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SCB-68A

NOTE TO USERS

NI 67xx Pinout Labels for the SCB-68A


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-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 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-68A to the NI 6703 model.

Figure 1. NI 6703



Analog

| | |
|----|----------|
| 68 | AO GND 0 |
| 34 | AO 0 (V) |
| 67 | NC |
| 33 | AO GND 1 |
| 66 | AO 1 (V) |
| 32 | NC |
| 65 | AO GND 2 |
| 31 | AO 2 (V) |
| 64 | NC |
| 30 | AO GND 3 |
| 63 | AO 3 (V) |
| 29 | NC |
| 62 | AO GND 4 |
| 28 | AO 4 (V) |
| 61 | NC |
| 27 | AO GND 5 |
| 60 | AO 5 (V) |
| 26 | NC |

Analog

| | |
|----|------------|
| 59 | AO GND 6 |
| 25 | AO 6 (V) |
| 58 | NC |
| 24 | AO GND 7 |
| 57 | AO 7 (V) |
| 23 | NC |
| 56 | AO GND/NC* |
| 22 | AO 8 (V) |
| 55 | AO GND 8 |
| 21 | NC |
| 54 | AO 9 (V) |
| 20 | AO GND 9 |
| 53 | NC |
| 19 | AO GND/NC* |
| 52 | AO 10 (V) |
| 18 | AO GND 10 |

Analog

| | |
|----|-----------|
| 51 | NC |
| 17 | AO 11 (V) |
| 50 | AO GND 11 |
| 16 | NC |
| 49 | AO GND 12 |
| 15 | AO 12 (V) |
| 48 | NC |
| 14 | AO GND 13 |
| 47 | AO 13 (V) |
| 13 | NC |
| 46 | AO GND 14 |
| 12 | AO 14 (V) |
| 45 | NC |
| 11 | AO GND 15 |
| 44 | AO 15 (V) |
| 10 | NC |

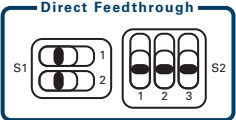
**Analog/
Digital**

| | |
|----|------------|
| 1 | +5V |
| 35 | D GND/NC* |
| 2 | P0.0 |
| 36 | D GND |
| 3 | P0.1 |
| 37 | D GND |
| 4 | P0.2 |
| 38 | RESERVED |
| 5 | P0.3 |
| 39 | D GND |
| 6 | P0.4 |
| 40 | RESERVED |
| 7 | P0.5 |
| 41 | D GND |
| 8 | P0.6 |
| 42 | D GND |
| 9 | D0.7 |
| 43 | AO GND/NC* |

SCB-68A Quick Reference Label

NI 6703 AO Series


Direct Feedthrough



*: Connected to Ground on NI 6703; No Connect (NC) on SH68-68-D1 cable.

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

Figure 2. NI 6704



Analog

| | |
|----|-------------|
| 68 | AO GND 0/16 |
| 34 | AO 0 (V) |
| 67 | AO 16 (I) |
| 33 | AO GND 1/17 |
| 66 | AO 1 (V) |
| 32 | AO 17 (I) |
| 65 | AO GND 2/18 |
| 31 | AO 2 (V) |
| 64 | AO 18 (I) |
| 30 | AO GND 3/19 |
| 63 | AO 3 (V) |
| 29 | AO 19 (I) |
| 62 | AO GND 4/20 |
| 28 | AO 4 (V) |
| 61 | AO 20 (I) |
| 27 | AO GND 5/21 |
| 60 | AO 5 (V) |
| 26 | AO 21 (I) |

Analog

| | |
|----|--------------|
| 59 | AO GND 6/22 |
| 25 | AO 6 (V) |
| 58 | AO 22 (I) |
| 24 | AO GND 7/23 |
| 57 | AO 7 (V) |
| 23 | AO 23 (I) |
| 56 | AO GND/NC* |
| 22 | AO 8 (V) |
| 55 | AO GND 8/24 |
| 21 | AO 24 (I) |
| 54 | AO 9 (V) |
| 20 | AO GND 9/25 |
| 53 | AO 25 (I) |
| 19 | AO GND/NC* |
| 52 | AO 10 (V) |
| 18 | AO GND 10/26 |

Analog

| | |
|----|--------------|
| 51 | AO 26 (I) |
| 17 | AO 11 (V) |
| 50 | AO GND 11/27 |
| 16 | AO 27 (I) |
| 49 | AO GND 12/28 |
| 15 | AO 12 (V) |
| 48 | AO 28 (I) |
| 14 | AO GND 13/29 |
| 47 | AO 13 (V) |
| 13 | AO 29 (I) |
| 46 | AO GND 14/30 |
| 12 | AO 14 (V) |
| 45 | AO 30 (I) |
| 11 | AO GND 15/31 |
| 44 | AO 15 (V) |
| 10 | AO 31 (I) |


**Analog/
Digital**

| | |
|----|------------|
| 1 | +5V |
| 35 | D GND/NC* |
| 2 | P0.0 |
| 36 | D GND |
| 3 | P0.1 |
| 37 | D GND |
| 4 | P0.2 |
| 38 | RESERVED |
| 5 | P0.3 |
| 39 | D GND |
| 6 | P0.4 |
| 40 | RESERVED |
| 7 | P0.5 |
| 41 | D GND |
| 8 | P0.6 |
| 42 | D GND |
| 9 | D0.7 |
| 43 | AO GND/NC* |

SCB-68A Quick Reference Label

NI 6704 AO Series

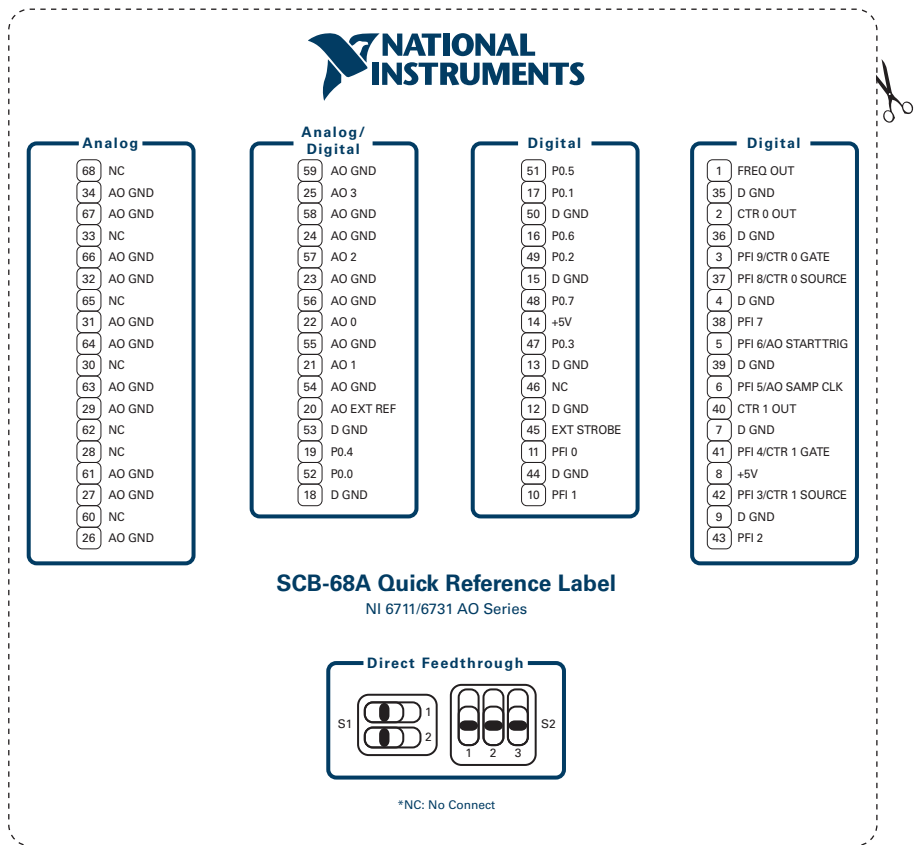
Direct Feedthrough



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

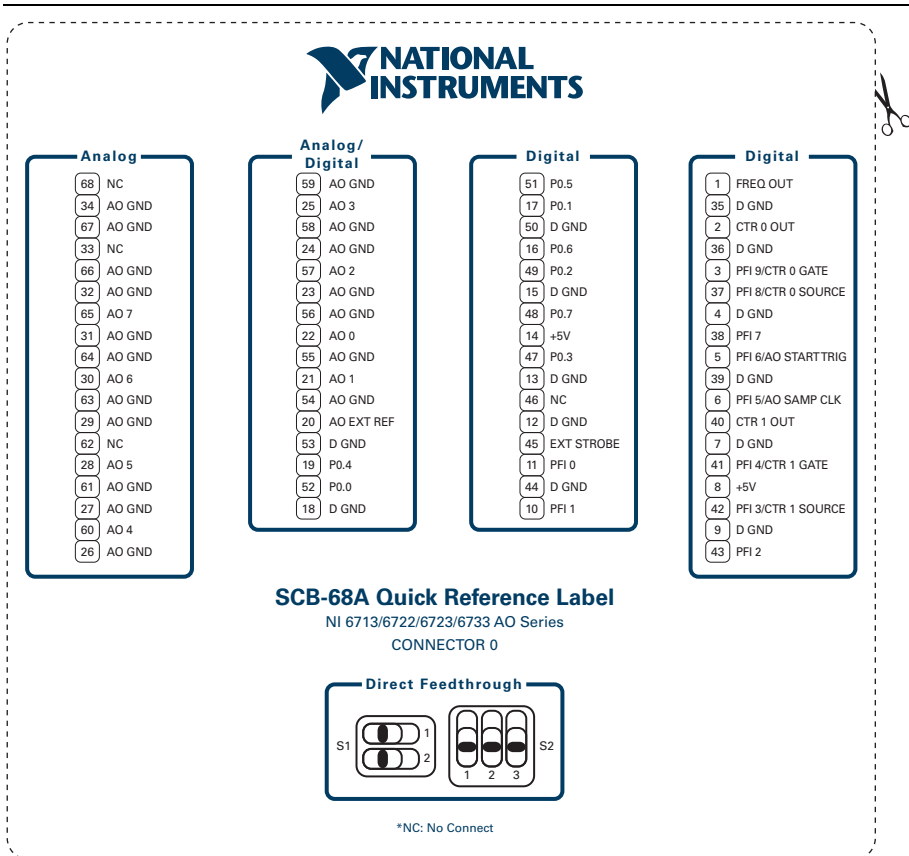
Use the following label if you are connecting the SCB-68A to the NI 6711/6731 models.

Figure 3. NI 6711/6731



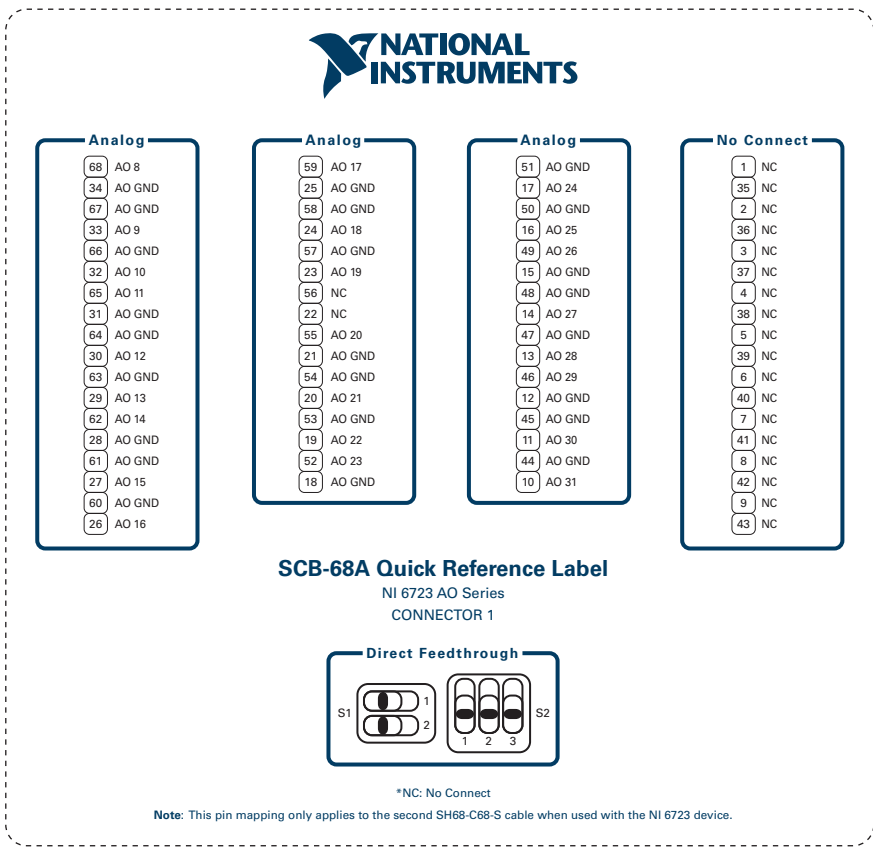
Use the following label if you are connecting the SCB-68A to Connector 0 of the NI 6713/6722/6723/6733 models.

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



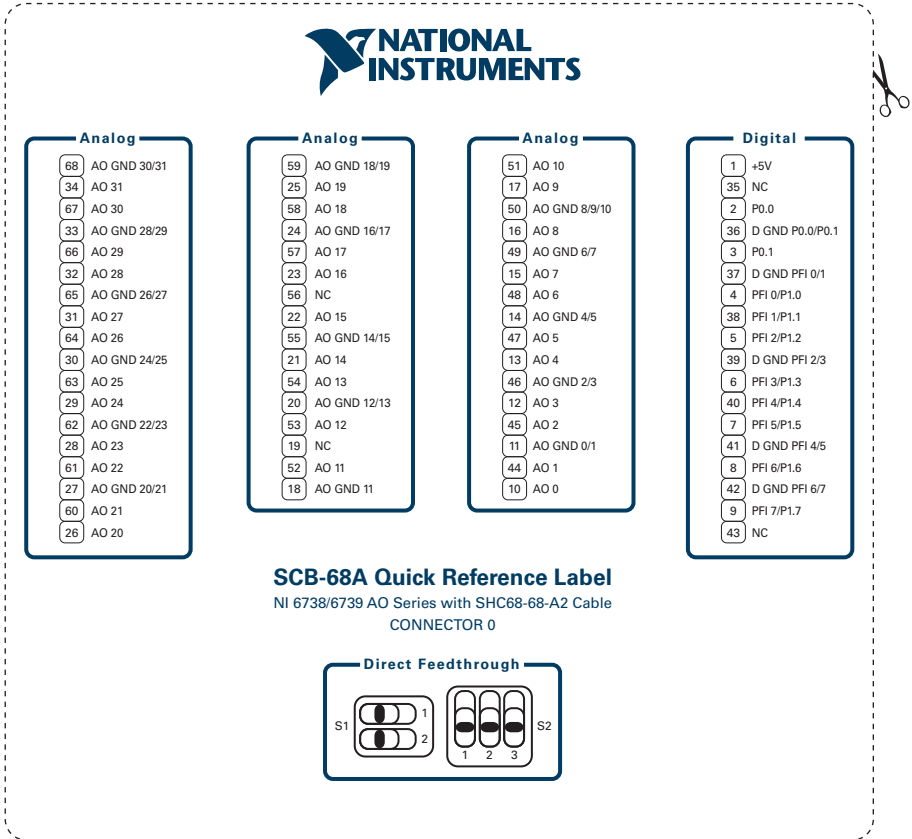
Use the following label if you are connecting the SCB-68A to Connector 1 of the NI 6723 model.

Figure 5. NI 6723 Connector 1



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

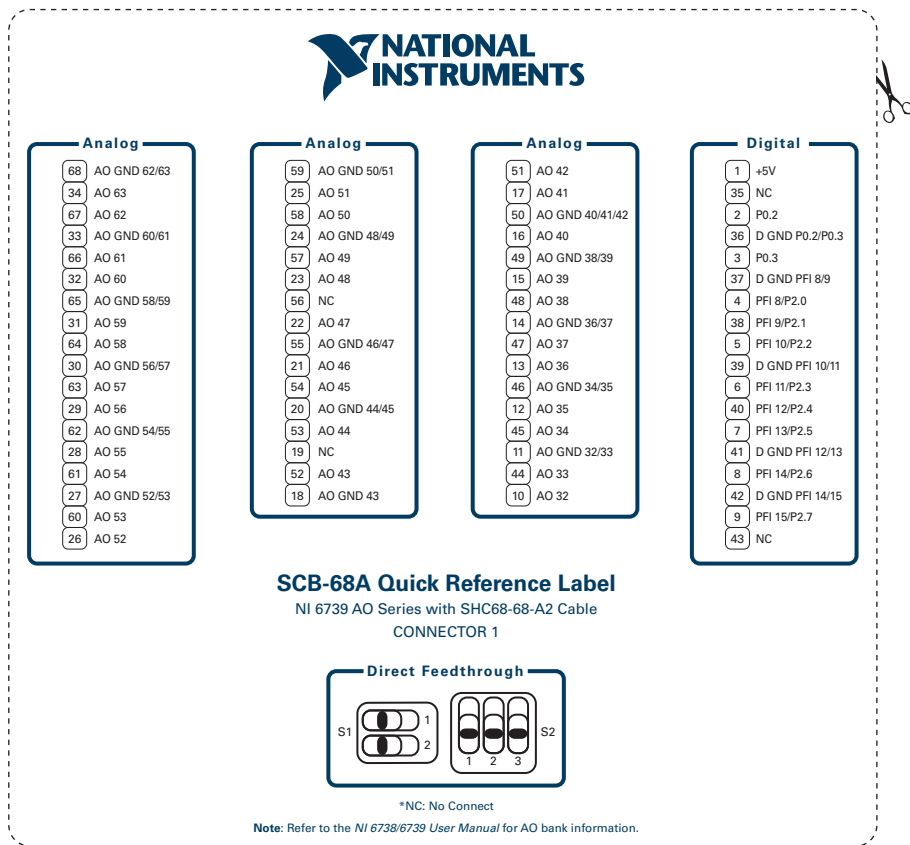
Figure 6. NI 6738/6739 Connector 0 with SHC68-68-A2 Cable



¹ 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-68A to Connector 1 of the NI 6739 model with the SHC68-68-A2 cable.¹


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



¹ 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-68A 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



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 |

Analog

| | |
|----|--------------|
| 59 | AO GND 18/19 |
| 25 | AO 19 |
| 58 | AO 18 |
| 24 | AO GND 16/17 |
| 57 | AO 17 |
| 23 | AO 16 |
| 56 | AO GND |
| 22 | AO 15 |
| 55 | AO GND 14/15 |
| 21 | AO 14 |
| 54 | AO 13 |
| 20 | AO GND 12/13 |
| 53 | AO 12 |
| 19 | AO GND |
| 52 | AO 11 |
| 18 | AO GND 11 |

Analog

| | |
|----|---------------|
| 51 | AO 10 |
| 17 | AO 9 |
| 50 | AO GND 8/9/10 |
| 16 | AO 8 |
| 49 | AO GND 6/7 |
| 15 | AO 7 |
| 48 | AO 6 |
| 14 | AO GND 4/5 |
| 47 | AO 5 |
| 13 | AO 4 |
| 46 | AO GND 2/3 |
| 12 | AO 3 |
| 45 | AO 2 |
| 11 | AO GND 0/1 |
| 44 | AO 1 |
| 10 | AO 0 |

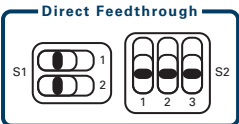
Digital

| | |
|----|-----------------|
| 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 |

SCB-68A Quick Reference Label

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

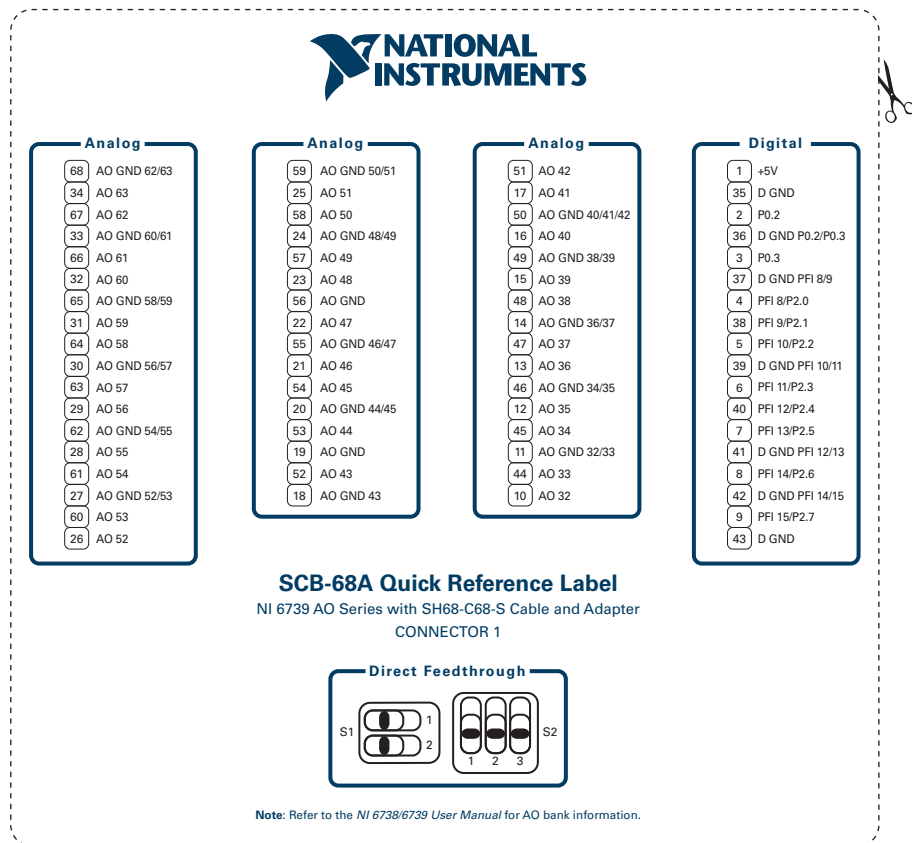
CONNECTOR 0



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

Use the following label if you are connecting the SCB-68A 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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