NATIONAL INSTRUMENTS NI 67xx Pinout Labels Analog Output Modules Instructions

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NATIONAL INSTRUMENTS NI 67xx Pinout Labels Analog Output Modules

Product Information

The PCI-6731 is a product that is part of the NI 67xx series. It is designed to be used with Analog Output Modules/Devices that utilize the 68-Pin Shielded Connector Block (SCB-68). The product supports various models such as NI 6703, NI 6704, NI 6711, and NI 6731.

NI 6703 Model:

The SCB-68 pinout labels for the NI 6703 model are as follows:

- 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 – 59 AO GND 6 – 25 AO 6 (V)
- 58 NC – 24 AO GND 7 – 57 AO 7 (V)

NI 6704 Model:

The SCB-68 pinout labels for the NI 6704 model are as follows:

- 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)
- 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)

NI 6711/6731 Models:

The SCB-68 pinout labels for the NI 6711/6731 models are as follows:

- 68 NC – 34 AO GND – 67 AO GND – 33 NC
- 66 AO GND – 32 AO GND – 65 NC – 31 AO GND
- 64 AO GND – 30 NC – 63 AO GND – 29 AO GND
- 62 NC – 28 NC – 61 AO GND – 27 AO GND
- 60 NC – 26 AO GND – 59 AO GND – 25 AO 3
- 58 AO GND – 24 AO GND – 57 AO 2 – 23 AO GND

Product Usage Instructions

To use the PCI-6731 with the SCB-68, follow these steps:

For NI 6703 Model:

1. Connect the SCB-68 to the NI 6703 model.
2. Refer to the pinout labels in the user manual for the correct connections.

For NI 6704 Model:

1. Connect the SCB-68 to the NI 6704 model.
2. Refer to the pinout labels in the user manual for the correct connections.

For NI 6711/6731 Models:

1. Connect the SCB-68 to the NI 6711/6731 models.
2. Refer to the pinout labels in the user manual for the correct connections.

Make sure to follow the instructions carefully to ensure proper usage of the PCI-6731 with the respective models.

Reference Label

Figure 1. NI 6703
Connected to Ground on NI 6703; No Connect (NC) on SH68-68-D1 cable.

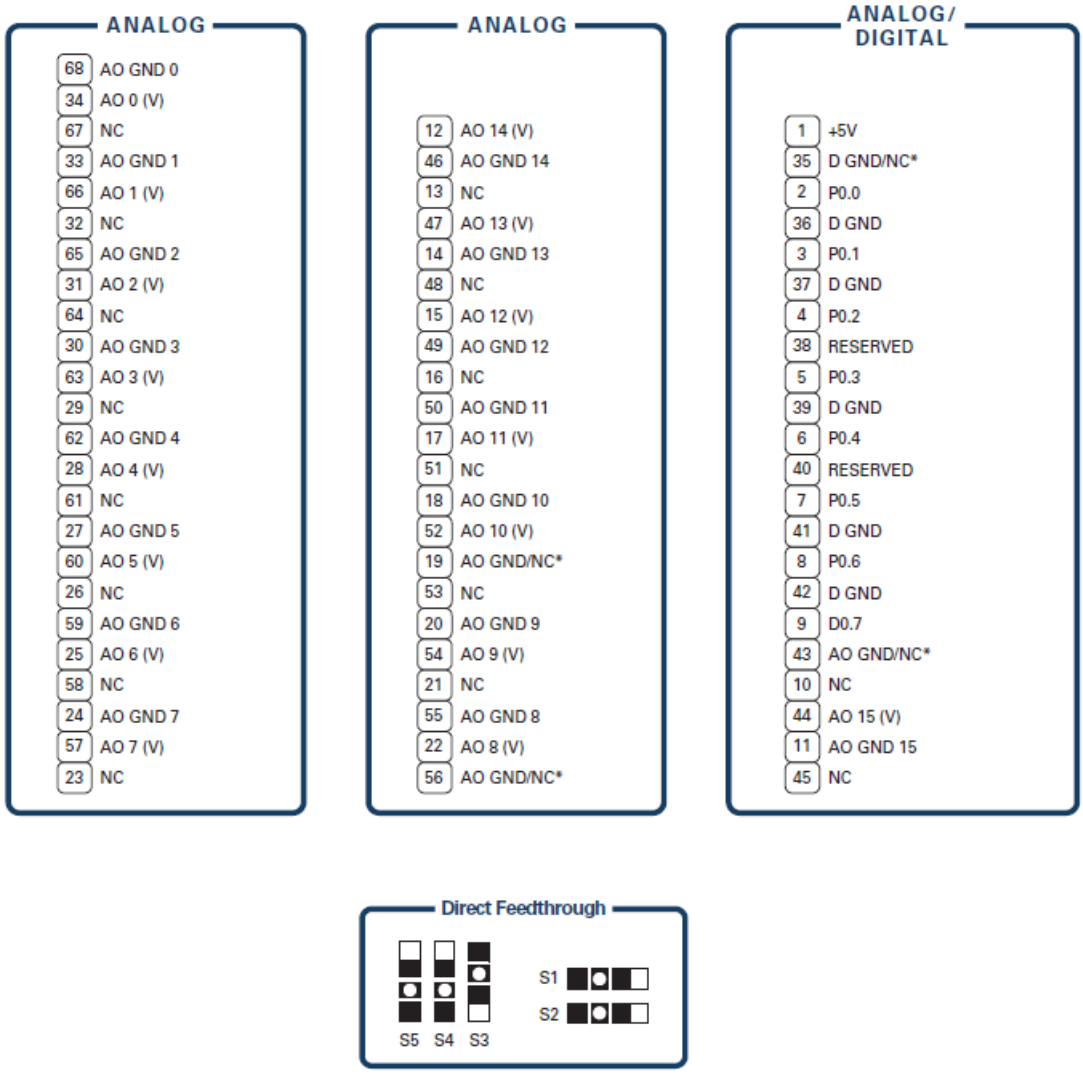


Figure 2. NI 6704
Connected to Ground on NI 6704; No Connect (NC) on SH68-68-D1 cable.

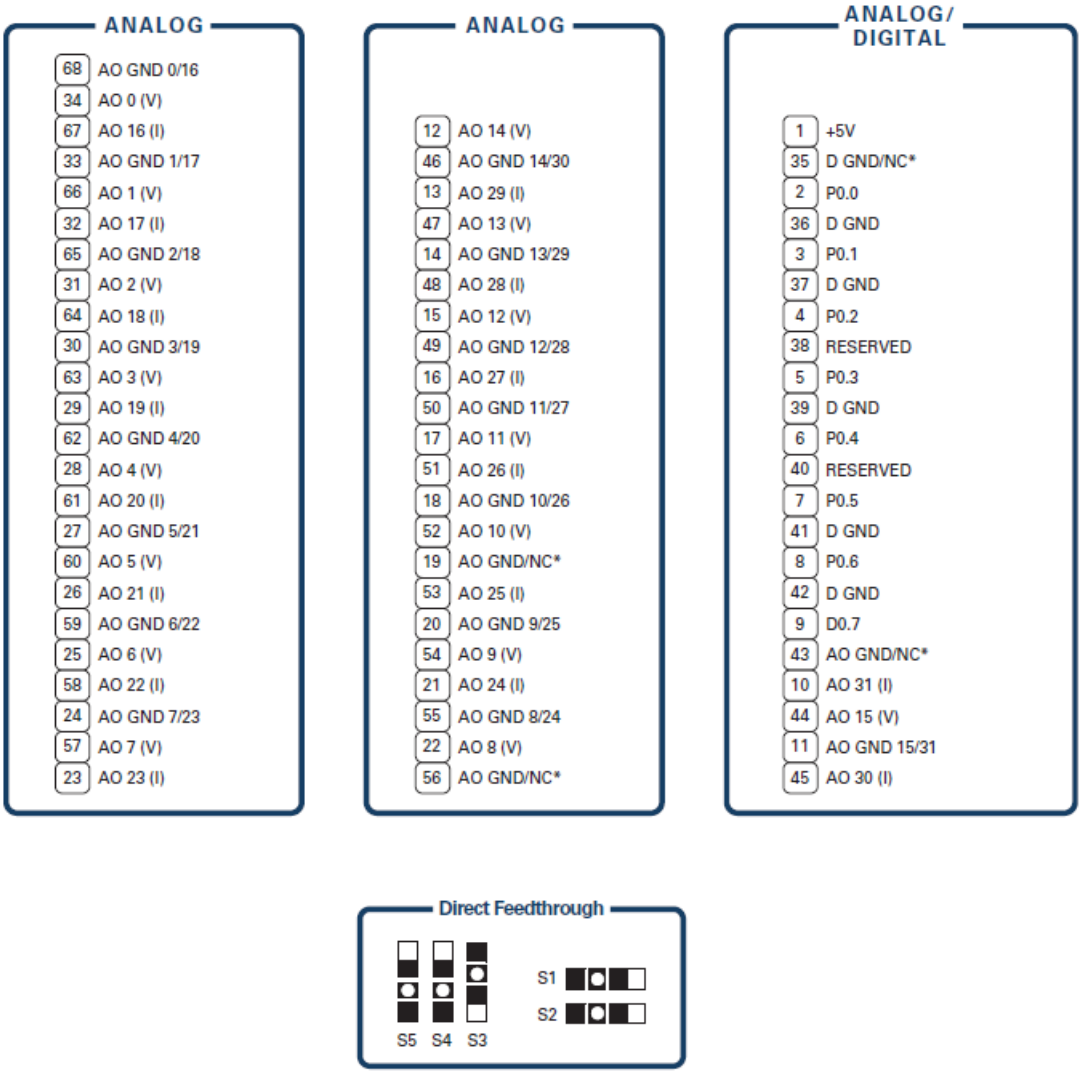


Figure 3. NI 6711/6731
NC: No Connect

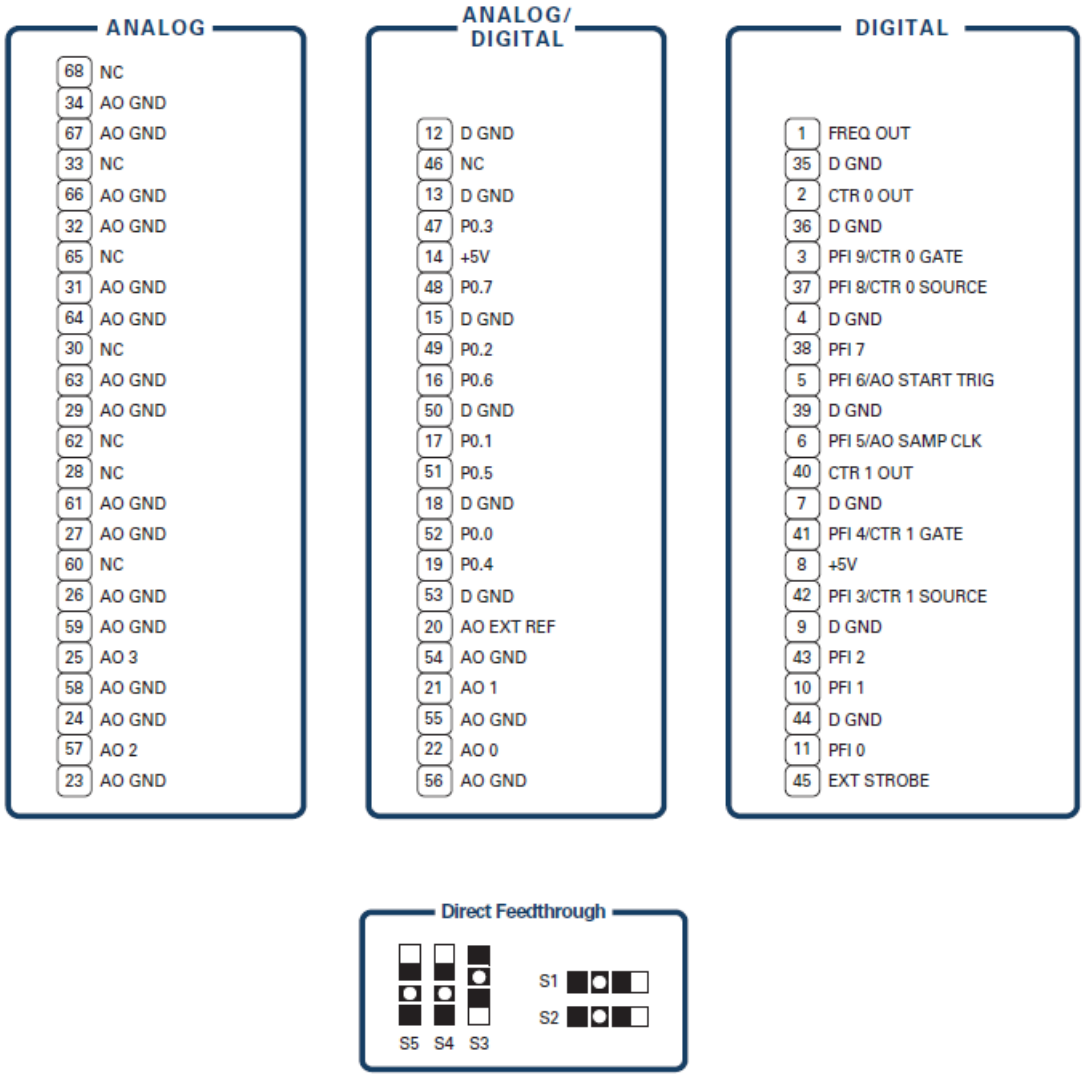


Figure 4. NI 6713/6722/6723/6733 Connector 0
NC: No Connect

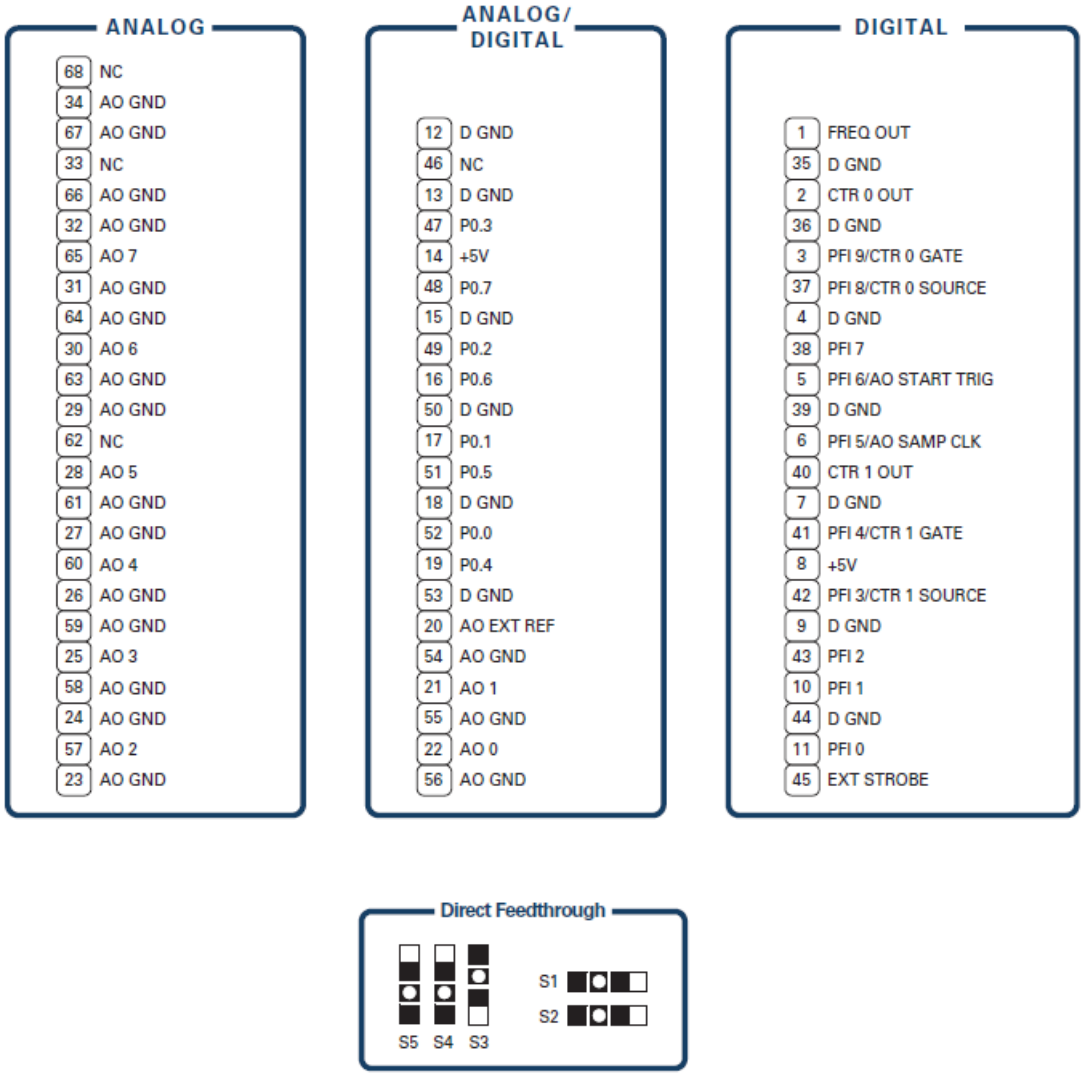


Figure 5. NI 6723 Connector 1
Note: This pin mapping only applies to the second SH68-C68-S cable when used with the NI 6723 device.

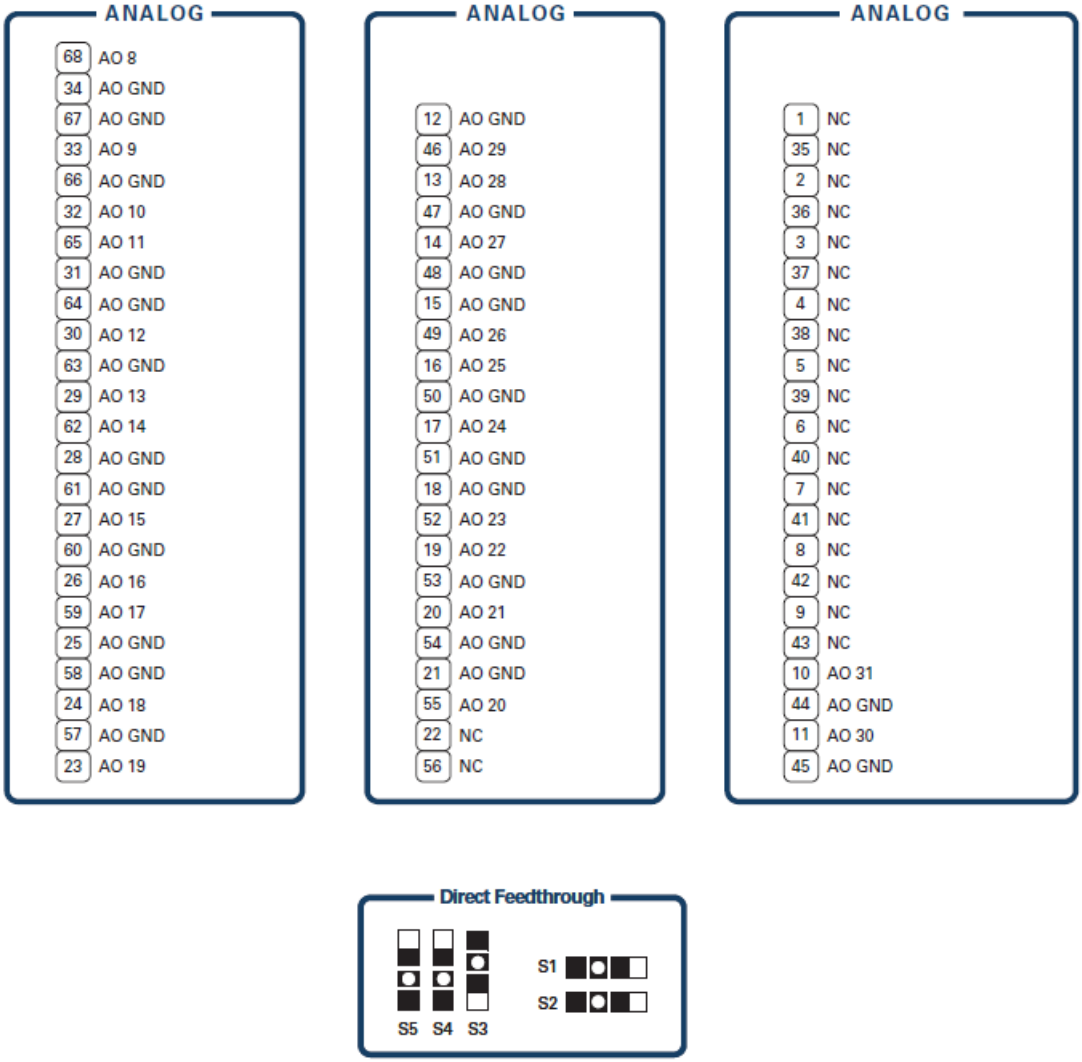


Figure 6. NI 6738/6739 Connector 0 with SHC68-68-A2 Cable
Note: Refer to the NI 6738/6739 User Manual for AO bank information.

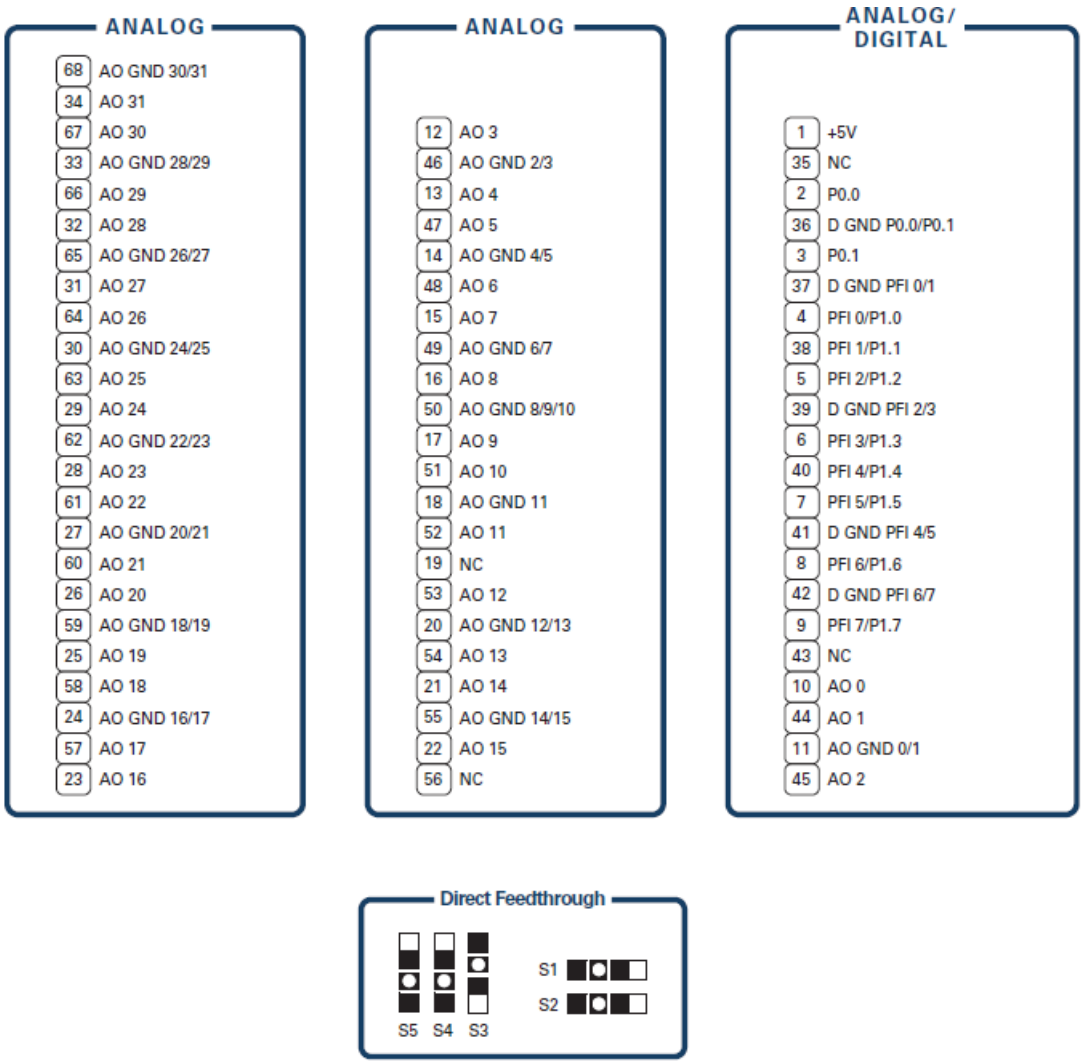


Figure 7. NI 6739 Connector 1 with SHC68-68-A2 Cable
Note: Refer to the NI 6738/6739 User Manual for AO bank information.

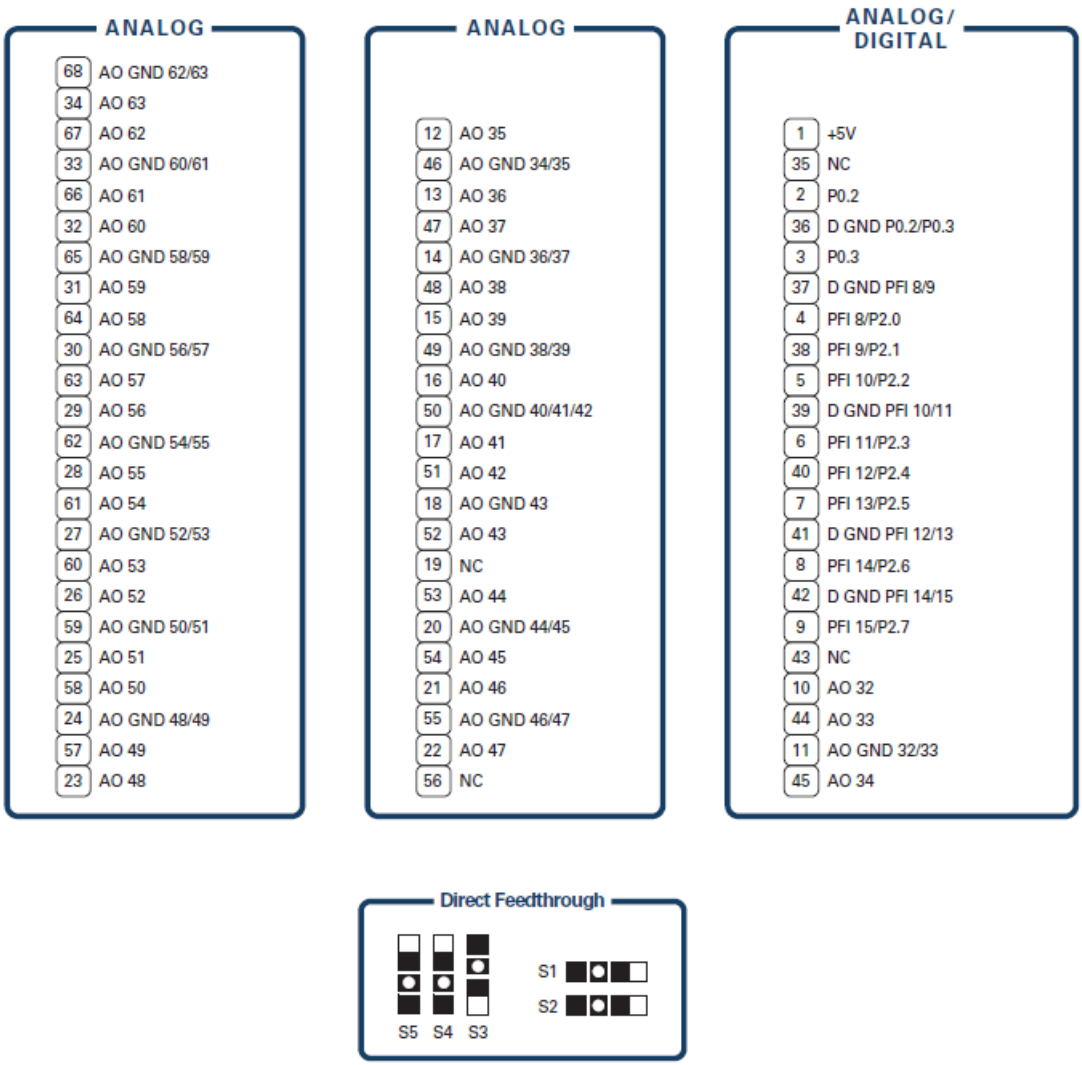
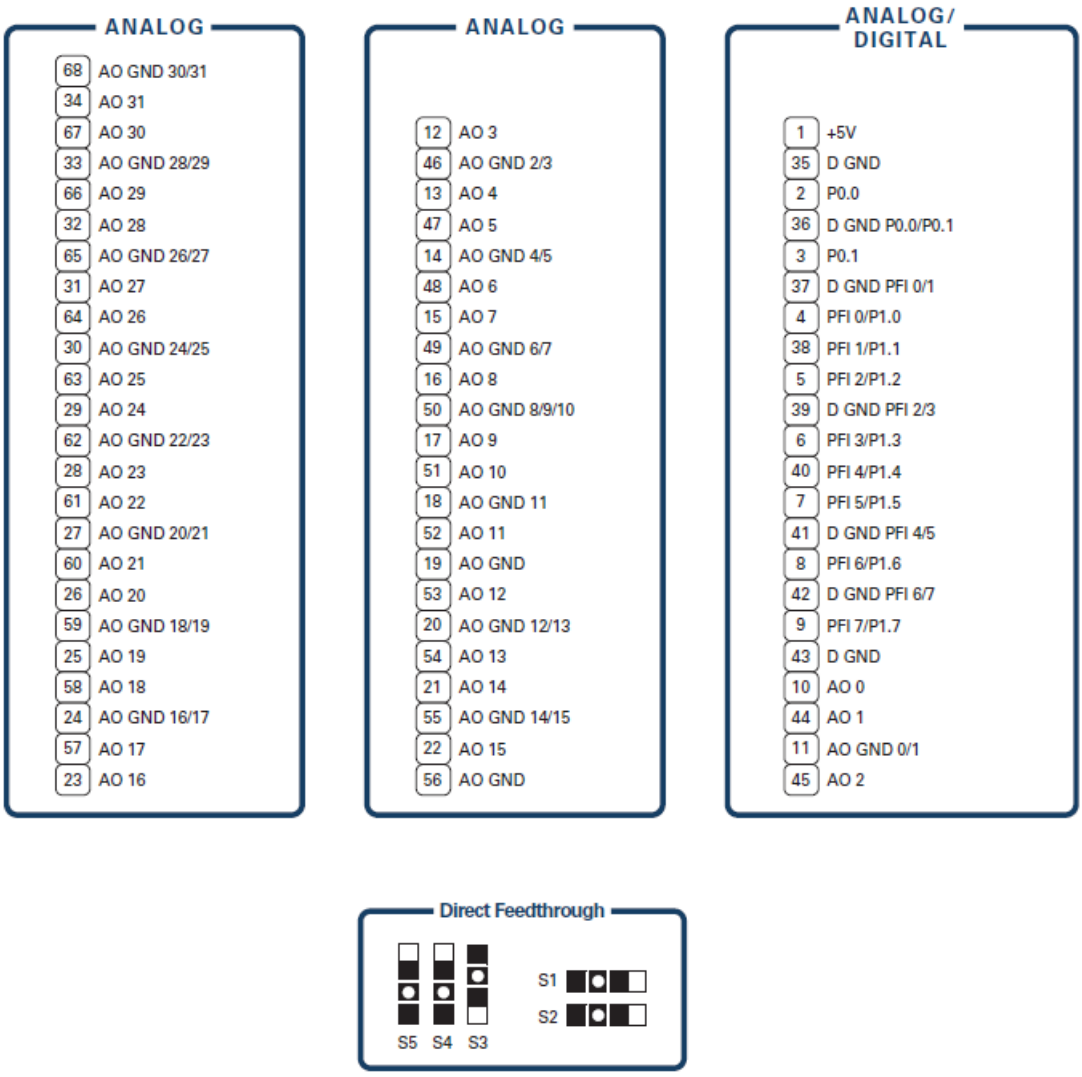


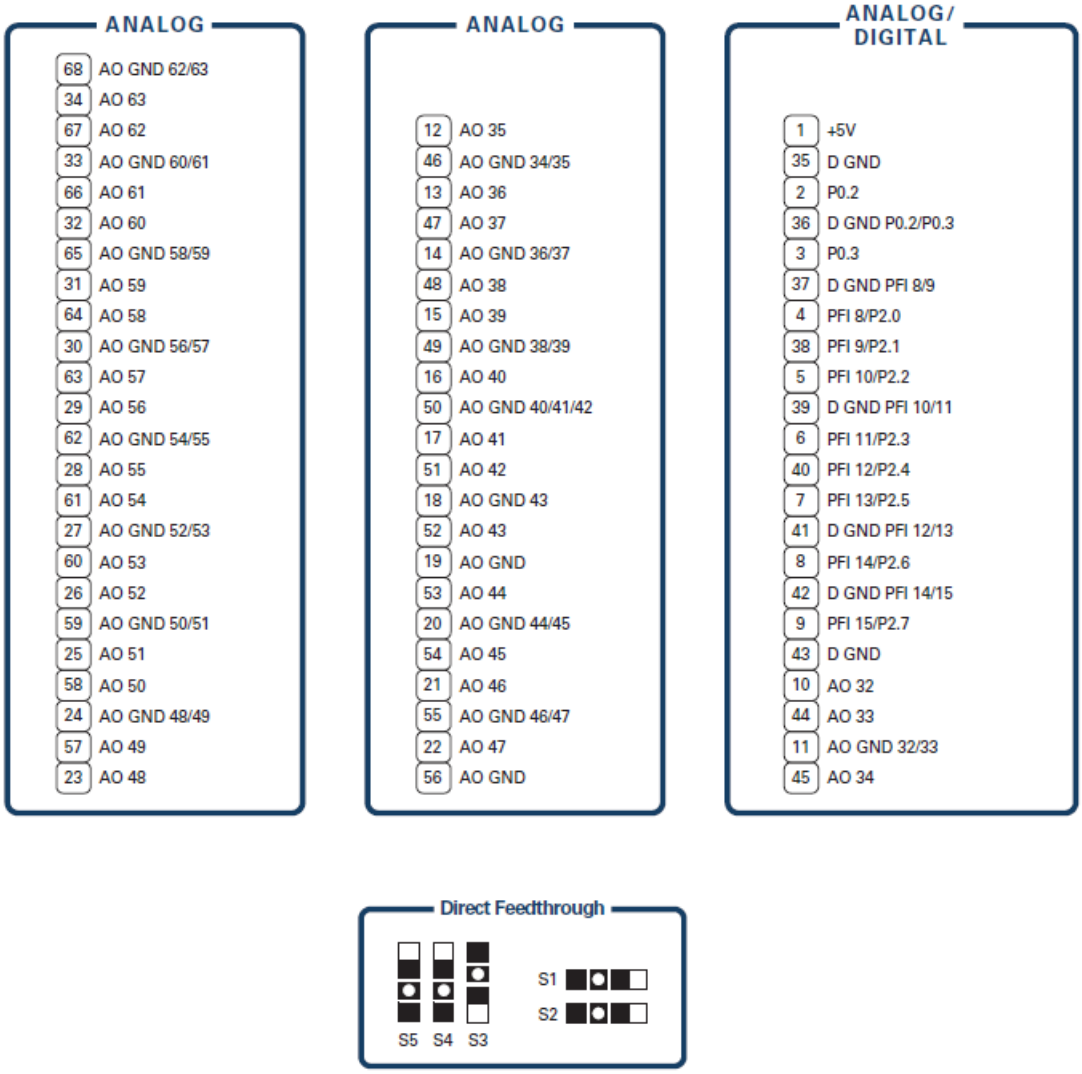
Figure 8. NI 6738/6739 Connector 0 with SH68-C68-S Cable and NI PXIe-6738/6739 Adapter
Note: Refer to the NI 6738/6739 User Manual for AO bank information.



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

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



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

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

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Documents / Resources

	NATIONAL INSTRUMENTS NI 67xx Pinout Labels Analog Output Modules [pdf] Instructions PCI-6731, NI 6703, NI 6704, NI 67xx Pinout Labels Analog Output Modules, Pinout Labels Analog Output Modules, Analog Output Modules, Output Modules

References

- Engineer Ambitiously - NI
- Trade Compliance - NI
- National Instruments Patents - NI
- NI Trademarks and Logo Guidelines - NI
- PCI-6731 National Instruments Analog Output Device | Apex Waves

Manuals+,