PXI PXIe The PXI/PXIe icon denotes that modules are available in both PXI and PXIe formats. Pickering is committed to making many more of its PXI products available as PXIe.

Pickering - PXI Switching Map

GENERAL PURPOSE SWITCHES

	Low Density (<50 Relays)			High Density					Medium Power (2 A to 5 A)										Switched Guard
Features	• Low Cost General Purpose • Uses High Reliability Pickering Reed Relays			• Highest Density PXI Modules • Pin Compatible With 40-145/6/8 • PXI/PXIe Versions for 40-140B			• Pin Compatible With 40-140B/141/143 • 60 W Maximum Power		• Medium Power Relays	• Low Cost Relay Module For Medium Power Switching Applications		• Power Ruthenium Reed Relays		• High Density • Highly Versatile Mixed Relay Configurations	• High Density		• High Density Power Relays		• Very High Density Electro-Mechanical Relay Module	• Up to 10^{12} Ω Isolation Resistance
Model Family	40-110	40-115		40-140B	40-161	40-143	40-145A		40-130	40-131	40-132	40-136		40-138	40-139A		40-137		40-100	40-121
Configurations	16 or 32 x SPDT	16 or 32 x SPST	16 or 24 x DPDT	50, 75 or 100 x SPST	50 x DPDT	48 or 64 x SPDT	50, 75 or 100 x SPST (NO or NC)	25 or 50 x DPST	8 or 13 x DPDT	16 or 26 x SPDT	16 or 32 x SPST	16, 25 or 32 x SPST	12, 14 or 19 x DPST	Module accepts mix of SPST, DPST, SPDT & DPDT Relays	Up to 80 x SPST, 40 x DPST, 52 x SPDT or 26 x DPDT		16 x SPST	32 or 39 x SPST	83 x SPDT	13 or 26 x SPST
Relay Type	Pickering Instrumentation Reed			Pickering Instrumentation Reed			Electro-mechanical		Electro-mechanical			Pickering Reed		Electro-mechanical			Electro-mechanical			Ruthenium Reed
Max Switch Voltage	150 VDC/100 VAC			150 VDC/100 VAC					220 VDC/125 VAC	300 VDC/250 VAC		200 V		300 VDC/250 VAC			110 VDC/250 VAC		200 VDC/140 VAC	100 V
Max Switch/Carry Current	0.25 A/1 A	1 A/1.2 A		1 A		0.25 A/1 A	1 A		2 A			1 A/2.5 A or 1 A/2 A		2 A			5 A	2 A	2 A	1 A
Max Switch Power	3 W	20 W		20 W		3 W	60 W		60 W			40 W		60 W			150 W	90 W	60 W	20 W
Typical Operate Time	0.5 ms			0.5 ms			3 ms		3 ms			0.5 ms		3 ms			10 ms		3 ms	0.5 ms
Connector Type	96-pin Micro-D			200-pin LFH					50 or 78-pin D-type			50 or 78-pin D-type		160-pin DIN 41612			37-pin D-type	78-pin D-type	500-pin SEARAY	26-Pin MS-M RF
Width (PXI-1, PXI-hybrid)	1-Slot			1-Slot					1-Slot											

HIGH POWER SWITCHES

	High Power (5 A to 40 A)																	
Features	• High Power • DPST and SPDT options		• PXI/PXIe Versions for 40/42-153/158		• High Power • SPST and DPST options		• High Density • High Current	• High Density • High Current	• Very High Power • Suitable For Automotive Test				• 50 A Peak	• 120 A Peak	• 90 A Peak	• 20 A Peak		
Model Family	40-150/151	40-153	40-155/156/157	40-158	40-160		40-161A	40-166	40-170		40-180	40-181	40-182A	40-183B	40-184A	40-185A		
Configurations	8 or 12 x DPST	Up to 50 x SPST	8 or 16 x SPDT, or 8 x DPDT	Up to 32 x SPDT	10 or 20 x SPST	10 x DPST	10, 12, 16 x SPST or 6, 12 x SPDT inc. Optional Hardware Interlock	5 or 10 x SPST, 3 or 4 x SPDT or 1, 2 or 3 x SPAT	2 x SPST or 2 x DPST		2 or 4 x SPST	2 x SPDT	3 or 6 x SPST	6 x SPST	3 or 6 x SPST			
Relay Type	Electro-mechanical												Solid State					
Max Switch Voltage	125 VDC/250 VAC	110 VDC/250 VAC	300 VDC/250 VAC		125 VDC/250 VAC		300 VDC/ 250 VAC	300 VDC/480 VAC	30 VDC/ 250 VAC		14 VDC or 28 VDC		200 VDC/AC peak	40 VDC/AC peak	100 VDC/AC peak	400 VDC/AC peak		
Max Switch/Carry Current	5 A				10 A	8 A	16 A	20 A, 30 A(SPST)	30 A or 20 A		40 A or 20 A		10 A	40 A	25 A	1.5 A		
Max Switch Power	175 W/1250 VA	150 W/1250 VA	175 W/1250 VA		300 W/2500 VA	240 W/2000 VA	448 W/4000 VA	600 W/5500 VA	900 W/7500 VA,600 W/5000 VA		560 W		2000 W	1600 W	2500 W	600 W		
Typical Operate Time	10 ms		8 ms	10 ms	22 ms		30 ms		15 ms		20 µs		250 µs			20 µs		
Connector Type	37 or 50-pin D-type		37 or 50-pin D-type	37 or 50-pin D-type, or SGMC	20-pin GMCT			20-Pin Scorpion	8-pin Power D-type									
Width (PXI-1, PXI-hybrid)	1-Slot							1-Slot	2-Slot				1 or 2-Slot	2-Slot	1 or 2-Slot			

LOW, MEDIUM & HIGH DENSITY MATRICES

	Low Density (<128 Crosspoints)			Medium Density (128 to 256 Crosspoints)										High Density (256 to 528 Crosspoints)																		Switched Guard		
Features	• Reed Relay Matrix	• 2 A • 2-Pole	• Wide Current Range from 10 µA	• 2 A Matrix With up to 224 Crosspoints					• Reed Relay Matrix			• Signal Insertion & Monitor Matrix		• 2 A Matrix • 128 Crosspoints			• Fast Operate Time • Long Service Life		• Ultra High Density		• Ultra High Density					• Highest Density in 1-Slot • 528 Crosspoints			• Highest Density Single Slot 3U 2 A Matrices • Up to 448 Crosspoints						• Up to 10^{12} Ω Isolation Resistance	• Up to 70 MHz	Features
Model Family	40-510/511/512/513	40-515/516/517	40-514	40-505	40-506	40-507	40-508	40-509	40-518A/519B	40-520	40-521	40-522	40-523/524	40-525A	40-527A	40-528B	40-529B	40-500	40-501	40-530	40-533B	40-531/532	40-534A	40-538	40-535/536/537	40-540A	40-541A	40-542A	40-575	40-576	40-577	40-578	40-579	40-580	40-581	40-582A	40-583	40-584A	40-585A	40-586B	40-587B	40-588	40-590	Model Family
Configurations	1 or 2-Pole or 1-Pole Shielded: Single 12x4, 12x8, 24x4 or Dual 12x4	2-Pole: Single 8x8, 16x4 or Dual 8x4,	2-Pole: Single 4x4, X&Y Loop-thru; Single 6x8, Y Loop-thru.	1-Pole: Single 42x4	1-Pole: Single 32x6	1-Pole: Single 25x8	1-Pole: Single 18x12	1-Pole: Single 14x16	2-Pole: Single 16x8 or 32x4	1-Pole: Between 16x16 & 32x2	1 or 2-Pole: Single 24x8	1 or 2-Pole Dual 12x8	1-Pole, 2-Pole, 1-Pole Shielded: Single 44x4, or 1-Pole: 46x4	1 Pole: 16x4 or 34x4 with Switched Loop-Thru	1 Pole: Single 64x2	1 Pole: Single 32x4	1 Pole: Single 16x8	1 Pole: Single 64x4	1 Pole: Single 32x8	1 or 2 Pole: Single 64x2 or 64x4	1 or 2-Pole or 1-Pole Shielded: Single 32x8 or Dual 16x8	1 or 2-Pole or 1-Pole Shielded: Dual 32x4	1-Pole: Single 55x8	1-Pole: Single 92x4, Single 44x8 or Dual 44x4	1-Pole: Single 132x4	1-Pole: Single 66x8	1-Pole: Single 33x16	1-Pole: Single 84x4	1-Pole: Single 64x6	1-Pole: Single 50x8	1-Pole: Single 36x12	1-Pole: Single 28x16	2-Pole: Single 32x8	2-Pole: Single 33x8	2-Pole: Single 16x16	2-Pole: Single 64x4	1-Pole: Single 128x2	1-Pole: Single 64x4	1-Pole: Single 32x8	1-Pole: Single 16x16	2-Pole: 16x8 and 32x8	8x4 and 16x4	Configurations
Relay Type	Pickering Instrumentation Reed	Electro-mechanical		Electro-mechanical					Pickering Instrumentation Reed					Electro-mechanical			Solid State	Pickering Instrumentation Reed																						Ruthenium Reed	Relay Type
Max Switch Voltage	150 VDC/100 VAC	300 VDC/250 VAC	220 VDC/250 VAC	300 VDC/250 VAC					150 VDC/100 VAC					220 VDC/ 150 VAC	300 VDC/250 VAC		±60 VDC/AC peak	±100 VDC/AC peak	150 VDC/100 VAC																							100 V	Max Switch Voltage
Max Switch/Carry Current	1 A/1.2 A	2 A		2 A					1 A/1.2 A	0.5 A/1 A	1 A/ 1.25 A			2 A			0.5 A	0.15 A	1 A			0.5 A							2 A			1 A	2 A									250 mA	Max Switch/Carry Current
Max Switch Power	20 W	60 W	62.5 VA, 60 W	60 W					15 W	10 W	20 W			60 W			30 W	15 W	20 W	15 W	10 W																					10 W	Max Switch Power
Typical Operate Time	0.5 ms	3 ms	4 ms	6.5 ms		3 ms			0.5 ms					3 ms			400 µs	0.5 ms											6.5 ms					3 ms							0.6 ms	0.5 ms	Typical Operate Time
Connector Type	68-pin Micro-D	50-pin D-type		160-pin DIN41612	78-pin D-type	78-pin D-type	50-pin D-type	50-pin D-type	78-pin D-type	50-pin D-type	96-pin Micro-D			78-pin D-type	50-pin D-type	37-pin D-type	78-pin D-type	96-pin Micro-D	200-pin LFH	96-pin Micro-D	200-pin LFH	96-pin Micro-D			200-pin LFH	96-pin micro-D	68-pin micro-D	160-pin DIN 41612	78-pin D-type	78-pin D-type	50-pin D-type	50-pin D-type	160-pin DIN 41612	96-pin micro-D	78-pin D-type	160-pin DIN 41612	78-pin D-type	50-pin D-type	37-pin D-type	104-pin D-Type	MMCX Coaxial	Connector Type
Width (PXI-1, PXI-hybrid)	1-Slot			1-Slot																								1-Slot												2-Slot	1-Slot	Width (PXI-1, PXI-hybrid)

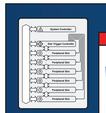
HIGH POWER MATRICES

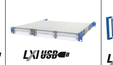
	High Power (2 A to 40 A)							
Features	• High Density • 2 A	• High Density • 5 A	• 2-Pole • 5 A	• High Density • 10 A	• High Density • 16 A	• High Speed, Long Service Life • High Inrush Current		
Model Family	40-545/546/547/548	40-549	40-550	40-551	40-552	40-553A	40-554B	40-555B
Configurations	1-Pole: Single 10x4, 10x8, 20x4 or Dual 10x4	1-Pole: Single 8x4, 8x8, 16x4 or Dual 8x4	2-Pole: Single 8x4	1-Pole: Single 4x4, 8x2 or 8x4 (8x4 loop-thru option)	1-Pole: Single 4x4 or 8x2 with loop-thru option	1-Pole: Single 6x2		1-Pole: Single 8x2
Relay Type	Electro-mechanical					Solid State		
Max Switch Voltage	110 VDC/250 VAC		125 VDC/250 VAC		300 VDC/250 VAC	±200 VDC/AC peak		±40 VDC/AC peak
Max Switch/Carry Current	2 A	5 A		10 A	16 A	10 A		40 A
Max Switch Power	90 W/500 VA	150 W/1250 VA		300 W/2500 VA	448 W/4000 VA	2000 W		1600 W
Typical Operate Time	10 ms	10 ms				120 µs		250 µs
Connector Type	37-pin D-type	25-pin D-type	37-pin D or 20-pin GMCT	20-pin GMCT		8-pin Power D-type		
Width (PXI-1, PXI-hybrid)	1-Slot					2-Slot		

BRIC LARGE MATRICES

| | High Density Matrix | | | | | | | | | | | | | | | | | | |

CHASSIS & REMOTE CONTROLLERS



	PXI Chassis				PXI Controllers	PXI/PXIe Hybrid Chassis			PXIe Controllers		LXI Ethernet/USB Chassis				
															
Chassis Slots	8-Slot	19-Slot	8-Slot	14-Slot	–	8-Slot	18-Slot	21-Slot	–	–	2-Slot	4-Slot	6-Slot	7-Slot	18-Slot
Features	• High Performance Chassis • Remote Management System	• High Performance Chassis • Remote Management System	• 6 Mechanical Expansion Slots for Efficient Housing of Wide Modules e.g. BRIC	• High Performance Chassis • Hot Swappable PSUs	• PCIe to PXI Control Interface Kit • Provides a PCI Express Interface	• Gen3 High Performance Chassis • Remote Management System	• Gen2 & Gen3 High Performance Chassis • Remote Management System	• Gen2 High Performance Chassis • 20 PXIe Hybrid Peripheral Slots • Very High Power and Cooling Capacity	• PXIe Embedded Controller • Max Throughput 14GB/s • Compact for Versatility	• PCIe to PXIe Control Interface Kit • Daisy Chain Option	• Compact chassis for hosting Pickering's 3U PXI modules in an LXI environment, allowing remote control over an Ethernet or USB connection				
Model Family	40-924	40-923A	40-908	40-914	41-924/51-924	42-924	42-925/42-926	42-927	43-920	43-921-001/002 and Kits	60-104	60-105	60-106	60-102D	60-103D

Choosing a Chassis for Pickering PXI Modules

(Please note the chassis slot width for all required modules when selecting a chassis)

CHASSIS SELECTION GUIDE:

PXI and PXIe (with PXIe and/or Hybrid Slots)

- Mix our 1000+ PXI Switching & Simulation modules with any vendors' PXI/PXIe instrumentation
- Embedded or remote Windows PC control
- Real-time operating system support
- High data bandwidths, especially with PXI Express
- Integrated module timing and synchronization

Pickering LXI or LXI/USB Modular Chassis (Only accept our PXI Switching & Simulation Modules):

- Choose from 1000+ Pickering PXI modules
- Ethernet or USB control enables remote operation
- Low-cost control from practically any controller
- LXI provides manual control via Web browsers
- Driverless software support
- Power sequencing immunity
- Ethernet provides chassis/controller voltage isolation
- Independence from Windows operating system

3U PXI modules are compatible with the following chassis types:

- All chassis conforming to the 3U PXI and 3U Compact PCI (cPCI) specification
- Legacy and hybrid peripheral slots in a 3U PXI Express (PXIe) chassis
- Pickering Interfaces LXI or LXI/USB modular chassis

3U PXIe versions of the modules are compatible with the following chassis types:

- All chassis conforming to the 3U PXIe specification
- PXIe and hybrid peripheral slots in a 3U PXI Express (PXIe) chassis

USB, COMMUNICATIONS & OPTICAL SWITCHING

	USB Switch	Telecoms/Differential Switching					Optical Switching			
Features	• Data Comms MUX For USB1 & USB2	• Tributary Switches • Suitable for Telecoms Test Applications		• Data Comms MUX For Switching USB and RS232	• Data Comms MUX For Switching AFDX, Ethernet, LVDS, USB and RS232	• Multiplexer Designed For Differential Signals • MIL-STD-1553	• MEMS Technology Offering High Reliability & Fast Operating Speed • Available With Single-Mode or Multi-Mode Support			
Model Family	40-737A	40-792/793	40-795/796	40-735	40-736	40-739	40-850A	40-852A	40-855A	40-860A
Configurations	4-Pole: Single 8 or 16-Channel	1-Pole (75Ω) 8 or 16-Channel Tributary Switch	2-Pole (100/120Ω) 8 or 16-Channel Tributary Switch	Single 36, Dual 18 or Single 18 Channel	8-Channel / 4-Pair, 16-Channel / 2-Pair & 32-Channel / 1-Pair	Single or Dual 4, 8 or 16-channel differential switching	Single 4-Channel MUX	Single 8-Channel MUX	Single, Dual, Triple or Quad 2-Channel MUX	Single, Dual, Triple, Quad Insert/Bypass Switch
Relay Type	Electro-mechanical	Electro-mechanical		Reed & Electro-mechanical	Electro-mechanical	Electro-mechanical	MEMS Optical			
Max Switch Voltage	100 V	100 VDC/100 VAC		150 VDC/100 VAC	100 V	–	–			
Max Switch/Carry Current	0.5 A data, 2 A power	1 A		0.5 A	0.3 A	0.8 A	–			
Max Switch Power	60 W	30 W		10 W	60 W	60 W	–			
Typical Operate Time	3 ms	10 ms		4 ms	3 ms	3 ms	1 ms			
Connector Type	USB or 78-pin D-type	96-pin Micro-D			78-pin D-type	78-pin D-type	FC/APC, FC/PC, SC/PC, MU (mini SC), LC, SC, ST			
Width (PXI-1, PXI-hybrid)	1-Slot	1-Slot					1 or 2-Slot			

RF SWITCHES & MULTIPLEXERS

| | RF SPDT Switch | | | | RF Multiplexer | | | | |