO GND 12/13
54	AO 13
21	AO 14
55	AO GND 14/15
22	AO 15
56	NC

**ANALOG/  
DIGITAL**

1	+5V
35	NC
2	P0.0
36	D GND P0.0/P0.1
3	P0.1
37	D GND PFI 0/1
4	PFI 0/P1.0
38	PFI 1/P1.1
5	PFI 2/P1.2
39	D GND PFI 2/3
6	PFI 3/P1.3
40	PFI 4/P1.4
7	PFI 5/P1.5
41	D GND PFI 4/5
8	PFI 6/P1.6
42	D GND PFI 6/7
9	PFI 7/P1.7
43	NC
10	AO 0
44	AO 1
11	AO GND 0/1
45	AO 2

**Direct Feedthrough**

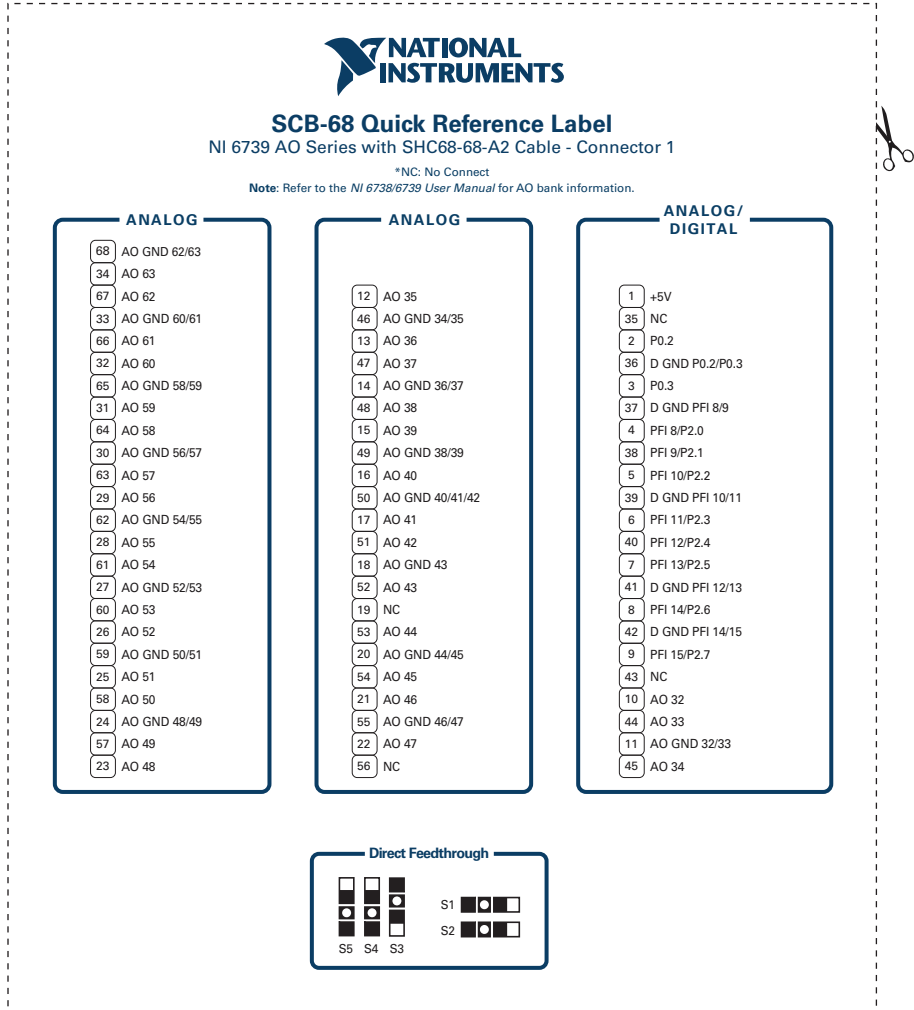


<sup>1</sup> Refer to Figure 8 if you are using the NI 6738/6739 with the SH68-C68-S cable and NI PXIe-6738 Adapter or NI PXIe-6739 Adapter.



Use the following label if you are connecting the SCB-68 to Connector 1 of the NI 6739 model with the SHC68-68-A2 cable.<sup>1</sup>


**Figure 7. NI 6739 Connector 1 with SHC68-68-A2 Cable**



<sup>1</sup> Refer to Figure 9 if you are using the NI 6739 with the SH68-C68-S cable and NI PXIe-6739 Adapter.

Use the following label if you are connecting the SCB-68 to Connector 0 of the NI 6738/6739 models with the SH68-C68-S cable and NI PXIe-6738 Adapter or NI PXIe-6739 Adapter.

**Figure 8.** NI 6738/6739 Connector 0 with SH68-C68-S Cable and NI PXIe-6738/6739 Adapter



### SCB-68 Quick Reference Label

NI 6738/6739 AO Series with SH68-C68-S Cable and Adapter - Connector 0

Note: Refer to the NI 6738/6739 User Manual for AO bank information.

**ANALOG**

68	AO GND 30/31
34	AO 31
67	AO 30
33	AO GND 28/29
66	AO 29
32	AO 28
65	AO GND 26/27
31	AO 27
64	AO 26
30	AO GND 24/25
63	AO 25
29	AO 24
62	AO GND 22/23
28	AO 23
61	AO 22
27	AO GND 20/21
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26	AO 20
59	AO GND 18/19
25	AO 19
58	AO 18
24	AO GND 16/17
57	AO 17
23	AO 16

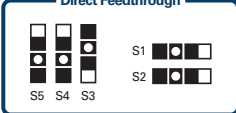
**ANALOG**

12	AO 3
46	AO GND 2/3
13	AO 4
47	AO 5
14	AO GND 4/5
48	AO 6
15	AO 7
49	AO GND 6/7
16	AO 8
50	AO GND 8/9/10
17	AO 9
51	AO 10
18	AO GND 11
52	AO 11
19	AO GND
53	AO 12
20	AO GND 12/13
54	AO 13
21	AO 14
55	AO GND 14/15
22	AO 15
56	AO GND

**ANALOG/  
DIGITAL**

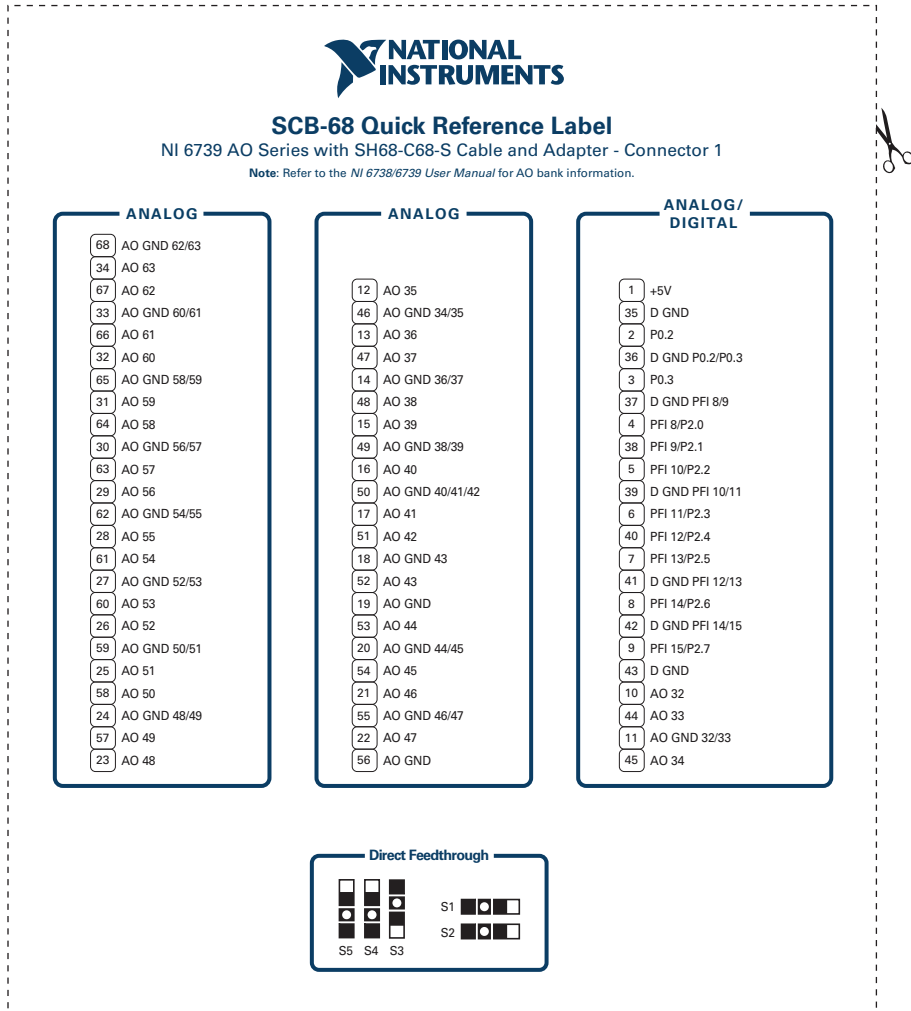
1	+5V
35	D GND
2	P0.0
36	D GND P0.0/P0.1
3	P0.1
37	D GND PFI 0/1
4	PFI 0/P1.0
38	PFI 1/P1.1
5	PFI 2/P1.2
39	D GND PFI 2/3
6	PFI 3/P1.3
40	PFI 4/P1.4
7	PFI 5/P1.5
41	D GND PFI 4/5
8	PFI 6/P1.6
42	D GND PFI 6/7
9	PFI 7/P1.7
43	D GND
10	AO 0
44	AO 1
11	AO GND 0/1
45	AO 2

**Direct Feedthrough**



Use the following label if you are connecting the SCB-68 to Connector 1 of the NI 6739 model with the SH68-C68-S cable and NI PXIe-6739 Adapter.

**Figure 9.** NI 6739 Connector 1 with SH68-C68-S Cable and NI PXIe-6739 Adapter



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