

# INSTALLATION INSTRUCTIONS

## NI TB-2630B

### Terminal Block for the NI PXI-2530B

このドキュメントには、日本語ページも含まれています。

This guide describes how to install and connect signals to the National Instruments TB-2630B terminal block to configure your NI PXI-2530B switch module as one of the following:

- 1-wire 128 × 1 multiplexer
- 1-wire dual 64 × 1 multiplexer
- 1-wire quad 32 × 1 multiplexer
- 1-wire octal 16 × 1 multiplexer
- 2-wire 64 × 1 multiplexer
- 2-wire dual 32 × 1 multiplexer
- 2-wire quad 16 × 1 multiplexer
- 4-wire 32 × 1 multiplexer
- 4-wire dual 16 × 1 multiplexer
- independent

This terminal block is a shielded accessory.

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## Introduction

The NI TB-2630B terminal block installs in front of the NI PXI-2530B switch module. The NI TB-2630B has ribbon cable headers to connect signals to the switch. Screw terminals for the trigger input and trigger output signals are also available. The NI TB-2630B is designed for use with the NI PXI-2530B and is not compatible with the NI PXI-2530.

## 1. Unpack the Terminal Block

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To avoid damage when you handle the terminal block, take the following precautions:



**Caution** *Never* touch the exposed pins of connectors.

- Ground yourself using a grounding strap or by touching a grounded object.
- Touch the antistatic package to a metal part of the chassis before you remove the terminal block from the package.

Remove the terminal block from the package and inspect the terminal block for loose components or any sign of damage. Notify NI if the terminal block appears damaged in any way. Do *not* install a damaged terminal block on a switch module.

Store the terminal block in the antistatic package when not in use.

## 2. Verify the Components

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Make sure you have the following:

- NI TB-2630B terminal block
- PXI chassis
- NI PXI-2530B switch module
- 1/8 in. flathead screwdriver
- Eight 2 × 9, 0.100 in. pitch ribbon cable connectors (included)
- 18-conductor, 28 AWG, 0.050 in. pitch ribbon cable (not included)

## 3. Connect Signals

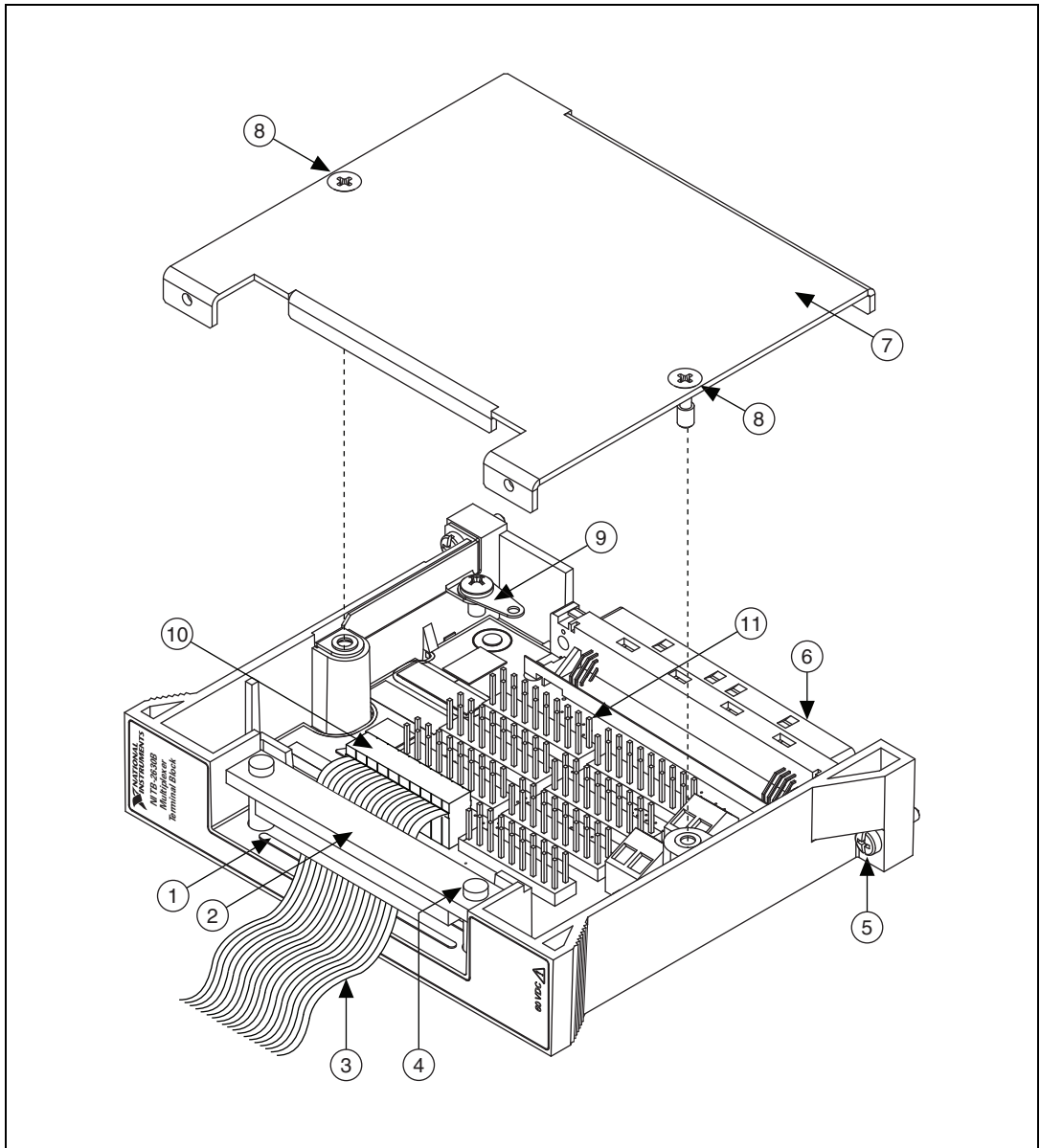
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**Caution** To ensure the specified EMC performance, operate this product only with shielded cables and accessories.

To connect signals to the terminal block, complete the following steps:

1. Remove the terminal block top cover screws with the flathead screwdriver.
2. Gently lift the terminal block top cover off the terminal block.
3. Loosen the two screws on the strain-relief assembly and remove the top strain-relief bar.
4. Prepare your ribbon cable by installing the 2 × 9 ribbon cable connectors onto separate 18-conductor ribbon cables.
5. Connect each ribbon cable to a header.
6. Connect the shield of the ribbon cable to the safety ground lug shown in Figure 1.
7. Replace the strain-relief bar and tighten the two screws on the strain-relief assembly to secure the cables.
8. Replace the terminal block top cover.
9. Secure the terminal block top cover with the top cover screws.



- |                         |                            |
|-------------------------|----------------------------|
| 1 Strain-relief opening | 7 Terminal block top cover |
| 2 Strain-relief bar     | 8 Top cover screws         |
| 3 Ribbon cable          | 9 Safety ground lug        |
| 4 Strain-relief screw   | 10 Ribbon cable connector  |
| 5 Chassis screws        | 11 Ribbon cable header     |
| 6 Rear connector        |                            |

**Figure 1.** NI TB-2630B Terminal Block



60 VDC MAX  
0.4 A MAX

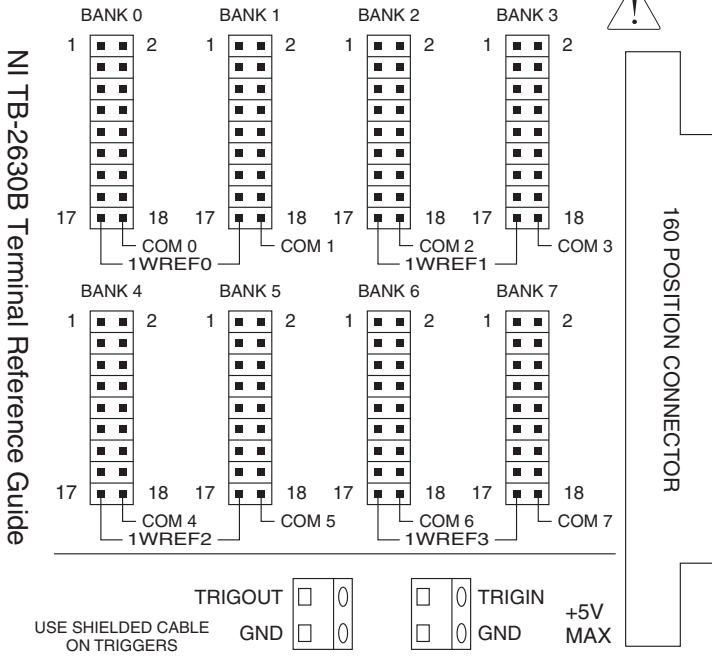


Figure 2. NI TB-2630B Terminal Reference

Tables 1 through 3 display terminal mapping for various topologies. Refer to the *NI Switches Help* for topology diagrams for each topology.

**Table 1.** 1-Wire and Independent Topology Terminal Mapping

Software Name					Hardware Name	
Single 128 × 1	Dual 64 × 1	Quad 32 × 1	Octal 16 × 1	Independent	NI PXI-2530B Connector Pin Number	NI TB-2630B Terminal Name
com0	com0	com0	com0	com0	51	Bank 0, Pin 18
—	—	—	com1	com1	30	Bank 1, Pin 18
—	—	com2	com2	com2	5	Bank 2, Pin 18
—	—	—	com3	com3	76	Bank 3, Pin 18
—	com4	com4	com4	com4	110	Bank 4, Pin 18
—	—	—	com5	com5	131	Bank 5, Pin 18
—	—	com6	com6	com6	156	Bank 6, Pin 18
—	—	—	com7	com7	84	Bank 7, Pin 18
—	—	—	—	1wref0	58	Bank 0–1, Pin 17
—	—	—	—	1wref1	6	Bank 2–3, Pin 17
—	—	—	—	1wref2	103	Bank 4–5, Pin 17
—	—	—	—	1wref3	155	Bank 6–7, Pin 17
ch0					41	Bank 0, Pin 1
ch1					40	Bank 0, Pin 2
ch2					42	Bank 0, Pin 3
ch3					39	Bank 0, Pin 4
ch4					43	Bank 0, Pin 5
ch5					38	Bank 0, Pin 6
ch6					44	Bank 0, Pin 7
ch7					37	Bank 0, Pin 8
ch8					45	Bank 0, Pin 9
ch9					36	Bank 0, Pin 10
ch10					46	Bank 0, Pin 11
ch11					35	Bank 0, Pin 12
ch12					47	Bank 0, Pin 13
ch13					34	Bank 0, Pin 14
ch14					48	Bank 0, Pin 15
ch15					33	Bank 0, Pin 16
ch16					50	Bank 1, Pin 1

**Table 1.** 1-Wire and Independent Topology Terminal Mapping (Continued)

Software Name					Hardware Name	
Single 128 × 1	Dual 64 × 1	Quad 32 × 1	Octal 16 × 1	Independent	NI PXI-2530B Connector Pin Number	NI TB-2630B Terminal Name
					31	Bank 1, Pin 2
					49	Bank 1, Pin 3
					32	Bank 1, Pin 4
					52	Bank 1, Pin 5
					29	Bank 1, Pin 6
					53	Bank 1, Pin 7
					28	Bank 1, Pin 8
					54	Bank 1, Pin 9
					27	Bank 1, Pin 10
					55	Bank 1, Pin 11
					26	Bank 1, Pin 12
					56	Bank 1, Pin 13
					25	Bank 1, Pin 14
					57	Bank 1, Pin 15
					24	Bank 1, Pin 16
					67	Bank 2, Pin 1
					15	Bank 2, Pin 2
					12	Bank 2, Pin 3
					11	Bank 2, Pin 4
					70	Bank 2, Pin 5
					61	Bank 2, Pin 6
					20	Bank 2, Pin 7
					62	Bank 2, Pin 8
					19	Bank 2, Pin 9
					63	Bank 2, Pin 10
					18	Bank 2, Pin 11
					64	Bank 2, Pin 12
					17	Bank 2, Pin 13
					65	Bank 2, Pin 14
					16	Bank 2, Pin 15
					66	Bank 2, Pin 16

**Table 1.** 1-Wire and Independent Topology Terminal Mapping (Continued)

Software Name					Hardware Name	
Single 128 × 1	Dual 64 × 1	Quad 32 × 1	Octal 16 × 1	Independent	NI PXI-2530B Connector Pin Number	NI TB-2630B Terminal Name
				ch48	14	Bank 3, Pin 1
				ch49	68	Bank 3, Pin 2
				ch50	13	Bank 3, Pin 3
				ch51	69	Bank 3, Pin 4
				ch52	1	Bank 3, Pin 5
				ch53	4	Bank 3, Pin 6
				ch54	3	Bank 3, Pin 7
				ch55	71	Bank 3, Pin 8
				ch56	10	Bank 3, Pin 9
				ch57	72	Bank 3, Pin 10
				ch58	9	Bank 3, Pin 11
				ch59	73	Bank 3, Pin 12
				ch60	8	Bank 3, Pin 13
				ch61	74	Bank 3, Pin 14
				ch62	7	Bank 3, Pin 15
				ch63	75	Bank 3, Pin 16
				ch64	120	Bank 4, Pin 1
				ch65	121	Bank 4, Pin 2
				ch66	119	Bank 4, Pin 3
				ch67	122	Bank 4, Pin 4
				ch68	118	Bank 4, Pin 5
				ch69	123	Bank 4, Pin 6
				ch70	117	Bank 4, Pin 7
				ch71	124	Bank 4, Pin 8
				ch72	116	Bank 4, Pin 9
				ch73	125	Bank 4, Pin 10
				ch74	115	Bank 4, Pin 11
				ch75	126	Bank 4, Pin 12
				ch76	114	Bank 4, Pin 13
				ch77	127	Bank 4, Pin 14
				ch78	113	Bank 4, Pin 15

**Table 1.** 1-Wire and Independent Topology Terminal Mapping (Continued)

Software Name					Hardware Name		
Single 128 × 1	Dual 64 × 1	Quad 32 × 1	Octal 16 × 1	Independent	NI PXI-2530B Connector Pin Number	NI TB-2630B Terminal Name	
					ch79	128	Bank 4, Pin 16
					ch80	111	Bank 5, Pin 1
					ch81	130	Bank 5, Pin 2
					ch82	112	Bank 5, Pin 3
					ch83	129	Bank 5, Pin 4
					ch84	109	Bank 5, Pin 5
					ch85	132	Bank 5, Pin 6
					ch86	108	Bank 5, Pin 7
					ch87	133	Bank 5, Pin 8
					ch88	107	Bank 5, Pin 9
					ch89	134	Bank 5, Pin 10
					ch90	106	Bank 5, Pin 11
					ch91	135	Bank 5, Pin 12
					ch92	105	Bank 5, Pin 13
					ch93	136	Bank 5, Pin 14
					ch94	104	Bank 5, Pin 15
					ch95	137	Bank 5, Pin 16
					ch96	94	Bank 6, Pin 1
					ch97	149	Bank 6, Pin 2
					ch98	91	Bank 6, Pin 3
					ch99	150	Bank 6, Pin 4
					ch100	146	Bank 6, Pin 5
					ch101	100	Bank 6, Pin 6
					ch102	141	Bank 6, Pin 7
					ch103	99	Bank 6, Pin 8
					ch104	142	Bank 6, Pin 9
					ch105	98	Bank 6, Pin 10
					ch106	143	Bank 6, Pin 11
					ch107	97	Bank 6, Pin 12
					ch108	144	Bank 6, Pin 13
					ch109	96	Bank 6, Pin 14



**Table 1.** 1-Wire and Independent Topology Terminal Mapping (Continued)

Software Name					Hardware Name		
Single 128 × 1	Dual 64 × 1	Quad 32 × 1	Octal 16 × 1	Independent	NI PXI-2530B Connector Pin Number	NI TB-2630B Terminal Name	
					ch110	145	Bank 6, Pin 15
					ch111	95	Bank 6, Pin 16
					ch112	147	Bank 7, Pin 1
					ch113	93	Bank 7, Pin 2
					ch114	148	Bank 7, Pin 3
					ch115	92	Bank 7, Pin 4
					ch116	85	Bank 7, Pin 5
					ch117	81	Bank 7, Pin 6
					ch118	157	Bank 7, Pin 7
					ch119	90	Bank 7, Pin 8
					ch120	151	Bank 7, Pin 9
					ch121	89	Bank 7, Pin 10
					ch122	152	Bank 7, Pin 11
					ch123	88	Bank 7, Pin 12
					ch124	153	Bank 7, Pin 13
					ch125	87	Bank 7, Pin 14
					ch126	154	Bank 7, Pin 15
					ch127	86	Bank 7, Pin 16

In the 1-wire 128 × 1 topology, the driver establishes a connection from 1wref0 (Bank 0–1, Pin 17) to com1 (Bank 1, Pin 18).

In the 1-wire dual 64 × 1 topology, the driver establishes the following connections:

- 1wref0 is connected to com1.
- 1wref2 is connected to com5.

In the 1-wire quad 32 × 1 topology, the driver establishes the following connections:

- 1wref0 is connected to com1.
- 1wref1 is connected to com3.
- 1wref2 is connected to com5.
- 1wref3 is connected to com7.

**Table 2.** 2-Wire Topology Terminal Mapping

Software Name			Polarity	Hardware Name	
Single 64 × 1	Dual 32 × 1	Quad 16 × 1		NI PXI-2530B Connector Pin Number	NI TB-2630B Terminal Name
com0	com0	com0	+	51	Bank 0, Pin 18
			-	30	Bank 1, Pin 18
—	—	com1	+	5	Bank 2, Pin 18
—	—		-	76	Bank 3, Pin 18
—	com1	com2	+	110	Bank 4, Pin 18
—			-	131	Bank 5, Pin 18
—	—	com3	+	156	Bank 6, Pin 18
—	—		-	84	Bank 7, Pin 18
—	—	—	+	58	Bank 0–1, Pin 17
—	—	—	-	6	Bank 2–3, Pin 17
—	—	—	+	103	Bank 4–5, Pin 17
—	—	—	-	155	Bank 6–7, Pin 17
ch0			+	41	Bank 0, Pin 1
			-	50	Bank 1, Pin 1
ch1			+	40	Bank 0, Pin 2
			-	31	Bank 1, Pin 2
ch2			+	42	Bank 0, Pin 3
			-	49	Bank 1, Pin 3
ch3			+	39	Bank 0, Pin 4
			-	32	Bank 1, Pin 4
ch4			+	43	Bank 0, Pin 5
			-	52	Bank 1, Pin 5
ch5			+	38	Bank 0, Pin 6
			-	29	Bank 1, Pin 6
ch6			+	44	Bank 0, Pin 7
			-	53	Bank 1, Pin 7
ch7			+	37	Bank 0, Pin 8
			-	28	Bank 1, Pin 8
ch8			+	45	Bank 0, Pin 9
			-	54	Bank 1, Pin 9

**Table 2.** 2-Wire Topology Terminal Mapping (Continued)

Software Name			Polarity	Hardware Name	
Single 64 × 1	Dual 32 × 1	Quad 16 × 1		NI PXI-2530B Connector Pin Number	NI TB-2630B Terminal Name
ch9			+	36	Bank 0, Pin 10
			-	27	Bank 1, Pin 10
ch10			+	46	Bank 0, Pin 11
			-	55	Bank 1, Pin 11
ch11			+	35	Bank 0, Pin 12
			-	26	Bank 1, Pin 12
ch12			+	47	Bank 0, Pin 13
			-	56	Bank 1, Pin 13
ch13			+	34	Bank 0, Pin 14
			-	25	Bank 1, Pin 14
ch14			+	48	Bank 0, Pin 15
			-	57	Bank 1, Pin 15
ch15			+	33	Bank 0, Pin 16
			-	24	Bank 1, Pin 16
ch16			+	67	Bank 2, Pin 1
			-	14	Bank 3, Pin 1
ch17			+	15	Bank 2, Pin 2
			-	68	Bank 3, Pin 2
ch18			+	12	Bank 2, Pin 3
			-	13	Bank 3, Pin 3
ch19			+	11	Bank 2, Pin 4
			-	69	Bank 3, Pin 4
ch20			+	70	Bank 2, Pin 5
			-	1	Bank 3, Pin 5
ch21			+	61	Bank 2, Pin 6
			-	4	Bank 3, Pin 6
ch22			+	20	Bank 2, Pin 7
			-	3	Bank 3, Pin 7
ch23			+	62	Bank 2, Pin 8
			-	71	Bank 3, Pin 8

**Table 2. 2-Wire Topology Terminal Mapping (Continued)**

Software Name			Polarity	Hardware Name	
Single 64 × 1	Dual 32 × 1	Quad 16 × 1		NI PXI-2530B Connector Pin Number	NI TB-2630B Terminal Name
ch24			+	19	Bank 2, Pin 9
			-	10	Bank 3, Pin 9
ch25			+	63	Bank 2, Pin 10
			-	72	Bank 3, Pin 10
ch26			+	18	Bank 2, Pin 11
			-	9	Bank 3, Pin 11
ch27			+	64	Bank 2, Pin 12
			-	73	Bank 3, Pin 12
ch28			+	17	Bank 2, Pin 13
			-	8	Bank 3, Pin 13
ch29			+	65	Bank 2, Pin 14
			-	74	Bank 3, Pin 14
ch30			+	16	Bank 2, Pin 15
			-	7	Bank 3, Pin 15
ch31			+	66	Bank 2, Pin 16
			-	75	Bank 3, Pin 16
ch32			+	120	Bank 4, Pin 1
			-	111	Bank 5, Pin 1
ch33			+	121	Bank 4, Pin 2
			-	130	Bank 5, Pin 2
ch34			+	119	Bank 4, Pin 3
			-	112	Bank 5, Pin 3
ch35			+	122	Bank 4, Pin 4
			-	129	Bank 5, Pin 4
ch36			+	118	Bank 4, Pin 5
			-	109	Bank 5, Pin 5
ch37			+	123	Bank 4, Pin 6
			-	132	Bank 5, Pin 6
ch38			+	117	Bank 4, Pin 7
			-	108	Bank 5, Pin 7

**Table 2.** 2-Wire Topology Terminal Mapping (Continued)

Software Name			Polarity	Hardware Name	
Single 64 × 1	Dual 32 × 1	Quad 16 × 1		NI PXI-2530B Connector Pin Number	NI TB-2630B Terminal Name
ch39			+	124	Bank 4, Pin 8
			-	133	Bank 5, Pin 8
ch40			+	116	Bank 4, Pin 9
			-	107	Bank 5, Pin 9
ch41			+	125	Bank 4, Pin 10
			-	134	Bank 5, Pin 10
ch42			+	115	Bank 4, Pin 11
			-	106	Bank 5, Pin 11
ch43			+	126	Bank 4, Pin 12
			-	135	Bank 5, Pin 12
ch44			+	114	Bank 4, Pin 13
			-	105	Bank 5, Pin 13
ch45			+	127	Bank 4, Pin 14
			-	136	Bank 5, Pin 14
ch46			+	113	Bank 4, Pin 15
			-	104	Bank 5, Pin 15
ch47			+	128	Bank 4, Pin 16
			-	137	Bank 5, Pin 16
ch48			+	94	Bank 6, Pin 1
			-	147	Bank 7, Pin 1
ch49			+	149	Bank 6, Pin 2
			-	93	Bank 7, Pin 2
ch50			+	91	Bank 6, Pin 3
			-	148	Bank 7, Pin 3
ch51			+	150	Bank 6, Pin 4
			-	92	Bank 7, Pin 4
ch52			+	146	Bank 6, Pin 5
			-	85	Bank 7, Pin 5
ch53			+	100	Bank 6, Pin 6
			-	81	Bank 7, Pin 6

**Table 2. 2-Wire Topology Terminal Mapping (Continued)**

Software Name			Polarity	Hardware Name	
Single 64 × 1	Dual 32 × 1	Quad 16 × 1		NI PXI-2530B Connector Pin Number	NI TB-2630B Terminal Name
ch54			+	141	Bank 6, Pin 7
			-	157	Bank 7, Pin 7
ch55			+	99	Bank 6, Pin 8
			-	90	Bank 7, Pin 8
ch56			+	142	Bank 6, Pin 9
			-	151	Bank 7, Pin 9
ch57			+	98	Bank 6, Pin 10
			-	89	Bank 7, Pin 10
ch58			+	143	Bank 6, Pin 11
			-	152	Bank 7, Pin 11
ch59			+	97	Bank 6, Pin 12
			-	88	Bank 7, Pin 12
ch60			+	144	Bank 6, Pin 13
			-	153	Bank 7, Pin 13
ch61			+	96	Bank 6, Pin 14
			-	87	Bank 7, Pin 14
ch62			+	145	Bank 6, Pin 15
			-	154	Bank 7, Pin 15
ch63			+	95	Bank 6, Pin 16
			-	86	Bank 7, Pin 16

**Table 3. 4-Wire Topology Terminal Mapping**

Software Name		Polarity	Hardware Name	
Single 32 × 1	Dual 16 × 1		NI PXI-2530B Connector Pin Number	NI TB-2630B Terminal Name
com0	com0	A+	51	Bank 0, Pin 18
		A–	30	Bank 1, Pin 18
		B+	110	Bank 4, Pin 18
		B–	131	Bank 5, Pin 18
—	com1	A+	5	Bank 2, Pin 18
—		A–	76	Bank 3, Pin 18
—		B+	156	Bank 6, Pin 18
—		B–	84	Bank 7, Pin 18
—	—	—	58	Bank 0–1, Pin 17
—	—	—	6	Bank 2–3, Pin 17
—	—	—	103	Bank 4–5, Pin 17
—	—	—	155	Bank 6–7, Pin 17
ch0		A+	41	Bank 0, Pin 1
		A–	50	Bank 1, Pin 1
		B+	120	Bank 4, Pin 1
		B–	111	Bank 5, Pin 1
ch1		A+	40	Bank 0, Pin 2
		A–	31	Bank 1, Pin 2
		B+	121	Bank 4, Pin 2
		B–	130	Bank 5, Pin 2
ch2		A+	42	Bank 0, Pin 3
		A–	49	Bank 1, Pin 3
		B+	119	Bank 4, Pin 3
		B–	112	Bank 5, Pin 3
ch3		A+	39	Bank 0, Pin 4
		A–	32	Bank 1, Pin 4
		B+	122	Bank 4, Pin 4
		B–	129	Bank 5, Pin 4

**Table 3. 4-Wire Topology Terminal Mapping (Continued)**

Software Name		Polarity	Hardware Name	
Single 32 × 1	Dual 16 × 1		NI PXI-2530B Connector Pin Number	NI TB-2630B Terminal Name
ch4		A+	43	Bank 0, Pin 5
		A-	52	Bank 1, Pin 5
		B+	118	Bank 4, Pin 5
		B-	109	Bank 5, Pin 5
ch5		A+	38	Bank 0, Pin 6
		A-	29	Bank 1, Pin 6
		B+	123	Bank 4, Pin 6
		B-	132	Bank 5, Pin 6
ch6		A+	44	Bank 0, Pin 7
		A-	53	Bank 1, Pin 7
		B+	117	Bank 4, Pin 7
		B-	108	Bank 5, Pin 7
ch7		A+	37	Bank 0, Pin 8
		A-	28	Bank 1, Pin 8
		B+	124	Bank 4, Pin 8
		B-	133	Bank 5, Pin 8
ch8		A+	45	Bank 0, Pin 9
		A-	54	Bank 1, Pin 9
		B+	116	Bank 4, Pin 9
		B-	107	Bank 5, Pin 9
ch9		A+	36	Bank 0, Pin 10
		A-	27	Bank 1, Pin 10
		B+	125	Bank 4, Pin 10
		B-	134	Bank 5, Pin 10
ch10		A+	46	Bank 0, Pin 11
		A-	55	Bank 1, Pin 11
		B+	115	Bank 4, Pin 11
		B-	106	Bank 5, Pin 11



**Table 3.** 4-Wire Topology Terminal Mapping (Continued)

Software Name		Polarity	Hardware Name	
Single 32 × 1	Dual 16 × 1		NI PXI-2530B Connector Pin Number	NI TB-2630B Terminal Name
ch11		A+	35	Bank 0, Pin 12
		A-	26	Bank 1, Pin 12
		B+	126	Bank 4, Pin 12
		B-	135	Bank 5, Pin 12
ch12		A+	47	Bank 0, Pin 13
		A-	56	Bank 1, Pin 13
		B+	114	Bank 4, Pin 13
		B-	105	Bank 5, Pin 13
ch13		A+	34	Bank 0, Pin 14
		A-	25	Bank 1, Pin 14
		B+	127	Bank 4, Pin 14
		B-	136	Bank 5, Pin 14
ch14		A+	48	Bank 0, Pin 15
		A-	57	Bank 1, Pin 15
		B+	113	Bank 4, Pin 15
		B-	104	Bank 5, Pin 15
ch15		A+	33	Bank 0, Pin 16
		A-	24	Bank 1, Pin 16
		B+	128	Bank 4, Pin 16
		B-	137	Bank 5, Pin 16
ch16		A+	67	Bank 2, Pin 1
		A-	14	Bank 3, Pin 1
		B+	94	Bank 6, Pin 1
		B-	147	Bank 7, Pin 1
ch17		A+	15	Bank 2, Pin 2
		A-	68	Bank 3, Pin 2
		B+	149	Bank 6, Pin 2
		B-	93	Bank 7, Pin 2

**Table 3. 4-Wire Topology Terminal Mapping (Continued)**

Software Name		Polarity	Hardware Name	
Single 32 × 1	Dual 16 × 1		NI PXI-2530B Connector Pin Number	NI TB-2630B Terminal Name
ch18		A+	12	Bank 2, Pin 3
		A-	13	Bank 3, Pin 3
		B+	91	Bank 6, Pin 3
		B-	148	Bank 7, Pin 3
ch19		A+	11	Bank 2, Pin 4
		A-	69	Bank 3, Pin 4
		B+	150	Bank 6, Pin 4
		B-	92	Bank 7, Pin 4
ch20		A+	70	Bank 2, Pin 5
		A-	1	Bank 3, Pin 5
		B+	146	Bank 6, Pin 5
		B-	85	Bank 7, Pin 5
ch21		A+	61	Bank 2, Pin 6
		A-	4	Bank 3, Pin 6
		B+	100	Bank 6, Pin 6
		B-	81	Bank 7, Pin 6
ch22		A+	20	Bank 2, Pin 7
		A-	3	Bank 3, Pin 7
		B+	141	Bank 6, Pin 7
		B-	157	Bank 7, Pin 7
ch23		A+	62	Bank 2, Pin 8
		A-	71	Bank 3, Pin 8
		B+	99	Bank 6, Pin 8
		B-	90	Bank 7, Pin 8
ch24		A+	19	Bank 2, Pin 9
		A-	10	Bank 3, Pin 9
		B+	142	Bank 6, Pin 9
		B-	151	Bank 7, Pin 9

**Table 3.** 4-Wire Topology Terminal Mapping (Continued)

Software Name		Polarity	Hardware Name	
Single 32 × 1	Dual 16 × 1		NI PXI-2530B Connector Pin Number	NI TB-2630B Terminal Name
ch25		A+	63	Bank 2, Pin 10
		A–	72	Bank 3, Pin 10
		B+	98	Bank 6, Pin 10
		B–	89	Bank 7, Pin 10
ch26		A+	18	Bank 2, Pin 11
		A–	9	Bank 3, Pin 11
		B+	143	Bank 6, Pin 11
		B–	152	Bank 7, Pin 11
ch27		A+	64	Bank 2, Pin 12
		A–	73	Bank 3, Pin 12
		B+	97	Bank 6, Pin 12
		B–	88	Bank 7, Pin 12
ch28		A+	17	Bank 2, Pin 13
		A–	8	Bank 3, Pin 13
		B+	144	Bank 6, Pin 13
		B–	153	Bank 7, Pin 13
ch29		A+	65	Bank 2, Pin 14
		A–	74	Bank 3, Pin 14
		B+	96	Bank 6, Pin 14
		B–	87	Bank 7, Pin 14
ch30		A+	16	Bank 2, Pin 15
		A–	7	Bank 3, Pin 15
		B+	145	Bank 6, Pin 15
		B–	154	Bank 7, Pin 15
ch31		A+	66	Bank 2, Pin 16
		A–	75	Bank 3, Pin 16
		B+	95	Bank 6, Pin 16
		B–	86	Bank 7, Pin 16

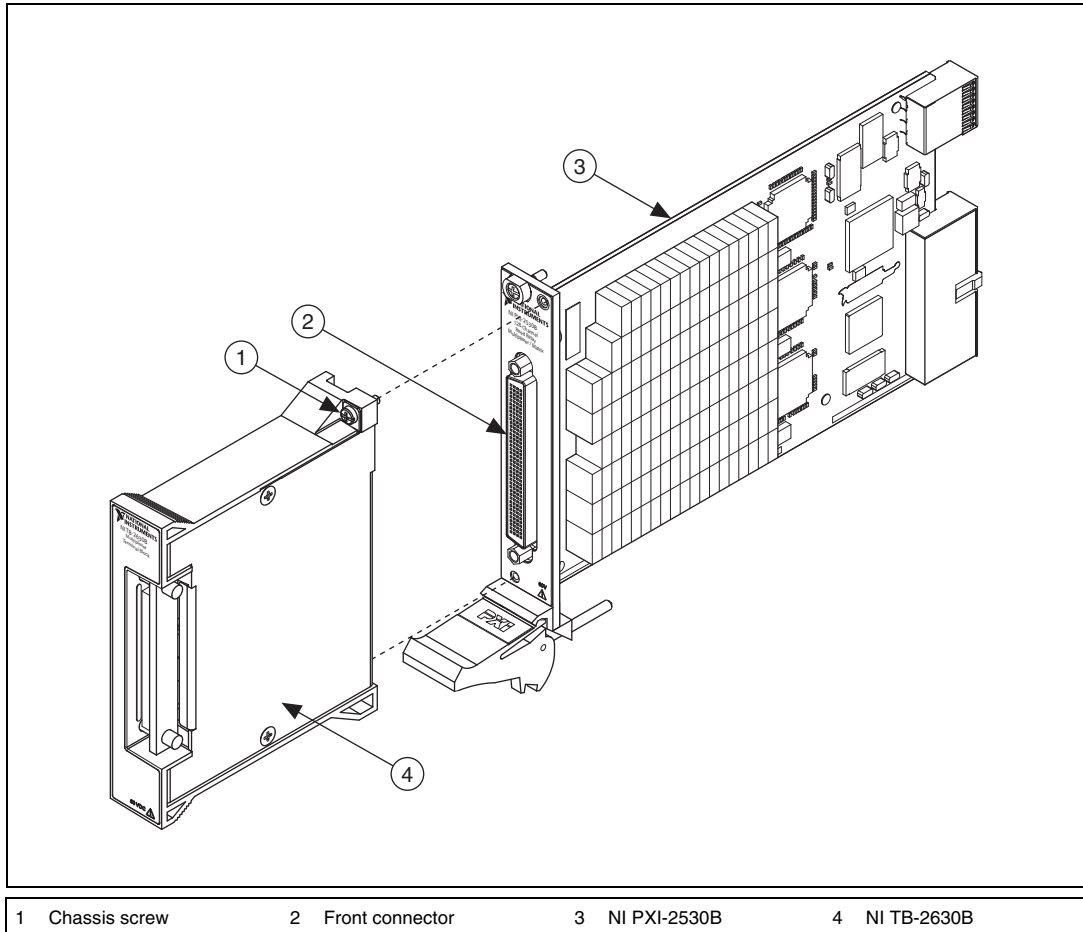
## 4. Install the Terminal Block

To connect the NI TB-2630B terminal block to the NI PXI-2530B front panel, complete the following steps.



**Note** The NI PXI-2530B should already be installed in a PXI chassis.

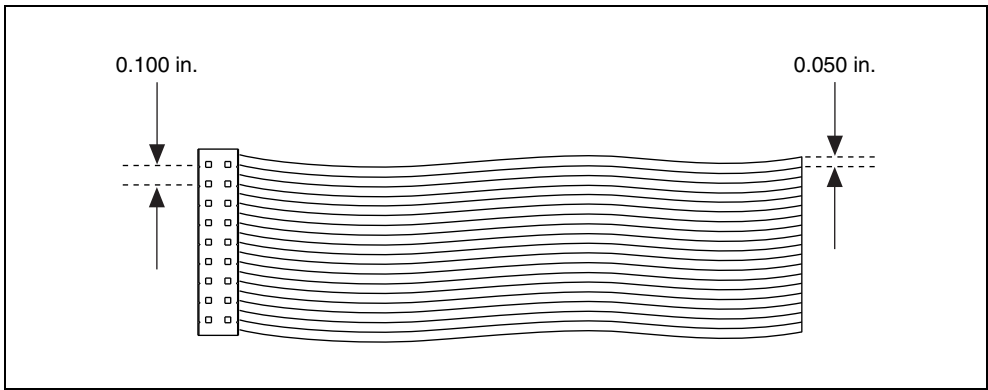
1. Plug the NI TB-2630B into the front connector of the NI PXI-2530B as shown in Figure 3.
2. Tighten the top and bottom chassis screws on the back of the terminal block rear panel to hold it securely in place.



**Figure 3.** Installing the NI TB-2630B Terminal Block

## Accessories

When a double row ribbon cable connector is used, the pitch of the ribbon cable is half the pitch of the connector. For example, a 0.050 in. pitch ribbon cable uses a 0.100 in. pitch connector. Ribbon cable connector assemblies are typically defined by the pitch of the connector. Refer to Figure 4 for a diagram of a 0.100 in. pitch cable assembly with a 0.100 in. pitch connector and a 0.050 in. pitch ribbon cable.



**Figure 4.** 0.100 in. Pitch Cable Assembly

The NI TB-2630B includes eight  $2 \times 9$  0.100 in. pitch ribbon cable connectors. Refer to Table 4 for additional connectors that you can use with the NI TB-2630B.

You can use any 0.050 in. pitch ribbon cable with the NI TB-2630B. To use a ribbon cable with more than 18 conductors, remove the unwanted conductors before using. Refer to Table 4 for more information about the cable connector assembly.

**Table 4.** Accessories for the NI TB-2630B

Accessory	Manufacturer	Part Number
$2 \times 9$ 0.100 in. Pitch Ribbon Cable Connector	NI	778962-01
0.100 in. Pitch Cable Connector Assembly (0.100 in. Pitch Connector and 0.050 in. Pitch Ribbon Cable)	Samtec	IDSD-09 Series

# Compliance and Certifications

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## Safety

This product meets the requirements of the following standards of safety for electrical equipment for measurement, control, and laboratory use:

- IEC 61010-1, EN 61010-1
- UL 61010-1, CSA 61010-1



**Note** For UL and other safety certifications, refer to the product label or the *Online Product Certification* section.

## Electromagnetic Compatibility

This product meets the requirements of the following EMC standards for electrical equipment for measurement, control, and laboratory use:

- EN 61326-1 (IEC 61326-1): Class A emissions; Basic immunity
- EN 55011 (CISPR 11): Group 1, Class A emissions
- AS/NZS CISPR 11: Group 1, Class A emissions
- FCC 47 CFR Part 15B: Class A emissions
- ICES-001: Class A emissions



**Note** For EMC declarations and certifications, refer to the *Online Product Certification* section.

## CE Compliance

This product meets the essential requirements of applicable European Directives as follows:

- 2006/95/EC; Low-Voltage Directive (safety)
- 2004/108/EC; Electromagnetic Compatibility Directive (EMC)

## Online Product Certification

To obtain product certifications for this product, visit [ni.com/certification](http://ni.com/certification), search by model number or product line, and click the appropriate link in the Certification column.

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## Waste Electrical and Electronic Equipment (WEEE)



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