
PXle-6571 User Manual

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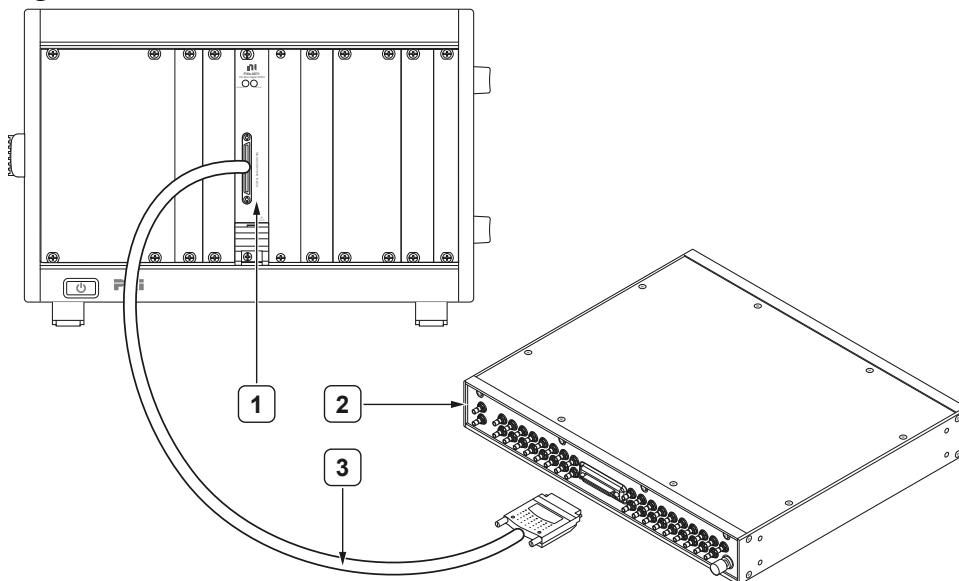
The SMB-2163 (NI part number 778747-01) is an SMB breakout box for high-speed digital devices. This breakout box connects to other devices for testing and debugging by routing every DIO and control channel on a separate SMB coaxial connector.

Complete the following steps to install the SMB-2163 on a module and prepare signal connections.



Caution Disconnect power from the device, accessory, and any other connected hardware before connecting the cable to prevent damage to the hardware and personal injury. NI is not liable for damage resulting from improper connections.

Figure 10. SMB-2163 Installation with a PXIe-6571

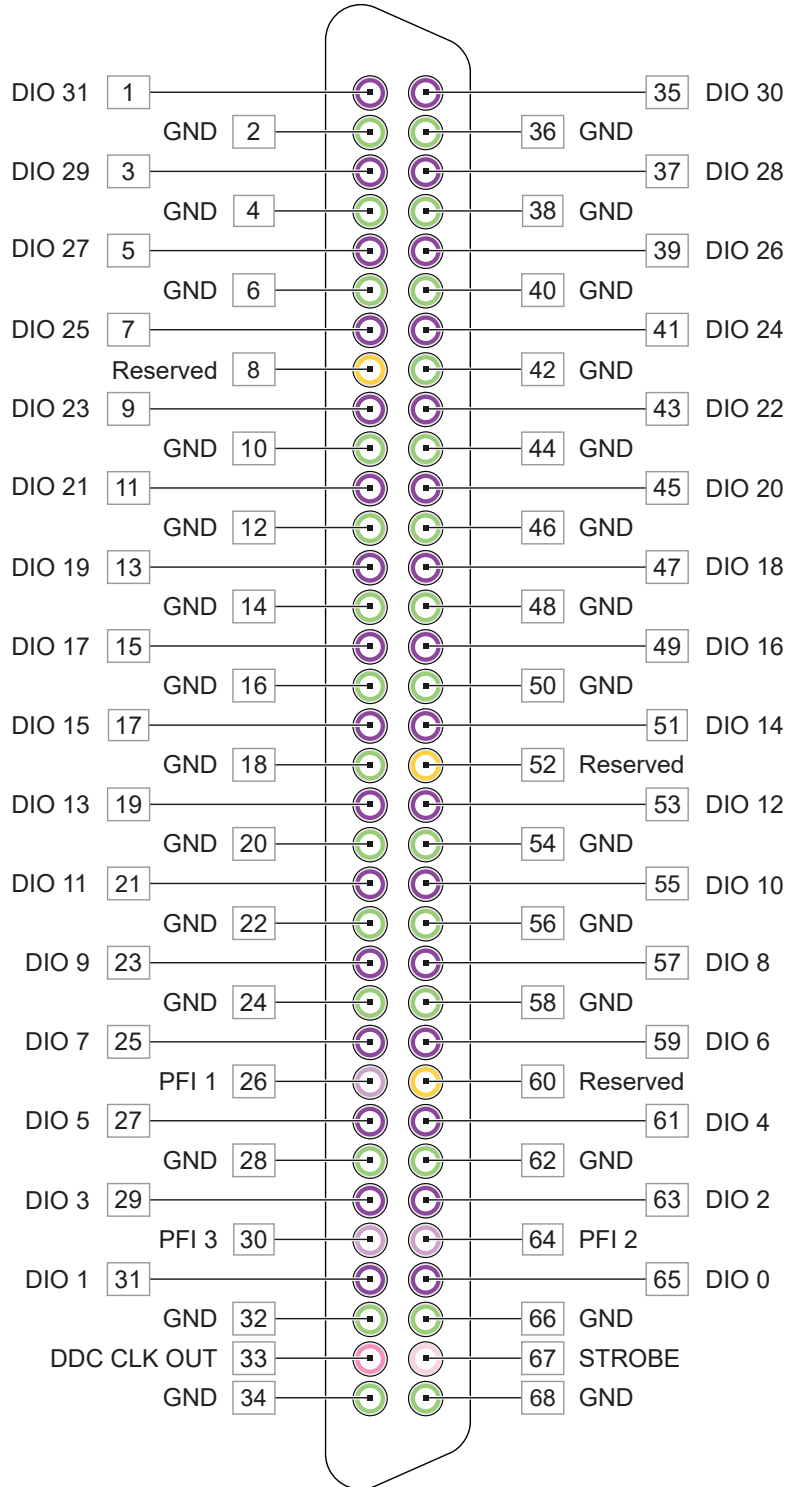


1. Chassis with the PXIe-6571 Installed
2. SMB-2163
3. SHC68-C68-D4

1. Attach either end of the SHC68-C68-D4 shielded cable to the VHDCI DDC connector of on the front panel of the PXIe-6571 and secure the cable with the captive screws

- on the cable connector.
- Attach the other end of the cable to the DDC connector of the SMB-2163 and secure the cable with the captive screws on the cable connector.
 - Make signal connections by connecting SMB cables to SMB-2163 signal terminals.

Figure 11. SMB-2163 DDC Connector Pinout



Item	DDC Pin	Signal Description
1	STROBE	Bidirectional digital data channels 0 through 31.
2	DDC CLK OUT	External Sample clock source for pattern acquisition.
3	DIO <0..31>	Exported Sample clock signal.
4	68-Pin Digital Data & Control (DDC) Connector	Programmable function interface channels 1 through 3.
5	Programmable Function Interface (PFI) <1..3>	Ground reference for signals.
6	Shield Ground Lug	These channels are reserved for system use. Do not connect signals to these channels.



Caution Connections that exceed any of the maximum ratings for the SMB-2163 or the digital pattern instrument can damage the device and the computer. NI is not liable for any damages resulting from such signal connections. Refer to ***SMB-2163 User Guide*** at ni.com/docs for details about the maximum input ratings.



Note To ensure a solid ground connection, tighten the SMB connectors by gently snapping them into place.



Note For additional shielding, you can connect the shield ground connector on the SMB-2163 to earth/hard ground. This terminal is connected to the shielded enclosure ground.