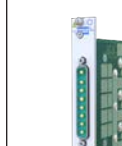
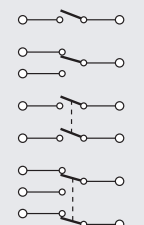
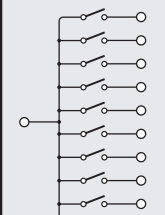
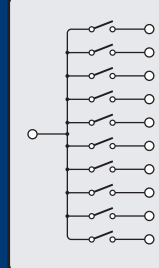
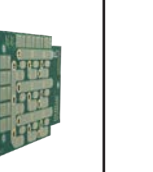


High Power (5 A to 40 A)																																										
																																										
Features	• High Power • DPST and SPDT options			• PXI/PXle Versions for 40/45/155/158			• High Power • SPST and DPST options			• High Density • High Current			• High Density • High Current			• 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 Optional Hardware Interlock			8 or 16 x SPST Optional Hardware Interlock or 8 x DPST			Up to 32 x SPDT Optional Hardware Interlock			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 6 x SPDT or 1, 2 or 3 x SP4T			2 x SPST or 2 x DPST			2 or 4 x SPST			2x SPDT, 2 x SPST or 4 x SPST			3 or 6 x SPST with Optional Hardware Interlock			6 x SPST with Optional Hardware Interlock			3 or 6 x SPST with Optional Hardware Interlock					
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/400 VAC			400 VDC/400 VAC			100 VDC/400 VAC			400 VDC/400 VAC								
Max Switch/Carry Current	5 A			5 A			10 A			8 A			16 A			20 A, 30 A (SPST)			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			60 W/5500 VA			900 W/7500 VA,600 W/5000 VA			560 W			2000 W			1600 W			2500 W			600 W					
Typical Operate Time	10ms			8ms			10ms			10ms			10ms			22ms, 66ms (SP4T)			30ms			15ms			20µs			250µs			20µs											
Connector Type	37 or 50-pin D-type			37 or 50-pin D-type, or SGM C			37 or 50-pin D-type			37 or 50-pin D-type, or SGM C			20-pin GMCT			20-Pin Scorpion™			1-Slot			2-Slot			8-pin Power D-type			1 or 2-Slot			2-Slot			1 or 2-Slot								
Width (PXI-1, PXI-hybrid)	1-Slot			1-Slot			1-Slot			1-Slot			1-Slot			1-Slot			2-Slot			2-Slot			2-Slot			2-Slot			2-Slot			2-Slot								

LOW DENSITY MULTIPLEXERS						
	Low Density				Switched Guard	
						
Features	• Low Density, Low Cost • Single and Dual Configurations		• Differential Thermal Offset <1.5µV	• Low Cost • 2 A Switching	• Wide Current Range from 10µA	• Up to 10 ¹¹ Ω Isolation Resistance
Model Family	40-630A	40-632A	40-620A	40-635A	40-514	40-121
Configurations	1-Pole: Single 64:1 or Dual 32:1, 2-Pole: Single 32:1, Dual 16:1 or 4-Pole: Single 16:1	1-Pole: Single 68:1 Dual 24:1 2-Pole: Single 24:1	2-Pole: Single 23:1 Low Thermal EMF MUX	Between 1-Pole: Single 64:1 & 2-Pole: 4-Bank 8:1	1-Pole: Single 24:1, Dual 12:1, Quad 6:1, 2-Pole: Single 12:1, Dual 6:1, Quad 3:1, 4-Pole: Single 6:1, Dual 3:1.	8 or 16 2:1 Multiplexers
Relay Type	Picking Instrumentation Reed			Electro-mechanical		Ruthenium Reed
Max Switch Voltage	150VDC/100VAC		100V	300VDC/250VAC	220VDC/250VAC	100V
Max Switch/Carry Current	1 A/1.2 A		0.5A/1 A	2 A	2 A/2.5 A	1 A
Max Switch Power	20W			60W	62.5VA, 60W	20W
Typical Operation Time	0.5 ms			3ms	4ms	0.5ms
Connector Type	68-pin		96-pin	78-pin D-type	37 & 50-pin D-type	26-Pin MS-M RF
Width (PXL-1, PXL-hybrid)			1-Slot	1-Slot		

HIGH POWER MULTIPLEXERS														
High Power														
														
Features	• 5A Power MUX		• 5A MUX • Multiple Configurations	• High Speed • Long Life	• High Density • 1-Pole Switching	• Power & Sense MUX	• Power MUX in Pickering BRIC format	• 1 or 2-Pole Power MUX • 10A or 8A Current Handling	• High Density • 10A Switching • 1-Pole	• High Density • 16A Switching • 1-Pole	• Suitable For Automotive Test	• High Speed, Long Life	• High Inrush Current	
Model Family	40-650A		40-651A	40-652A	40-657A	40-658A	40-571A	40-660A	40-665A	40-661B	40-662A	40-664A	40-666B 40-667C	
Configurations	2-Pole: Single 16:1		1-Pole: 1-Bank 48:1, 2-Bank 24:1, 4-Bank 11:1 or 8-Bank 5:1	1-Pole: Single 24:1 & 48:1, Dual 24:1, 2-Pole: Single 24:1	1-Pole: 8-Bank 8:1, 4-Bank 16:1, 2-Bank 32:1 or Single 64:1	2-Pole: Dual 18:1	Max configurations between 6-Pole: 48:1 & 48-Pole: 6:1 with loop-thru	2-Pole: Single 10:1	1-Pole: Single 10:1	1-Pole: Single 18:1	8-Bank 6:1, 5-Bank 6:1, 4-Bank 4:1 or 8:1, Dual 8:1 or 16:1, Single 16:1 or 32:1,	Quad 2:1, Quad 4:1, Dual 4:1, Dual 8:1, Single 8:1, Single 12:1 Single 16:1	1-Pole: Single 4:1	1-Pole: Single 6:1 or Dual 3:1. Optional Hardware Interlock
Relay Type	Electro-mechanical			Solid State	Electro-mechanical	Instrumentation Reed		Electro-mechanical			Solid State			
Max Switch Voltage	125 VDC/250 VAC		110 VDC/250 VAC	±100 V	110 VDC/250 VAC	200 VDC/240 VAC (Power) & 240 VDC (Sense)		100 VDC/100 VAC peak		125 VDC/250 VAC		300 VDC/250 VAC	14 VDC or 28 VDC	+200 VDC/AC peak ±40 VDC/AC peak
Max Switch/Carry Current	5 A				2 A	1 A/2 A (Power), 1 A/1.2 A (Sense)		3 A		8 A		10 A	16 A	20 A or 40 A 10 A 40 A
Max Switch Power	175 W/1250 VA		150 W/1250 VA	500 W	90 W/500 VA	40 W (Power), 20 W (Sense)		105 W		240 W/2000 VA		300 W/2500 VA	448 W/4000 VA	560 W 2000 W 1600 W
Typical Operate Time	10.5 ms		85 µs	10.5 ms	0.5 ms	10.5 ms		10.5 ms		10.5 ms		8.5 ms	15.5 ms	120 µs 250 µs
Connector Type	37-pin D-type		9 & 50-pin D-type	50-pin D-type	78-pin D-type		50-pin D-type		20-pin GMCT			8-pin Power D-type		
Width (PXI-1, PXI-hybrid)	1-Slot		1-Slot	1-Slot	8-Slot		1-Slot			2-Slot				

CHASSIS & REMOTE CONTROLLERS

	PXI Chassis			PXI Controllers	PXI/PXIe Hybrid Chassis			PXIe Controllers		LXI Ethernet/USB Chassis				
Chassis Slots	8-Slot	19-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	- 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 28GB/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	40-914	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	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 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													

RF SPST Switch

RF SPDT Switch

RF Multiplexer

Features	- Up to 1 GHz - SPDT Options - Optional Hardware Interlock	8 GHz Bandwidth - Terminated	- High Performance - Low Cost	Multiple Connector Options	- High Density - High Performance - Low Cost	8 GHz Bandwidth - Terminated Channels - High Performance	4 GHz - Very Low Insertion Loss	3 GHz Bandwidth - High Performance	3 GHz - Bandwidth - Terminated	3 GHz - Bandwidth - Terminated Com	3 GHz Bandwidth - High Performance - Low Cost	- Up to 2 GHz Bandwidth - Choice of SMA or SMB Connectors	Choice of SMA or SMB Connectors	- Very High Density - High Performance - Low Cost	- High Density - High Performance - Low Cost	- Low Cost - Unterminated	- Low Cost - Terminated Channels												
Model Family	40-753	40-880B	40-870A	40-830A	40-710	40-754A	40-881B	40-882B	40-883B	40-878	40-872A	40-832A	40-873A	40-876A	40-874A	40-834A	40-875A	40-835A	40-740	40-745	40-746	40-747	40-748	40-749	40-755A	40-756	40-760/2/4/6	40-761A/3A/5A/7A	
Impedance	75 Ω	50 Ω	75 Ω	50 Ω	75 Ω	50 Ω	50 Ω	50 Ω	50 Ω	50 Ω	75 Ω	50 Ω	50 Ω	50 Ω	75 Ω	50 Ω	50 Ω	75 Ω	50 Ω	50 Ω	75 Ω	50 Ω	75 Ω	50 Ω	75 Ω	50 Ω	75 Ω	50 Ω	50 Ω
Configurations	12 or 24 x SPST (13 or 20 x SPDT)	Dual, Quad, Hex or Octal SPDT	Triple or Hex SPDT	Quad SPDT	9 or 17 x SPDT	8 GHz	Single or Dual SPAT Terminated	Single, Dual, Triple or Quad SPAT Terminated	Single SPDT Terminated	Single SP16T Terminated	Single, Dual or Quad 4:1 RF MUX	Single, Dual or Quad SPAT	Single or Dual SPAT Terminated	Single, Dual or Quad SPAT Terminated	Single or Dual SP8T	Single SP16T	SPAT Terminated	SP4T or SP8T	Dual SPAT	Single SP16T	Dual SP8T	Quad SPAT	4 or 10 SPAT: 8 SPAT+4 SPDT: 3 SPAT+1 SPDT	5 or 10 SPAT: 8 SPAT+4 SPDT: 4 SPAT+2 SPDT	4 or 10 SPAT: 8 SPAT+4 SPDT: 3 SPAT+1 SPDT	5 or 10 SPAT: 8 SPAT+4 SPDT: 4 SPAT+2 SPDT	1 Pole: Single 12:1 or 24:1	1 or 2 Pole: Single 24:1, Dual 12:1, Quad 6:1, Hex 4:1, Octal 3:1 or Twelve 2:1	Dual, Quad or Octal SPAT: Single, Dual or Quad SP8T: Single or Dual SP16T, or Single SP32T
Max Frequency	1GHz	8GHz	3GHz	2.7GHz	1GHz to 2.5GHz	1GHz	1.2GHz	500MHz	1.2GHz	500MHz	1.2GHz	500MHz	1.2GHz	500MHz	1.2GHz	500MHz	1.2GHz	500MHz	1.2GHz	500MHz	1.2GHz	500MHz	1.2GHz	500MHz	1.2GHz	500MHz	1.2GHz	500MHz	600MHz
Insertion Loss	<3dB	<4dB	<0.5dB	<0.9dB	<3dB	<3dB	<6.8dB	<5dB	<8dB	<9dB	<1.4dB	<1dB	<1.6dB	<1.5dB	<1.3dB	<1.2dB	<2.1dB	<1.3dB	<1.9dB	<3dB	<2.6dB	<2.9dB	<1.9dB	<1.5dB	<1.25dB	0.8dB	<2dB	–	<3dB
Max Power	25W	+36dBm	–	–	10W	–	+36dBm	–	+30dBm	–	25W	–	10W	–	1W Terminated	2W Terminated	–	–	–	–	–	–	–	–	–	–	–	–	–
Typical Operate Time	1ms	50µs	3ms	–	10ms	–	50µs	–	30dBm	–	25W	–	10W	–	1W Terminated	2W Terminated	–	–	–	–	–	–	–	–	–	–	–	–	–
Relay Type	Electro-mechanical	Solid State	–	–	Electro-mechanical	–	Solid State	–	MEMS	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Connector Type	SMB	SMA	SMB, MCX	–	SMB, SMA	SMB	SMA	MS-M	SMB	MS-M	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Width (PXI-1, PXI-hybrid)	1 or 2-Slot	1, 2 or 3-Slot	1-Slot	–	1 or 2-Slot	–	2-Slot	1-Slot	2-Slot	1-Slot	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

RF Matrix

Features	8 GHz Bandwidth - High Performance	- Expandable - High Performance	Expandable	X and Y Isolation Switching	- Expandable - Easy Y-Axis Loop-Thru	- Low Loss Expansion Options: 20x8, 32x8, 48x8, ... - X and Y Isolation Switching	- High Performance - Loop-Thru Option			
Model Family	40-884B	40-877A	40-837A	40-750A	40-725	40-726B	40-727A	40-728A	40-729A	40-724
Impedance	50 Ω	75 Ω	50 Ω	75 Ω	50 Ω	75 Ω	50 Ω	75 Ω	50 Ω	75 Ω
Configurations	Single 4x4	Single or Dual 2x2	8x2	8x9	12x8	16x4	16x2	8x4	16x4, 16x8, 32x4 or with 32x8 Optional Loop-Thru	16x4, 16x8, 32x4 or with 32x8 Optional Loop-Thru
Max Frequency	8GHz	2.5GHz	1GHz	500MHz	250MHz	300MHz	250MHz	300MHz	100MHz	300MHz
Insertion Loss	<8dB	<1.4dB	<2.0dB	<3dB	3dB	–	–	–	–	–
Max Power	+30dBm	–	–	–	–	–	–	–	–	–
Typical Operate Time	50µs	3ms	<6ms	–	0.5ms	–	–	–	–	–
Relay Type	Solid State	Electro-mechanical	–	Instrumentation Reed	–	–	–	–	–	–
Connector Type	SMA	SMB, MCX	SMA, SMB, MS-M	SMB, MS-M	SMB	–	–	–	–	–
Width (PXI-1, PXI-hybrid)	3-Slot	1-Slot	–	–	–	–	–	–	–	–

6U PXI SWITCHING

	Relays	Matrices	RF
Features	High Power Relay Module	- Ultra High Density BIRST	- Ultra High Density 250MHz Bandwidth 500 Ω or 75 Ω
Model Family	45-157	45-541	45-542
Configurations	48x SPDT Power Relays	1-Pole: Single 132x8 Matrix	16x16 Expandable RF Matrix
Relay Type	Electro-mechanical	Instrument Reed	Electro-mechanical
Max Switch Voltage	300 VDC / 240 VAC	100 VDC / 70 VAC rms	170 VDC / 120 VAC
Max Switch/Carry Current	7.5 A	0.5 A	1 A
Max Switch Power	240 W / 1800 VA	10 W	60 W
Typical Operate Time	10 ms	0.5 ms	6.5 ms
Connector Type	50-pin D-type	50-pin D-type	SMB, SMZ, 1.0/2.3, Lemo 00
6U PXI Slot Width	1-Slot	1-Slot	1 or 2-Slot

FAULT INSERTION

	Fault Insertion Matrices				Fault Insertion Switches															
Features	- High Density Fault Insertion Breakout Matrix - Available With 2 or 3 Pin Breakout				Power Fault Insertion Breakout Matrix															
Model Family	40-592A				40-595A															
Configurations	Dual 31x4 to Dual 124x4 Fault Matrix, 2 Pin Breakout	Dual 31x4 to Dual 268x4 Fault Matrix, 2 Pin Breakout	Dual 20x4 to Dual 80x4 Fault Matrix, 3 Pin Breakout	Dual 20x4 to Dual 163x4 Fault Matrix, 3 Pin Breakout	Dual 6x2 to Dual 30x2 or Dual 6x4 to Dual 30x4 Fault Matrix, 3 Pin Breakout	32, 64 or 74 Channels, 2 Fault Buses (2 Fault Inputs), Optional Hardware Interlock	6 Signal Channels, 2 Fault Buses (2 Fault Inputs), Optional Hardware Interlock	7 Signal Channels, 1 or 2 Fault Buses (1 or 2 Fault Inputs), Optional Hardware Interlock	11 or 22 Signal Channel Pairs, 4 or 8 Fault Inputs	5 or 10 Signal Channel Pairs, 5 or 10 Fault Inputs	16 or 34 Signal Channels, 4 Fault Buses (8 Fault Inputs)	20 Signal Channels, 1 or 2 Fault Buses (1 or 2 Fault Inputs)	10 Signal Channels, 1 or 2 Fault Inputs	4 or 8 Pair Differential, 4 Fault Buses (8 Fault Inputs)	4 or 8 Pair Differential, 2 Fault Buses (4 Fault Inputs)	11 or 22 Signal Channel Pairs, 11 or 22 Fault Inputs	3 or 6 pairs of two wire connections designed for use on differential serial interfaces	1 or 2 pairs of two wire connections designed for use on differential serial interfaces inc MUX		
Relay Type	Pickering Instrumentation Reed				Electro-mechanical															
Max Switch Voltage	150 VDC/100 VAC				125 VDC/250 VAC															
Max Switch/Carry Current	1 A/1.2 A				10 A(matrix) 8 A(breakout)															
Max Switch Power	20 W				300 W/2500 VA															
Typical Operate Time	0.5 ms				10 ms															
Connector Type	78-pin D-type				37-pin D-type															
Width (PXI-1, PXI-hybrid)	4-Slot	8-Slot	4-Slot	8-Slot	1-Slot	2-Slot	2-Slot	2-Slot	2-Slot	2-Slot	2-Slot	2-Slot	2-Slot	2-Slot	2-Slot	2-Slot	2-Slot	2-Slot		

REED RELAYS

	Reed Relays from Pickering Electronics	
Features	1000/100Base-T1 - ECU Test	1000/100Base-T1 700MHz Differential
Model Family	40-203	40-204
Configurations	3 or 6 pairs of two wire connections designed for use on differential serial interfaces	1 or 2 pairs of two wire connections designed for use on differential serial interfaces inc MUX
Relay Type	Reed Relay	Electro-mechanical
Max Switch Voltage	150 VDC/100 VAC	200 V
Max Switch/Carry Current	–	–
Max Switch Power	–	–
Typical Operate Time	–	–
Connector Type	MMCX	–
Width (PXI-1, PXI-hybrid)	1-Slot	1-Slot

PXI Switching Map with 1000+ Modules

- Relays
- Matrices
- Multiplexers
- Fault Insertion

- RF, Microwave & Optical
- Connectivity & Cables
- PXI & PXIe Hybrid Chassis
- LXI/USB Modular Chassis

3 Year Warranty

Pickering's PXI Switching Map provides a reference to our range of 1000+ PXI and PXIe Switch modules, including their basic specifications and cabling options.

For information on our range of Simulation and Instrumentation products, please see our **PXI Simulation & Instrumentation** Map.

For information on our range of connection solutions, please see our **Cables & Connectors** Map.

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SCAN ME

Switching from Pickering

At Pickering, we understand that to design, deploy and sustain your test system can be challenging, and we believe in offering you the PXI, PCI, LXI & USB products and services to help your engineering team get the job done on time and on budget.

- All our products come with a standard 3-year warranty and long-term support of typically 15 to 20 years
- If our product range doesn't fit your application, we have the ability and expertise to develop a product to your specifications - this includes the design and manufacture of turnkey microwave and optical signal routing sub-assemblies
- We design and manufacture a full range of supporting cable and connector solutions, including custom cables - please try out our free graphical on-line **Cable Design Tool** ([pickeringtest.com/cdt](#))

Software - Our S/W drivers support all major Windows and Linux (32 & 64-Bit) platforms and all popular Programming languages including C/C++, LabVIEW, LabVIEW RT, .NET, VB, LabWindows/CVI, MATLAB, Python, AT&T, TestStand, Veristand and Switch Executive. Our drivers include a common Soft Front Panel for manual control and monitoring.

We provide a range of software tools to help streamline the design, deployment and sustainment of our switching systems, including:

- Signal Routing - Switch Path Manager (SPM)** automates signal routing through our switch systems and provides a 50% reduction in program development time
- Simulation Tools** - Allow users to simulate most of our PXI & LXI products, allowing for code development independent of your application hardware
- Sequence Manager** - Users can load and execute (via H/W or S/W triggers) predefined switch operations for our modules, accelerating test execution times
- Diagnostic Test Tools - BIRST** (Built-in Relay Self-Test) and eBIRST Test Tools automatically find faulty relays in Pickering switching systems, significantly reducing repair costs and test system downtime

Learn more at [pickeringtest.com/software](#).

Relay Counting

PXI PXIe

Pickering is committed to supporting both the PXI and PXI Express (PXIe) standards and will supply all new modules in both formats wherever possible. We also have an active program to replicate existing PXI modules in PXIe and already have several hundred PXIe modules available. Modules that are available in both formats are identified on this map by the PXI/PXIe icon.

Relay Counting - Many modules now feature relay operation counting to determine if a relay is approaching end of life (EOL). This information can be used to reduce the load on heavily used relays. Please refer to the specific module datasheet for more information.

Direct Sales & Support Offices

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