DEVICE SPECIFICATIONS

PXI-2576 Specifications

Multi-Bank Multiplexer

This document lists specifications for the PXI-2576 multiplexer module. All specifications are subject to change without notice. Visit

Topology

Refer to the

Path resistance is a combination of relay contact resistance and trace resistance. Contact resistance typically remains low for the life of a relay. At the end of relay life, the contact resistance may rise rapidly above 1 Ω .

Thermal EMF	<10 μV, typical			
Minimum switch load	20 mV/1 mA			
Bandwidth				
50 Ω system				
4×1 , 8×1 configurations	>30 MHz, typical			
16 × 1 configuration	>20 MHz, typical			
32 × 1 configuration	>15 MHz, typical			
64 × 1 configuration	>10 MHz, typical			
100 Ω system				
4×1 , 8×1 configurations	>60 MHz, typical			
16 × 1 configuration	>40 MHz, typical			
32 × 1 configuration	>20 MHz, typical			
64 × 1 configuration	>10 MHz, typical			
Bank-to-bank crosstalk (50 Ω or 100 Ω sy	vstem, 4 × 1 configuration)			
100 kHz	<-75 dB, typical			
1 MHz	<-53 dB, typical			
10 MHz	<-35 dB, typical			
Open-channel isolation (50 Ω or 100 Ω sy	vstem, 4 × 1 or 8 × 1 configuration)			
100 kHz	>79 dB, typical			
1 MHz	>52 dB, typical			
10 MHz	>40 dB, typical			

Dynamic Characteristics

Relay operate time	2 ms, typical
	3.4 ms, maximum



Note Certain applications may require additional time for proper settling. Refer to the

Electrical (resistive)

30 V, 200 mA	2×10^6 cycles, typical
30 V, 400 mA	5×10^5 cycles, typical
30 V, 1 A	1×10^5 cycles, typical
100 V, 100 mA	2×10^6 cycles, typical
100 V, 200 mA	2.5×10^5 cycles, typical
100 V, 300 mA	1×10^5 cycles, typical



Note Relays are field replaceable. Refer to the

Environment

Maximum altitude	2,000 m (at 25 °C ambient temperature)			
Pollution Degree	2			
Indoor use only.				
Operating Environment				
Ambient temperature range	0 °C to 55 °C (Tested in accordance with IEC 60068-2-1 and IEC 60068-2-2.)			
Relative humidity range	10% to 90%, noncondensing (Tested in accordance with IEC 60068-2-56.)			
Storage Environment				
Ambient temperature range	-20 °C to 70 °C (Tested in accordance with IEC 60068-2-1 and IEC 60068-2-2.)			
Relative humidity range	5% to 95%, noncondensing (Tested in accordance with IEC 60068-2-56.)			
Shock and Vibration				
Operational shock	30 g peak, half-sine, 11 ms pulse (Tested in accordance with IEC 60068-2-27. Test profile developed in accordance with MIL-PRF-28800F.)			
Random vibration				
Operating	5 Hz to 500 Hz, 0.31 g_{rms} (Tested in accordance with IEC 60068-2-64.)			
Nonoperating	5 Hz to 500 Hz, 2.46 g _{rms} (Tested in accordance with IEC 60068-2-64. Test profile exceeds the requirements of MIL-PRF-288001 Class 3.)			

Compliance and Certifications

Safety

This product is designed to meet the requirements of the following electrical equipment safety standards for measurement, control, and laboratory use:

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



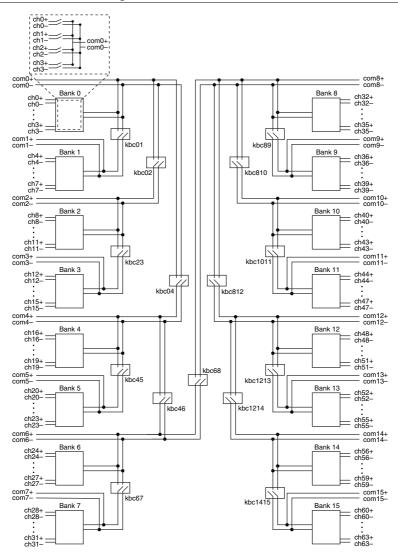
Note For UL and other safety certifications, refer to the product label or the

Environmental Management

NI is committed to designing and manufacturing products in an environmentally responsible manner. NI recognizes that eliminating certain hazardous substances from our products is beneficial to the environment and to NI customers.

For additional environmental information, refer to the

Figure 1. PXI-2576 Power-on State



The following figure shows the PXI-2576 connector pinout.

				$\overline{\gamma}$			
	81			80			
COM1+ COM0+	160			1	— COM2+		
COM0+	82		7.	79	— COM3+ — COM2-		
COM0-	159			2 70	— сомз–		
CH4+ CH0+	83 158	==		78	— CH8+		
CH0+ CH4-	84			77	— CH12+ — CH8-		
CH4-	157			4	— CH8- — CH12-		
CH5+	85			76	— CH9+		
CH1+	156 86			5 75	— CH13+		
CH5- CH1-	155		4	6	— CH9- — CH13-		
CH1-	87		7.	74	— CH13- — CH10+		
CH6+ CH2+	154	- 1		7	— CH14+		
CH6-	88 153			73	— CH10-		
CH2-	89			72	— CH14–		
CH7+ CH3+	152			9	— CH11+ — CH15+		
CH7-	90		7	71	— CH11-		
CH3-	151_ 91	-8 8		10 70	— CH15-		
COM5+	150		_	11	- COM6+		
COM4+ COM5-	92			69	— COM7+ — COM6-		
COM4-	149			12	— COM7-		
CH20+	93	==		68	- CH24+		
CH16+	94	_		67	— CH28+		
CH20- CH16-	147		_	14	— CH24– — CH28–		
CH21+	95		7.	66	— CH25+		
CH17+	146			15	— CH29+		
CH21-	96 145	==	=	65	— CH25-		
CH17-	97			64	— CH29-		
CH22+ CH18+	144			17	— CH26+ — CH30+		
CH22-	98		7-	63	— CH26-		
CH18-	143 99			18	CH30-		
CH23+	142		_	62 19	— CH27+		
CH19+ CH23-	100			61	— CH31+ — CH27-		
CH19-	141			20	— CH31–		
COM9+	101 140	==	7	60	— COM10+		
COM8+	102			59	- COM11+		
COM9- COM8-	139			22 58	— COM10- — COM11-		
CH36+				58	— CH40+		
CH32+	138			23	— CH44+		
CH36-	137			57 24	— CH40-		
CH32-	105			56	— CH44–		
CH37+ CH33+	136			25 55	— CH41+ — CH45+		
CH37-	106 135	==	7	26	— CH41–		
CH33- CH38+	107			54	— CH45– — CH42+		
CH38+ CH34+	134			27	— СН42+ — СН46+		
CH38-	108			53	— CH42-		
CH34-	133	-8 8		28 52	— CH46-		
CH39+	132			29	— CH43+		
CH35+ CH39-	110			51	— CH47+ — CH43-		
CH35-	131			30	— CH47-		
COM13+	111 130	==	=	50 31	— COM14+		
COM12+	112			49	— COM15+		
COM13-	129			32	— COM14- — COM15-		
CH52+	113		7	48	— CH56+		
CH48+	128			33 47	- CH60+		
CH52-	127		_	34	— CH56-		
CH48- CH53+	115			46	— CH60- — CH57+		
CH49+	126			35	- CH61+		
CH53-	116	==	=	45	— CH57- — CH61-		
CH49-	125 117			44			
CH54+ CH50+	124			37	— CH58+ — CH62+		
CH50+	118		7	43	— CH62+ — CH58-		
CH50-	123 119			38 42	— CH62-		
CH55+	122	- 7		39	— CH59+		
CH51+ CH55-	120			41	— CH63+ — CH59-		
CH55-	121			40	— CH59- — CH63-		
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Accessories

Visit