# **DAQ** Accessories Selection Guide

# **NI Cable Design Advantages**

National Instruments offers many different high-performance shielded cables that have been specially designed for specific NI multifunction DAQ devices. Each type of cable features improved signal integrity using the following technologies:

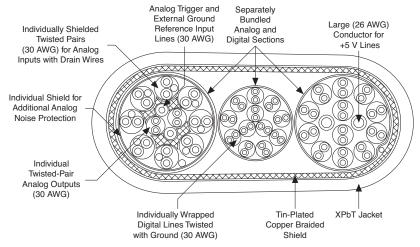


Figure 1. Enhanced-Performance Shielded Cable Used in the SHC68-68-EPM Cable

#### **Multifunction DAQ Accessories**

M Series	Feature	Connect to	Connector <sup>1</sup>	Cable <sup>2,5</sup>	Accessory
68-pin devices	Noise-reducing	SCC portable signal conditioning	0 or 1	SHC68-68-EPM	SCC-68
	Noise-reducing	SCXI high-performance signal conditioning	0 only	SHC68-68-EPM	NI SCXI Signal Conditioning Hardware
	Noise-reducing	Screw terminals	0 or 1	SHC68-68-EPM	SCC-68, SCB-68, or TBX-68
	Noise-reducing	Screw terminals (PXI only)	0 only	-	TB-2706
	Noise-reducing	BNC terminal block	0 or 1	SHC68-68-EPM	BNC-2110, BNC-2111, BNC-2120, or BNC-2090
	Noise-reducing	50-pin connector	0 or 1	SHC68-68-EPM <sup>4</sup>	50-pin accessories
	Basic shielding	Screw terminals	0 or 1	SHC68-68	SCB-68, CB-68LP, CB-68LPR
	Low-cost	Screw terminals	0 or 1	RC68-68	CB-68LP or CB-68LPR
	Custom connectivity	Board mounting connectors	0 or 1	SHC68-68-EPM	PCB mounting connectors
	Custom connectivity	68-pin female connector	0 or 1	SHC68-68M-EPM	Custom-built or third-party
	Custom connectivity	Unterminated	0 or 1	SHC68-NT-S	Custom-built or third-party
37-pin devices	150 V CAT II, DIN rail	Screw terminals	0 only	SH37F-37M	CB-37F-HVD
	High-voltage isolated	Screw terminals	0 only	DB37M-DB37F-EP3	CB-37F-HVD, CB-37FH, or CB-37FV
	DIN rail	Screw terminals	0 only	SH37F-37M or R37F-37M-1	CB-37FH or CB-37FV
	Custom connectivity	Unterminated	0 only	SH37F-P-4	Custom-built or third-party
	Custom connectivity	Crimp and poke termination	0 only	-	TB-37F-37CP
	Custom connectivity	Solder cup termination	0 only	=	TB-37F-37SC
	Low-cost	Screw terminals	0 only	-	CB-37F-LP

S Series	Feature	Connect to	Connector	Cable	Accessory
NI 6115, NI 6120,	Noise-reducing	SMB terminal block (PXI only)	0 only	_	TB-2708 or TB-27096
NI 6123, NI 6133,	Noise-reducing	Screw terminals (PXI only)	0 only	_	TB-2705
NI 6122, NI 6132,	Noise-reducing	Screw terminals	0 only	SH68-68-EP	SCB-68
NI 6110, NI 6111	Noise-reducing	BNC terminal block	0 only	SH68-68-EP	BNC-2110, BNC-2120, or BNC-2090A
	Low-cost	Screw terminals	0 only	R6868	CB-68LP or CB-68LPR
NI 6143	Noise-reducing	Screw terminals (PXI only)	0 only	_	TB-2706
	Noise-reducing	Screw terminals	0 only	SHC68-68-EPM	SCB-68
	Low-cost	Screw terminals	0 only	RC68-68	CB-68LP or CB-68LPR
NI 6154	High-voltage isolated	Screw terminals	0 only	DB37M-DB37F-EP	CB-37F-HVD, CB-37FH, or CB-37FV
6TB-2708 for use with PXI-6115	and PXI-6120; TB-2709 for use with PXI-6122, PXI-62	23, PXI-6232, and PXI-6133.			

R Series	Feature	Connect to	Connector	Cable	Accessories
NI 7833R,	Noise reducing	Screw terminals	0	SHC68-68-RMIO	SCB-68
NI 7831R,			1 or 2	SHC68-68-RDIO	
NI 7830R	Signal conditioning and I/O expansion	C Series modules	1 or 2	SHC68-68-RDIO	cRIO-9151 R Series expansion chassis
NI 7813R, NI 7811R	Noise reducing	Screw terminals	0, 1, 2, or 3	SHC68-68-RDIO	SCB-68
	Signal conditioning and I/O expansion	C Series modules	0, 1, 2, or 3	SHC68-68-RDIO	cRIO-9151 R Series expansion chassis



# **DAQ Accessories Selection Guide**

Product	Feature	Connect to	Cable	Accessory
68-Pin E Series (except DAQCard devices)				
NI 6070E, NI 6032E,	Noise-reducing	SCC portable signal conditioning	SH68-68-EP	SCC-68
NI 6052E, NI 6030E,		SCXI high-performance signal conditioning	SH68-68-EP	NI SCXI Signal Conditioning Hardware
NI 6040E, NI 6024E,		Screw terminals	SH68-68-EP	SCB-68 or TBX-68
NI 6036E, NI 6023E, NI 6034E		BNC terminal block	SH68-68-EP	BNC-2110, BNC-2111, BNC-2120, or BNC 2190
NI 0034E		50-pin connector	SH6850	Custom-built or third-party
	Low-cost	Screw terminals	R6868	CB-68LP or CB-68LPR
100-Pin E Series				
NI 6071E,	Noise-reducing	Screw terminals	SH100100	SCB-100
NI 6033E,		Screw terminals	SH1006868	2 SCB-68
NI 6031E,		BNC terminal block	SH1006868	BNC-2115, BNC-2110, BCN-2111, BNC-2120, or BNC-2190
NI 6025E		50-pin connector	SH1005050	Custom-built or third-party
	Low-cost	Screw terminals	SH1006868	CB-68LP and/or CB-68LPR
E Series DAQCard Devices				
DAQCard-6062E,	Noise-reducing	SCC portable signal conditioning	SHC68-68-EPM	SCC-68
DAQCard-6036E,		SCXI high-performance signal conditioning	SHC68-68-EPM	NI SCXI Signal Conditioning Hardware
DAQCard-6024E		Screw terminals	SHC68-68-EPM	SCB-68 or TBX-68
		BNC terminal block	SHC68-68-EPM	BNC-2110, BNC-2111, BNC-2120, or BNC 2190
	Low-cost	Screw terminals	RC68-68	CB-68LP or CB-68LPR
B Series				
NI 6010	Low-cost	Screw terminals	SH37F-37M-1	CB-37F-LP1, CB-37FH, CB-37FV

# **Analog Output Accessories**

Model	Shielding	Connect to	Cable	Accessory
NI 673x,	Shielded	BNC	SH68-68-EP	BNC-2110
PCI-671x,		Screw terminals	SH68-68-EP	SCB-68 or TBX-68
PXI-671x		Screw terminals	_	TB-2705 (PXI)
		Custom	SH68-68-EP	CA-1000
	Unshielded	Screw terminals	R6868	CB-68LP or CB-68LPR
NI 6723	Shielded	BNC	2 SH68-C68-S	BNC-2110 and BNC-2115
		Screw terminals	2 SH68-C68-S	2 SCB-68 or TBX-68
		Custom	2 SH68-C68-S	2 CA-1000
NI 6722	Shielded	BNC	SH68-C68-S	BNC-2110
		Screw terminals	SH68-C68-S	SCB-68
		Custom	SH68-C68-S	CA-1000
	Unshielded	Screw terminals	RC68-68	CB-68LP or CB-68LPR
NI 6703,	Shielded	Screw terminals	SH68-68-D1	SCB-68
NI 6704		Custom	SH68-68-D1	CA-1000
	Unshielded	Screw terminals	R6868	CB-68LP or CB-68LPR
DAQCard-6715	Shielded	BNC	SHC68-68-EPM	BNC-2110
		Screw terminals	SHC68-68-EPM	SCB-68
		Custom	SHC68-68-EPM	CA-1000
	Unshielded	Screw terminals	RC68-68	CB-68LP or CB-68LPR

## **DIO Accessories**

Product	Feature	Connect to	Cable	Accessory
100-Pin				
NI 6509, NI 6511, NI 6512, NI 6513, NI 6514,	Noise-reducing	Screw terminals	SH100-100-F	SCB-100
NI 6515, NI 6527, NI 6528, PC-DIO-96	Low-cost	Screw terminals	Cable included in kit	CB-100 kit
50-Pin				
NI 6503, USB-6501 OEM,	Noise-reducing	Screw terminals	PSH27-50F-D1	CB-50, CB-50LP
PC-DIO-24, DAQCard-DIO-24	Low-cost	Screw terminals	NB1	CB-50, CB-50LP
37-Pin				
NI 6510, NI 6516, NI 6517, NI 6518,	High-voltage	Screw terminals	SH37F-37M	CB-37F-HVD
NI 6519, NI 6520, NI 6521	High-voltage	Screw terminals	-	TB-2621 (PXI only)
	Noise-reducing	Screw terminals	SH37F-37M	CB-37FH, CB-37FV
	Low-cost	Screw terminals	R37F-37M-1	CB-37FH, CB-37FV
	Low-cost	Screw terminals	_	CB-37F-LP
	Custom connectivity	37-pin female connector	-	TB-37F-37CP, TB-37F-37SC
	Custom connectivity	37-pin female connector	SH37F-P-4	=

## **Counter/Timer Accessories**

Product	Feature	Connect to	Cable	Accessory
100-Pin				
NI 6624	Noise-reducing	Screw terminals	SH100-100F	SCB-100
	Low-cost	Screw terminals	Cable included in kit	CB-100 kit
68-Pin				
NI 6601, NI 6602, NI 6608	Noise-reducing	Screw terminals	SH68-68-D1	SCB-68
	Noise-reducing	BNC connectors	SH68-68-D1	BNC-2121
	Noise-reducing	Screw terminals	-	TB-2715
	Low-cost	Screw terminals	R6868	CB-68LP
	Low-cost	Screw terminals	R6868	TBX-68

#### 100-Pin Accessories

#### **Cables**

**SH100100** – Shielded 100-conductor cable terminated with 100-pin male 0.050 series D-type connectors. This cable connects the 100-pin E Series devices to 100-pin accessories.

1 m	182853-01
2 m	182853-02

**SH100-100-F** — Shielded 100-conductor cable for connecting 100-pin DIO and TIO devices to 100-pin accessories.

2 m ......185095-02

**R1005050** – Connects 100-pin E Series, DIO, and TIO devices to standard 50-pin third-party or custom connectors.

1 m	182762-01
2 m	182762-02

### **Connector Blocks**

**SCB-100** – Shielded I/O connector block for rugged, low-noise signal termination with 100-pin E Series, DIO, and TIO devices. It also includes general-purpose breadboard areas and an IC temperature sensor for cold-junction compensation in temperature measurements.

SCB-100 .......776990-01 Dimensions – 19.5 by 15.2 by 4.5 cm (7.7 by 6.0 by 1.8 in.)

**CB-100** – Includes two CB-50 I/O connector blocks and an R1005050 ribbon cable for connecting to any devices with a 100-pin SCSI I/O connector. Each CB-50 block includes hardware for mounting the accessory on a standard DIN-rail or panel.

CB-100 with 1 m R1005050 cable ......777812-01

**PCB Mounting Connectors for Custom Accessories** – Build custom accessories that connect to 100-conductor shielded and ribbon cables using these connectors.

100-pin, female, right-angle mounting	777778-01
100-pin, female, vertical mounting	777779-01

## **68-Pin Accessories**

#### **Cables**

**SHC68-68-EPM** – A high-performance shielded 68-conductor cable terminated with a VHDCI 68-pin male connector at one end and a 68-pin female 0.050 D-type connector at the other end for connecting M Series, DAQCard, and select S Series devices to standard 68-pin accessories.

0.5 m	192061-0R5
1 m	192061-01
2 m	192061-02
5 m	192061-05
10 m	192061-10

**SHC68-68** — A low-cost cable for connecting M Series DAQ devices to 68-pin accessories and signal conditioning systems. It features individually twisted cable pairs but does not have shields between the analog and digital signals. For improved noise rejection, consider the SHC68-68-EPM.

1 m	191945-01
2 m	191945-02

**SHC68-68-RMIO, SHC68-68-RDIO** — High-performance shielded 68-conductor cables terminated with a VHDCI 68-pin male connector at one end and a 68-pin female 0.050 D-type connector at the other end; specifically designed for the MIO and DIO connectors on R Series devices. SHC68-68-RMIO

1 m	189588-01
2 m	189588-02
SHC68-68-RDIO	
1 m	191667-01

**SH68-C68-S** – Basic shielded cable featuring twisted pairs and additional ferrites for connecting NI 672x analog output devices to 68-pin accessories.











SH68-C68-S

SCB-100

SHC68-68-EPM

SHC68-68-RDIO

BUY ONLINE at ni.com or CALL 800 813 3693 (U.S.)

**SHC68U-68-EP** – Shielded 68-conductor cable terminated with an inverted VHDCI 68-pin male connector at one end and a 68-pin female 0.050 series D-type connector at the other. When using two E Series DAQCard devices in adjacent slots, use one SHC68-68-EPM and one SHC68U-68-EP.

0.5 m	1	187406-0R5
1 m		187406-01

**SH68-68-EP, SH68-68R1-EP** — Shielded 68-conductor cable terminated with two 68-pin female 0.050 series D-type connectors. They connect to 68-pin mass-terminated USB M Series, E Series, S Series, and B Series devices. If you need a right-angle connector, use the SH68-68R1-EP. SH68-68-EP

1 m	184749-01
2 m	184749-02
5 m	184749-05
10 m	184749-10
SH68-68R1-EP	
1 m	187051-01

**SH68-68-D1** – Shielded 68-conductor cable terminated with two 68-pin female 0.050 series D-type connectors. This cable connects counter/timer and NI 670x analog output devices to 68-pin accessories.

1 m	183432-01
2 m	

**SH6850** — A shielded cable that connects a 68-pin E Series, S Series (except NI 6143), or B Series multifunction DAQ product to a third-party or custom standard 50-pin accessory. The cable provides a screw-latching 68-pin female connector on one side and a standard 50-pin female connector on the other side.

1 m	776784-01
2 m	



SH68-68-EP



SH68-68-D1



SHC68-68M-EPM

**SHC68-NT-S** – A shielded 68-conductor cable terminated with a 68-pin male VHDCl connector at one end and open to bare wires at the other. The cable connects M Series, NI 6143, and R Series devices to custom accessories through bare wires.

2 m	100011	$\Omega$
Z [[]	 189041	-UZ

**RC68-68** – A 68-conductor ribbon cable that connects a DAQCard, M Series device, or NI 6143 directly to 68-pin accessories. You can use two RC68-68 cables together in adjacent PCMCIA slots or on 2-connector M Series devices.

0.25 m	18/252-0H25
0.5 m	187252-0R5
1 m	187252-01

**R6868** – A low-cost, 68-conductor flat ribbon cable terminated with two 68-pin connectors. Use this cable to connect a 68-pin E Series, S Series (except NI 6143), or B Series multifunction DAQ device to 68-pin accessories.

-1	m	102/10	27 1	∩1	ı
	1111	 10240	ا-2(	UΙ	1

**R6850** – Combines a 68F-50M cable adapter and a standard 50-pin cable with female connectors on both ends. It is designed to adapt a 68-pin E Series, S Series, or B Series multifunction DAQ device to a third-party or custom 50-pin accessory.

1 m	 776842-1	01
1 m	 //6842-1	ļ

#### **Connector Blocks**

SCC-68 — High-performance I/O terminal block for M Series and E Series DAQ devices that provides four slots for analog input and digital SCC signal conditioning modules, general-purpose breadboard areas, an IC temperature sensor for cold-junction compensation, and 68 screw terminals for direct I/O connectivity.







SCB-68

**SCB-68** – Shielded I/O connector block for rugged, low-noise signal termination with 68-pin DAQ devices. It includes general-purpose breadboard areas and an IC temperature sensor for cold-junction compensation in temperature measurements.

Dimensions – 19.5 by 15.2 by 4.5 cm (7.7 by 6.0 by 1.8 in.)

BNC-21xx — Shielded connector blocks with BNC connectors for easy connectivity to I/O signals. The BNC-2110 and BNC-2120 (for 68-pin M Series, S Series, and B Series) have BNC inputs for eight differential analog input signals, analog output signals, and some digital I/O signals. Other digital I/O signals are accessible through screw terminals. The BNC-2120 also provides a function generator, quadrature encoder, temperature reference, thermocouple connector, and LEDs for digital I/O signals. The BNC-2111 (for 68-pin M Series and B Series) has BNC inputs for 16 single-ended analog input signals, analog output signals, and some digital I/O signals. The unshielded version of the BNC-2111 is suitable for 0EM applications. The BNC-2115 has BNC connectors for the extended I/O channels of 100-pin E Series devices (NI 6025E/6031E/6033E/6071E)

(NI 6025E/6031E/6033E/6071E).	
BNC-2110	777643-01
Dimensions - 29.3 by 11.2 by 5.5 cm (8.0 by 4.4 by	2.2 in.)
BNC-2111, shielded	779347-01
BNC-2111, unshielded	779347-02
Dimensions - 19.05 by 10.5 by 3.5 cm (7.4 by 3.5 b	y 2.0 in.)
BNC-2115	777807-01
Dimensions – 20.3 by 11.2 by 5.5 cm (8.0 by 4.4 by	2.2 in.)
BNC-2120	777960-01
Dimensions - 26.7 by 11.2 by 6.0 cm (10.5 by 4.4 b	y 2.4 in.)

**BNC-2090A**, **BNC-2090** – A shielded, 1U, 19-in. rack-mountable adapter with 22 signal-labeled BNC connectors to simplify connections to your I/O signals. The accessory provides access to all analog I/O; analog and digital triggers; clocks for synchronization purposes; and two user-defined signals through BNC connectors. Digital I/O signal connectivity is provided through 29 spring terminals. The BNC-2090A includes easy access to areas where users can build custom signal conditioning circuitry including lowpass filters, highpass filters, and voltage dividers (attenuators). 68-pin SCSI connectors are featured on the front and back of the accessory, providing additional options for connecting to the data acquisition device. The BNC-2090A can connect to any 68-pin M Series (connectors 0 and 1), E Series, S Series, or B Series DAQ device. The BNC-2090A is a RoHS-compliant accessory.

For existing users of the BNC-2090, the BNC-2090A provides complete backward compatibility with existing systems. The BNC-2090A provides easier assembly/disassembly, easier access to areas for custom signal conditioning, a smaller footprint, RoHS compliance, and optimization for M Series and other NI-DAQmx supported devices. NI recommends the BNC-2090A instead of the BNC-2090 for all use cases.

Dimensions – 48.3 by 4.4 by 18.8 cm (19.0 by 1.7 by 7.4 in.)

**SC-2075** – Connector block with breadboard area for prototyping, as well as BNC and spring-terminal connectivity for 68-pin M Series, E Series, and B Series multifunction DAQ devices. The built-in ±15 V or adjustable 0 to 5 V power supply and LEDs for digital lines make the SC-2075 ideal for academic laboratories.

Dimensions – 26.7 by 20.7 by 4.4 cm (10.5 by 8.2 by 1.7 in.)



BNC-2090A













TB-2706

TB-2708/9

**TBX-68** – Connector block for easy connection of field I/O signals to 68-pin DAQ devices. The TBX-68 includes 68 screw terminals and one 68-pin male connector for direct connection to 68-pin cables. The TBX-68 is mounted in a protective plastic base with hardware for mounting on a standard DIN rail.

TBX-68 .......777141-01 Dimensions — 12.50 by 10.74 cm (4.92 by 4.23 in.)

**TB-270x** – TB-270x devices are 68-pin shielded accessories with screw terminals for I/O signals that mount directly to the front panel of 68-pin PXI DAQ modules. The TB-2705 works with PXI-6030E/6040E/6052E/6070E E Series modules and PXI-6115/612x/613x S Series modules. The TB-2706 works with 68-pin PXI M Series modules and the PXI-6143. The TB-2708 and TB-2709 provide nine SMB connectors for direct access to simultaneous sampling I/O, and an auxiliary connector for advanced timing and triggering with the MFIT-Pigtail cable. The TB-2708 works with the PXI-6115/6120 S Series modules. The TB-2709 works with the PXI-612x/613x S Series modules.

TB-2705	778241-01
TB-2706	779183-01
TB-2708	778823-01
TB-2709	779554-01
Dimensions – 10.7 by 8.6 by 2.0 cm (4.2 by 3.4 by 0	0.8 in.)

Dimensions – 8.43 by 10.41 by 2.03 cm (3.32 by 4.1 by 0.8 in.)

**PCB Mounting Connectors for Custom Accessories** – Build custom accessories that connect to 68-conductor shielded and ribbon cables using these connectors.







DAQ Signal Accessory



SH50-50







NB-1



CB-50LP

### 37-Pin Accessories

#### **Cables**

**DB37M-DB37F-EP** — High-performance shielded 37-pin female-to-male D-Sub cable with separate analog input, analog output, and digital sections designed to reduce noise. This cable is for use with the new isolated S Series (PCI-6154) and select isolated M Series (NI 6230 and NI 6236) devices.

1 m ......193737-01

<b>SH37F-37M</b> – 37-pin D-Sub female-to-male shielded I/O cables.
1 m
2 m778621-02
<b>SH37F-P-4</b> – 37-pin D-Sub shielded female-to-pigtail cable for custom wiring.
4 m778620-04
R37F-37M – 37-pin D-Sub female-to-male ribbon I/O cable.

#### **Connector Blocks**

 $\label{eq:cb-37F-HVD} \textbf{-} \text{UL-listed (150 V, 2 A) 37-pin female D-Sub horizontal terminal block that mounts in line with the DIN rail.}$ 

CB-37F-HVD ......779491-01

**CB-37F-LP** – Direct mountable connector block for 37-pin data acquisition devices. Easily accessible screw terminals and low cost make this accessory ideal for OEM applications.

CB-37F-LP.......779353-01

**CB-37FV** – 37-pin female D-Sub vertical terminal block that mounts perpendicular to the DIN rail.

CB-37FV ......778672-01

**CB-37FH** – 37-pin female D-Sub horizontal terminal block that mounts in line with the DIN rail.

CB-37FH ......778673-01

**TB-2621** – 37-pin front-mounting PXI terminal block. High-voltage, UL-listed for CAT II, 150 VDC/VAC.

TB-2621......779444-01

<b>TB-37F-37CP</b> – 37-pin female D-Sub crimp and poke termination	
accessory for custom cabling.	

TB-37F-37CP ......779185-01

**TB-37F-37SC** – 37-pin female D-Sub solder cup termination accessory for custom cabling.

TB-37F-37SC ......779184-01

**37-Pin HV Safety Kit** – Accessories for modifying two connectors with safety keying for use in high-voltage data acquisition with devices such as NI 6521.

37-Pin HV Safety Kit......779445-01

# **Specialty Accessories**

**CA-1000** – A configurable enclosure that gives you maximum user-defined connectivity and flexibility through customized panelettes. Each enclosure can accommodate up to nine panelettes.

Dimensions – 30.7 by 25.4 by 4.3 cm (21.1 by 10.0 by 1.7 in.)

**USB Accessory Kits** – Connectors, labels, and screw drivers for use with USB-6008/6009 multifunction DAQ and USB-6501 digital I/O devices.

USB-6008/6009 Analog I/O Accessory Kit	779371-01
USB Digital I/O Accessory Kit	779376-01

**Hi-Speed USB Cables** – Designed to connect any USB data acquisition device to the USB port of your computer. They feature a B-type connector for the device-side connection and an A-type connector for the host-side connection.

1 m	
2 m	184125-02

**PSH27-50F-D1** – Shielded cable that connects to the DAQCard-DIO-24 and is terminated with a 50-pin female connector that attaches directly to 50-pin accessories.

U.5 m	1//6989-UR5
1 m	776989-01













SH37F-37M

SH37F-37-P-4

CB-37F-LP

CB-37FV CB-37F-HVD

TB-2621

**CB-15** – DIN-rail mountable connector block for use with the NI CF-6004. Easily accessible screw terminals make this accessory great for prototyping.

**MFIT-Pigtail** – Shielded 14-conductor cable terminated with a 14-position MFIT female connector at one end and unterminated bare wires at the other end. It connects to the auxiliary connector of the TB-2708 and TB-2709 for access to digital I/O and trigger lines on various S Series PXI modules.

1 m ......194123-01

**Strain-Relief Accessory** – Attaches to the bottom of your notebook computer or DAQPad and provides adjustable strain relief for one or two PCMCIA cables attached to DAQCard devices, or a USB cable attached to a DAQPad device.

**RTSI Bus Cables** – Connect timing and synchronization signals among data acquisition, M Series, E Series, S Series, vision, motion, and CAN boards for PCI. For systems using long and short boards, order the extended RTSI cable.

2 boards	776249-02
3 boards	776249-03
4 boards	776249-04
5 boards	776249-05
Extended 5 heards	777562_05

# **Signal Conditioning**

**SCC** – A portable modular signal conditioning system consisting of modules that plug into a low-profile shielded carrier. Choose from a variety of signal conditioning options including sensor, input, isolation, and filtering modules. SCC is compatible with M Series, E Series, and some B Series and portable devices.

**SCXI** – A high-performance modular signal conditioning platform that provides a front end to your M Series or E Series DAQ device. You can expand your analog inputs to 3,072 channels. SCXI offers a variety of modules for sensor conditioning, amplification, filtering, and other modules.

**R Series Expansion Chassis** – The NI cRIO-9151 is a chassis that connects directly to any digital connector on R Series intelligent DAQ devices and houses up to four C Series I/O modules for low-cost signal conditioning, I/O channel expansion, and direct connectivity. Many types of C Series modules are available, including 24-bit thermocouple inputs, IEPE accelerometer inputs, current and voltage output modules, 24 V industrial digital I/O modules, and electromechanical relay modules.







Strain Poliof Ac



Strain-Relief Accessory



MFIT-Pigtail



RTSI Bus Cable



SCC Portable, Modular Signal Conditioning



SCXI High-Performance Signal Conditioning

# **NI Services and Support**



NI has the services and support to meet your needs around the globe and through the application life cycle – from planning and development through deployment and ongoing maintenance. We offer services and service levels to meet customer requirements in research, design, validation, and manufacturing. Visit ni.com/services.

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integrators. Services range from start-up assistance to turnkey system integration.

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