COMPREHENSIVE SERVICES

We offer competitive repair and calibration services, as well as easily accessible documentation and free downloadable resources.

SELL YOUR SURPLUS

We buy new, used, decommissioned, and surplus parts from every NI series. We work out the best solution to suit your individual needs.

Sell For Cash Get Credit Receive a Trade-In Deal

OBSOLETE NI HARDWARE IN STOCK & READY TO SHIP

We stock New, New Surplus, Refurbished, and Reconditioned NI Hardware.



Bridging the gap between the manufacturer and your legacy test system.

0

1-800-915-6216



www.apexwaves.com

sales@apexwaves.com

All trademarks, brands, and brand names are the property of their respective owners.

Request a Quote



PCIe-6738

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



Figure 1. NI 6703



SCB-68 Quick Reference Label

NI 6703 AO Series

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



- 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)
- 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)
- 23 NC

- ANALOG -

- 12 AO 14 (V) 46 AO GND 14
- 13 NC
- 47 AO 13 (V) 14 AO GND 13
- 48 NC
- 15 AO 12 (V)
- 49 AO GND 12

- 19 AO GND/NC*
- 54 AO 9 (V)
- 21 NC
- 55 AO GND 8

- 16 NC 50 AO GND 11
- 17 AO 11 (V)
- 51 NC 18 AO GND 10
- 52 AO 10 (V)
- 53 NC
- 20 AO GND 9

- 22 AO 8 (V)
- 56 AO GND/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*
- 10 NC
- 44 AO 15 (V)
- 11 AO GND 15
- 45 NC

Direct Feedthrough =





Figure 2. NI 6704

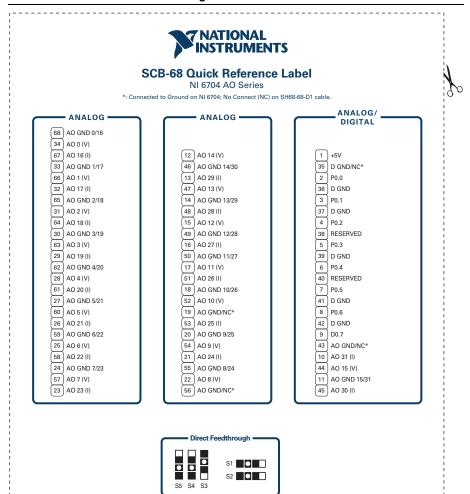
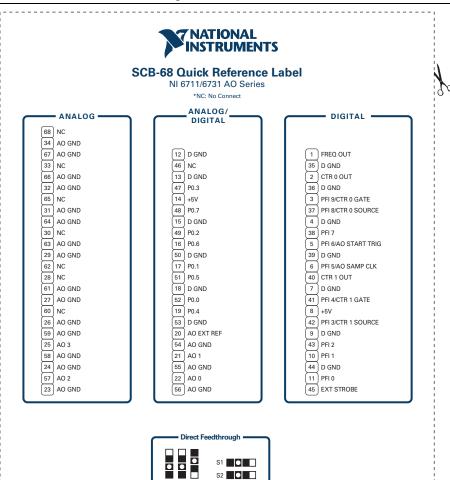


Figure 3. NI 6711/6731



S2 •

S5 S4 S3

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

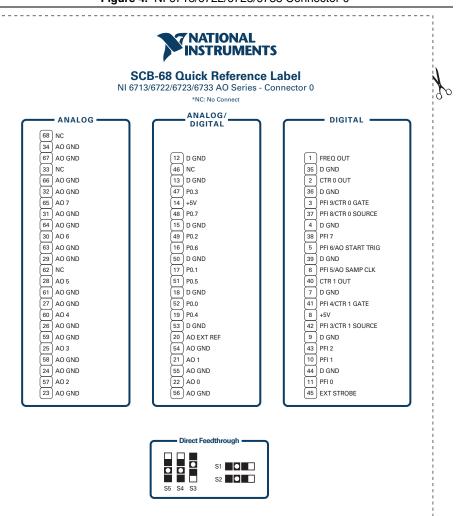


Figure 5. NI 6723 Connector 1

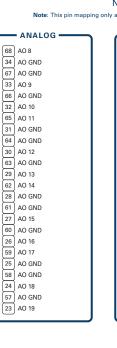


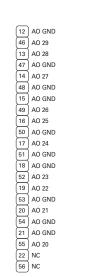
SCB-68 Quick Reference Label

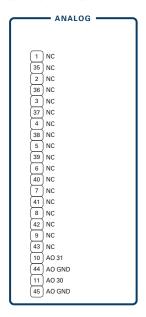
NI 6723 AO Series - Connector 1

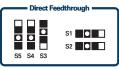
- ANALOG -

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



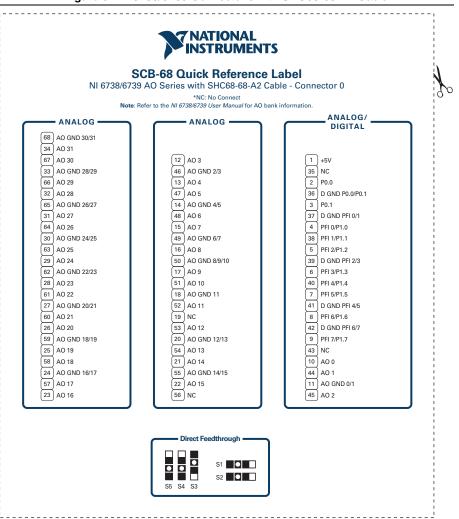






Use the following label if you are connecting the SCB-68 to Connector 0 of the NI 6738/6739 models with the SHC68-68-A2 cable.1

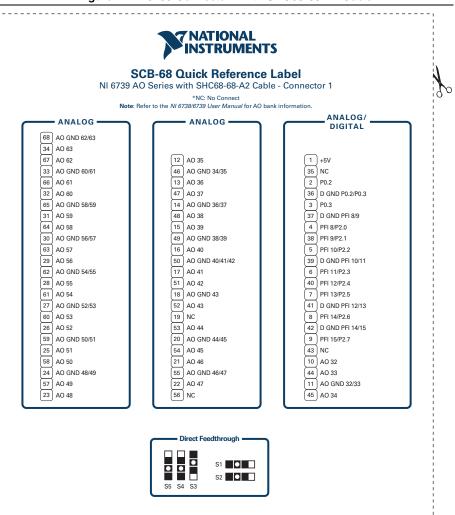
Figure 6. NI 6738/6739 Connector 0 with SHC68-68-A2 Cable



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

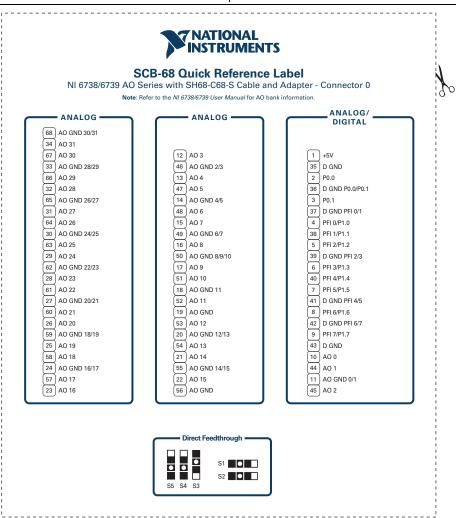
Figure 7. NI 6739 Connector 1 with SHC68-68-A2 Cable



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

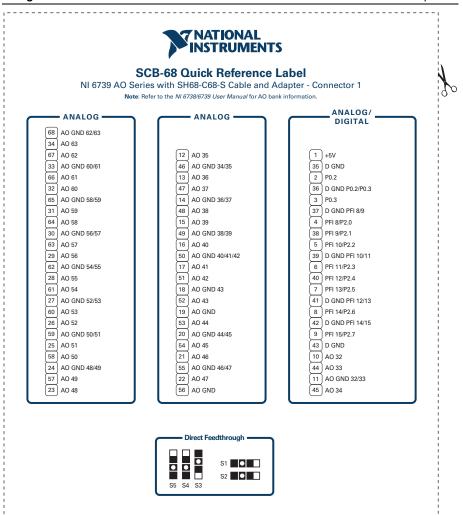
Use the following label if you are connecting the SCB-68 to Connector 0 of the NI 6738/6739 models with the SH68-C68-S cable and NI PXIe-6738 Adapter or NI PXIe-6739 Adapter.

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



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



Refer to the NI Trademarks and Logo Guidelines at ni.com/trademarks for more information on NI trademarks. Other product and company names mentioned herein are trademarks or trade names of their respective companies. For patents covering NI products/technology, refer to the appropriate location: Help»Patents in your software, the patents.txt file on your media, or the National Instruments Patents Notice at ni.com/patents.You can find information about end-user license agreements (EULAS) and third-party legal notices in the readme file for your NI product. Refer to the Export Compliance Information at ni.com/legal/export-compliance for the NI global trade compliance policy and how to obtain relevant HTS codes, ECCNs, and other import/export data. NI MAKES NO EXPRESS OR IMPLIED WARRANTIES AS TO THE ACCURACY OF THE INFORMATION CONTAINED HEREIN AND SHALL NOT BE LIABLE FOR ANY ERRORS. U.S. Government Customers: The data contained in this manual was developed at private expense and is subject to the applicable limited rights and restricted data rights as set forth in FAR 52.227-14, DFAR 25.227-7014, and DFAR 25.227-7015.

© 2018 National Instruments. All rights reserved.

377334A-01 Apr6