

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 - RF & Microwave Switching Map

CHASSIS & REMOTE CONTROLLERS

Chassis Slots	PXI Chassis			PXI Controllers		PXI/PXIe Hybrid Chassis			PXIe Controllers		LXI Ethernet/USB Chassis				
	8-Slot	19-Slot	14-Slot	8-Slot	18-Slot	21-Slot	8-Slot	18-Slot	21-Slot	2-Slot	4-Slot	6-Slot	7-Slot	18-Slot	
Features	<ul style="list-style-type: none"> High Performance Chassis Remote Management System 	<ul style="list-style-type: none"> High Performance Chassis Remote Management System 	<ul style="list-style-type: none"> High Performance Chassis Hot Swappable PSUs 	<ul style="list-style-type: none"> PCIe to PXI Control Interface Kit Provides a PCI Express Interface 	<ul style="list-style-type: none"> Gen3 High Performance Chassis Remote Management System 	<ul style="list-style-type: none"> Gen2 High Performance Chassis 20 PXIe Hybrid Peripheral Slots Very High Power and Cooling Capacity 	<ul style="list-style-type: none"> PXIe Embedded Controller Max Throughput 28GB/s Compact for Versatility 	<ul style="list-style-type: none"> PCIe to PXI Control Interface Kit Daisy Chain Option 	<ul style="list-style-type: none"> Compact chassis for hosting Pickering's 3U PXI modules in an LXI environment, allowing remote control over an Ethernet or USB connection 	LXI USB	LXI USB	LXI USB	LXI USB	LXI USB	
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

(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 Ethernet/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

PXI RF SWITCHES

Features	RF SPDT Switch		RF SPDT Switch		RF SPDT Switch		RF SPDT Switch	
	40-753	40-880B	40-870A	40-830A	40-710	40-754A	40-754A	40-754A
Impedance	75 Ω	50 Ω	75 Ω	75 Ω	50 Ω	75 Ω	50 Ω	75 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			
Max Frequency	1 GHz	8 GHz	3 GHz	2.7 GHz	10 GHz to 2.5 GHz	10 GHz	1.2 GHz	500 MHz to 1.2 GHz
Insertion Loss	<3 dB	<4 dB	<0.5 dB	<0.9 dB	<3 dB		<0.75 dB	<0.45 dB
Max Power	25 W	+36 dBm			10 W			
Typical Operate Time	1 ms	50 μs	3 ms		10 ms		3 ms	
Relay Type	Electro-mechanical	Solid State			Electro-mechanical			
Connector Type	SMB	SMA	SMB, MCX	SMB, MCX	SMB	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

PXI MICROWAVE SWITCHES

Features	SPDT		Transfer Switch		SP4T/SP6T		SP8T/SP10T/SP12T		Flexible	
	40-780B	40-781A	40-781A-92x	40-782B	40-784B	40-785C	40-788	40-890	40-890	40-890
Impedance	50 Ω	75 Ω	50 Ω	50 Ω	50 Ω	75 Ω	50 Ω	75 Ω	50 Ω	75 Ω
Configurations	Single, Dual, Triple or Quad SPDT	Single or Dual SPDT Terminated	Single or Dual SPDT Terminated	Single or Dual SPDT Terminated	Single, Dual or Triple SP4T & SP6T	Single, Dual or Triple SP4T & SP6T with Terminated Options	SP8T, SP10T, SP12T with Terminated Options	Transfer, SPDT, SP4T, SP6T, SP10T, SP12T with Terminated Options		
Max Frequency	Up to 67 GHz	2.5 GHz	110 GHz	Up to 50 GHz	Up to 40 GHz	Up to 67 GHz	2.5 GHz	Up to 40 GHz	Up to 110 GHz	2.5 GHz
Insertion Loss	Up to 1.1 dB	<0.5 dB	<2.5 dB	<1.1 dB	<1.1 dB	<1.7 dB	<0.3 dB	<1.5 dB	<1.7 dB	<0.3 dB
Max Power	Up to 700 W	1 W Terminated	Up to 240 W	Up to 150 W	Up to 240 W	Up to 700 W	400 W	Up to 700 W	400 W	400 W
Typical Operate Time	10 ms (15 ms for 12.4 GHz)	10 ms	20 ms	15 ms	<10.5 ms	15 ms	15 ms	15 ms	<15 ms	<15 ms
Relay Type	Microwave Relay									
Connector Type	N-type, SMA, SMA-2.9, SMA-2.4, SMA-1.8, 1.6/5.6	SMA, SMA-2.9, SMA-2.4, SMA-1.8	SMA-1.0	SMA, SMA-2.9, SMA-2.4	SMA, SMA-2.9	N-type, SMA-2.9, SMA-2.4, SMA-1.8, 1.6/5.6	N-type, SMA	N-type, SMA, SMA-2.9, SMA-2.4, SMA-1.85, 1.6/5.6		
Width (PXI-1, PXI-hybrid)	1, 2 or 3-Slot	1 or 2-Slot	2-Slot	1 or 2-Slot	1 or 2-Slot	1, 3, 4 or 6-Slot	2 or 4-Slot	1, 2, 3, 4, 5 or 6-Slot		

PXI RF MATRICES

Features	RF Matrix									
	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	300 MHz
Max Frequency	8 GHz	2.5 GHz	1 GHz	500 MHz	250 MHz	300 MHz	250 MHz	300 MHz	100 MHz	300 MHz (190 MHz Loop-thru)
Insertion Loss	<8 dB	<1.4 dB	<2.0 dB	<3 dB	3 dB				<3 dB	
Max Power	+30 dBm								10 W	
Typical Operate Time	50 μs	3 ms	<6 ms	0.5 ms		0.5 ms		0.5 ms		0.5 ms
Relay Type	Solid State	Electro-mechanical	Instrumentation Reed					Reed		
Connector Type	SMA	SMB, MCX	SMA, SMB, MS-M	SMB, MS-M	SMB	SMB or MS-M RF		SMB		
Width (PXI-1, PXI-hybrid)	3-Slot	1-Slot				1-Slot		2-Slot		

PXI RF MULTIPLEXERS

Features	RF Multiplexer														
	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
Impedance	50 Ω	50 Ω	50 Ω	75 Ω	50 Ω	75 Ω	50 Ω	75 Ω	50 Ω	75 Ω	50 Ω	75 Ω	50 Ω	75 Ω	50 Ω
Configurations	Single or Dual SP4T Terminated	Single, Dual, Triple or Quad SP4T Terminated	Single SP8T Terminated	Single SP16T Terminated	Single, Dual or Quad 4:1 RF-MUX	Single, Dual or Quad SP4T	Single or Dual SP4T Terminated	Single, Dual or Quad SP4T Terminated	Single or Dual SP8T	Single SP16T	SP4T Terminated	SP4T or SP8T	Dual SP4T	Single SP16T	Dual SP8T
Max Frequency	8 GHz	4 GHz	3 GHz	3 GHz	3 GHz	3 GHz	3 GHz	3 GHz	3 GHz	3 GHz	3 GHz	3 GHz	3 GHz	3 GHz	3 GHz
Insertion Loss	<6.8 dB	<5 dB	<8 dB	<9 dB	<1.4 dB	<1 dB	<1.6 dB	<1.5 dB	<1.3 dB	<1.2 dB	<2.1 dB	<1.3 dB	<1.9 dB	<3 dB	<1.6 dB
Max Power	+36 dBm		+30 dBm		25 W	10 W	1 W Terminated	2 W Terminated						10 W	
Typical Operate Time	50 μs				50 μs		3 ms							5 ms	
Relay Type	Solid State														
Connector Type	SMA				SMB, MCX									SMA, SMB	
Width (PXI-1, PXI-hybrid)	1 or 2-Slot	1, 2 or 3-Slot	2-Slot	3-Slot	1-Slot					1-Slot				1 or 2-Slot	

PXI ATTENUATORS

Features	Attenuators	
	41-182B	41-180
Model Family	41-182B	41-180
Configurations	Solid State Programmable RF Attenuator	Programmable RF Attenuator
Number of Channels	3 or 6	1 or 2
Frequency Range	10 MHz to 6 GHz	DC to 3 GHz
Maximum Attenuation	31.75 dB per channel	63 dB per channel
Maximum Gain		
Connector Type	SMA	
Width (PXI-1, PXI-hybrid)	1 or 2-Slot	1-Slot

LXI ETHERNET RF & MICROWAVE MATRICES

Features	Video Matrix		High Frequency Matrix		Wideband Matrix		RF Matrix - 1 GHz			RF Matrix - 2.4 GHz			Microwave Matrix	
	60-711	60-760	65-110A	60-730	60-731	60-732	60-770	60-771	60-772	60-750	60-751	60-750	60-751	
Model Family	60-711	60-760	65-110A	60-730	60-731	60-732	60-770	60-771	60-772	60-750	60-751	60-750	60-751	
Configurations	Single or Dual 24x8 (software configurable)	Single or Dual 24x8 (software configurable)	RF matrix with sizes between 24x8 and 104x8 or between 16x16 and 104x16	32x16 terminated, 24x16 terminated, 16x16 terminated	32x8 terminated, 24x8 terminated, 16x8 terminated, 8x8 terminated	32x4 terminated, 24x4 terminated, 16x4 terminated, 8x4 terminated	32x16 terminated, 24x16 terminated, 16x16 terminated	32x8 terminated, 24x8 terminated, 16x8 terminated, 8x8 terminated	32x4 terminated, 24x4 terminated, 16x4 terminated, 8x4 terminated	Single or Dual 3x3, Single or Dual 4x4, Single 8x4, Optional Loop-Thru and/or Terminations	Single 3x3, Single 4x4, Optional Loop-Thru and/or Terminations	4-Channel Terminated MUX with up to 16 Banks	4-Channel Terminated MUX with up to 14 Banks	
Impedance	75 Ω	50 Ω	50 Ω	75 Ω	75 Ω	75 Ω	50 Ω	50 Ω	50 Ω	50 Ω	50 Ω	50 Ω	75 Ω	
Frequency Range	DC to 25 MHz	DC to 50 MHz (useable to 100 MHz)	200 MHz Useable to 500 MHz	DC to 1 GHz (useable to 1.5 GHz)	DC to 1 GHz (useable to 1.5 GHz)	DC to 1 GHz (useable to 1.5 GHz)	DC to 1 GHz (useable to 1.5 GHz)	DC to 2.4 GHz	DC to 2.4 GHz	DC to 10 GHz	DC to 18 GHz	18 GHz, 26.5 GHz, 40 GHz, 50 GHz or 67 GHz	6 GHz, 18 GHz, 26.5 GHz or 40 GHz	
Insertion Loss	<0.75 dB	<1 dB	<1 dB to 50 MHz	<2.5 dB	<2.5 dB	<2.5 dB	<2.5 dB	<2.5 dB	<2.5 dB	<2.5 dB	<3 dB	0.5 dB (18 GHz), 1.7 dB (67 GHz)	0.2 dB (up to 3 GHz)	
VSWR	<2.0:1	<1.8:1	<1.4:1	<1.8:1	<1.8:1	<1.8:1	<1.8:1	<1.8:1	<1.8:1	<1.8:1	<1.6:1	1.5:1 (18 GHz), 2.2:1 (67 GHz)	1.2:1 (up to 3 GHz)	
Max Power	30 W	10 W	0.25 W (limited by termination resistors)	0.125 W (limited by termination resistors)	0.125 W (limited by termination resistors)	0.125 W (limited by termination resistors)	0.5 W (limited by termination resistors)	0.5 W (limited by termination resistors)	0.5 W (limited by termination resistors)	100 W (1 W for termination resistors)	100 W (1 W for termination resistors)	100 W/1 W per termination (18 GHz), 1 W (67 GHz)	250 W (up to 3 GHz)	
Typical Operate Time	3 ms	3 ms	5 ms	3 ms	3 ms	3 ms	3 ms	3 ms	3 ms	18 ms	18 ms	18 ms	13 ms	
Relay Type	Electro-mechanical	Electro-mechanical	Electro-mechanical	Electro-mechanical	Electro-mechanical	Electro-mechanical	Electro-mechanical	Electro-mechanical	Electro-mechanical	Microwave Relay	Microwave Relay	Microwave Relay	Microwave Relay	
Connector Type	SMB, MCX or BNC	SMB or BNC	SMB	F-type	F-type	F-type	SMA	SMA	SMA	SMA, SMA-2.9, SMA-2.4 or SMA-1.85	SMA or SMA-2.9 (40 GHz)	SMA, SMA-2.9, SMA-2.4 or SMA-1.85	DIN 1.6/5.6	
Enclosure Size	1U High, Full Rack Width, 340 mm Deep or 2U High, Full Rack Width, 500 mm Deep	1U High, Full Rack Width, 340 mm Deep or 2U High, Full Rack Width, 500 mm Deep	4U High, Full Rack Width, 500 mm Deep	6U High, Full Rack Width, 500 mm Deep	3U High, Full Rack Width, 500 mm Deep	2U or 3U High, Full Rack Width, 500 mm Deep	6U High, Full Rack Width, 500 mm Deep	3U High, Full Rack Width, 500 mm Deep	2U High, Full Rack Width, 500 mm Deep	2U High, Full Rack Width, 500 mm Deep	2U High, Full Rack Width, 500 mm Deep	2U or 3U High, Full Rack Width, 500 mm Deep	1U or 2U High, Full Rack Width, 500 mm Deep	

LXI ETHERNET RF & MICROWAVE MULTIPLEXERS

Features	Video MUX		RF MUX		Microwave MUX					
	60-721A	60-722	60-800	60-801	60-802	60-803	60-820			
Model Family	60-721A	60-722	60-800	60-801	60-802	60-803	60-820			
Configurations	24, 48, 72, 96, 120 or 144-Channel MUX with Terminations	Single or Dual 12-Channel MUX	4-Channel Terminated MUX with up to 16 Banks	4-Channel Terminated MUX with up to 14 Banks	6-Channel MUX with up to 16 Banks	4-Channel MUX with up to 16 Banks	6 Channel MUX with up to 16 Banks			
Impedance	75 Ω	75 Ω	50 Ω	50 Ω	50 Ω	50 Ω	75 Ω			
Frequency Range	1 GHz	1 GHz	18 GHz, 26.5 GHz, 40 GHz, 50 GHz or 67 GHz	6 GHz, 18 GHz, 26.5 GHz or 40 GHz	6 GHz, 18 GHz, 26.5 GHz or 40 GHz	18 GHz, 26.5 GHz, 40 GHz, 50 GHz or 67 GHz	2.5 GHz			
Insertion Loss	3.5 dB	1.3 dB	0.5 dB (18 GHz), 1.7 dB (67 GHz)	0.2 dB (up to 3 GHz)	0.2 dB (up to 3 GHz)	0.5 dB (18 GHz), 1.7 dB (67 GHz)	0.3 dB			
VSWR	1.5:1	1.5:1	1.5:1 (18 GHz), 2.2:1 (67 GHz)	1.2:1 (up to 3 GHz)	1.2:1 (up to 3 GHz)	1.5:1 (18 GHz), 2.2:1 (67 GHz)	1.3:1			
Max Power	0.5 W (limited by termination resistors)	400 W	100 W/1 W per termination (18 GHz), 1 W (67 GHz)	250 W (up to 3 GHz)	250 W (up to 3 GHz)	100 W/1 W per termination (18 GHz), 1 W (67 GHz)	400 W (up to 2 GHz)			
Typical Operate Time	5 ms	20 ms	18 ms	13 ms	13 ms	18 ms	18 ms			
Relay Type	Electro-mechanical	Microwave Relay	Microwave Relay	Microwave Relay	Microwave Relay	Microwave Relay	Microwave Relay			
Connector Type	F-Type	F-Type	SMA, SMA-2.9, SMA-2.4 or SMA-1.85	SMA or SMA-2.9 (40 GHz)	SMA, SMA-2.9, SMA-2.4 or SMA-1.85	DIN 1.6/5.6				
Enclosure Size	2U or 3U High, Full Rack Width, 500 mm Deep	2U High, Full Rack Width, 500 mm Deep	2U or 3U High, Full Rack Width, 500 mm Deep	1U or 2U High, Full Rack Width, 500 mm Deep	2U or 3U High, Full Rack Width, 500 mm Deep	2U or 3U High, Full Rack Width, 500 mm Deep	2U High, Full Rack Width, 500 mm Deep			

Relay Counting - Many PXI(e) 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.

Pickering - RF & Microwave Switching Map

pickering RF & Microwave Switching Map

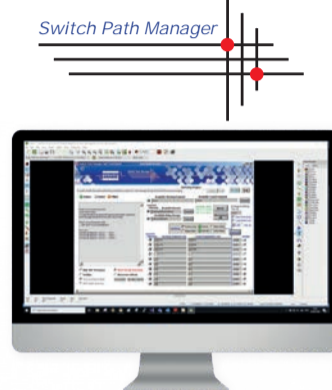
SWITCHING & SIMULATION SOLUTIONS FROM PICKERING INTERFACES

About Us

At Pickering, we understand that to design, deploy and sustain your test system can be challenging, and we believe in offering you the products and services to help your engineering team get the job done on time and budget. Since 1988, our core focus has and continues to be high-density modular switching and simulation systems for PXI, PCI, LXI and USB applications.

We offer the industry's deepest portfolio (over 1000 products in PXI alone), but the value doesn't end there. Take a look at the benefits of working with Pickering:

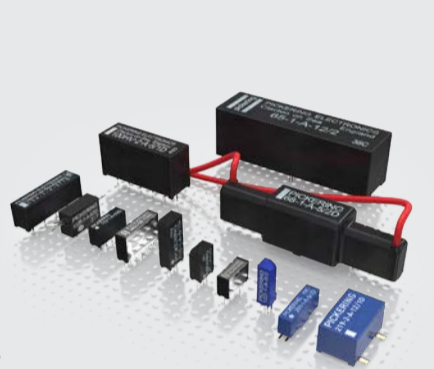
- When our product range doesn't fit your application, we have the agility and expertise needed to develop a system to your specifications, often with little to no engineering cost.
- We can also help accelerate software development and test time by offering tools to help with your programming efforts. These include our Switch Path Manager signal routing software that simplifies coding of switching systems, and simulation tools that allow development to begin before your hardware is received.



- We know that maximizing uptime of your test system is important—with our diagnostic test tools, you can identify faulty or damaged components in a matter of minutes. Many of our products include spare relays, so you can self-repair in the field without voiding our 3-year warranty.
- Our products have a history of longevity, typically 15–20 years, which is critical to many of our customers. All products manufactured by us come with a standard 3-year warranty* and include guaranteed long-term support.
- Our technical staff can address any hardware or software problems you may encounter with Pickering Products. We have multiple offices located around the world and provide access to support engineers that have many years' experience in functional test and are committed to responding in a timely fashion.
- All module and cabling manufacturing processes are done within our two factories on flexible manufacturing lines allowing us to offer simple customization to meet your needs. The chances are good that we can enhance your engineering team's effectiveness with our collaborative, creative and agile culture.

Reed Relays

Pickering is the only switch provider with in-house reed relay manufacturing capability. These instrument grade reed relays feature **SoftCenter™** technology, ensuring long service life and repeatable contact performance. In addition, most of our switch modules use through-hole technology relays (as opposed to surface mount) allowing easy replacement without the need for special tools. Learn more: pickeringrelay.com



Learn more: pickeringtest.com/whypickering
Note*: Currently the 110 GHz products come with a 1-year Warranty

COMPREHENSIVE RANGE OF RF & MICROWAVE CONNECTORS & CABLES

Connector Types used on Pickering RF & Microwave Modules

SMB Connector

This is a push-fit connector with a small outline making it suitable for high density RF switching. It typically has a maximum frequency of 4GHz and is used on many of our 3GHz PXI switches and multiplexers. It is available in 50Ω and 75Ω versions.



MCX Connector

This is a push-fit connector with a similar size to the SMB connector. It has a higher maximum frequency of typically 6GHz and is offered as an alternative to SMB on many of our switches and multiplexers. It is available in 50Ω and 75Ω versions.



MS-M Connector

This is a multi-way connector with an impedance of 50Ω and maximum frequency of 500 MHz. Its small footprint makes it suitable for single slot high-density RF modules such as our 40-755A 17x SPDT switch and 40-755A 10 bank 4 to 1 multiplexer.



SMA Connectors

This is a threaded connector which mates well with semi-rigid and larger cables than the MCX/SMB, ensuring a higher performance and lower loss. Ideally the connector should be secured with a torque spanner to ensure that it is sufficiently tightened while avoiding accidental mechanical damage.



It is used on many of our 50 Ω microwave switching modules in different variations depending on the maximum frequency of the switch as follows:

- 26.5 GHz - Standard SMA
- 40 GHz - SMA-2.9
- 50 GHz - SMA-2.4
- 67 GHz - SMA-1.85
- 110 GHz - SMA-1.0

Other Connectors

Selected modules are available with alternative connector types such as BNC, N-type, F-type, SMZ, 1.0/2.3 and 1.6/5.6. If you have a particular connector requirement, please contact your local Pickering sales office.



RF & Microwave Cable Assemblies

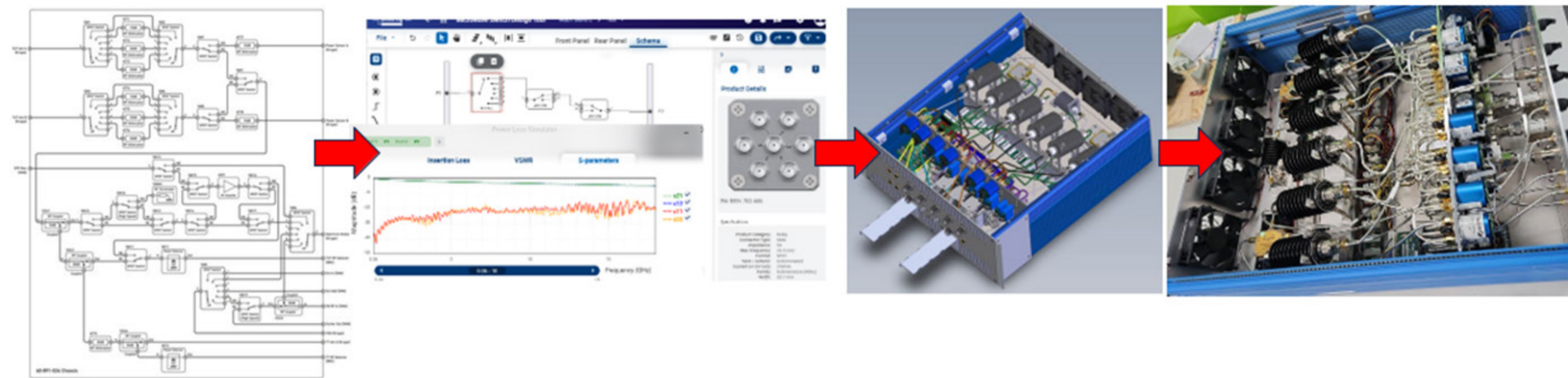


We support all our RF and microwave switching products with a wide range of cabling options allowing easy integration into your test system.

The range of coaxial cables available includes:

- BNC to BNC 50Ω
- SMB to SMB 50Ω
- SMA to SMA 50Ω
- MCX to MCX 50Ω
- MMCX to MMCX 50Ω
- SMB to BNC 50Ω
- BNC to SMA 50Ω
- SMB to SMA 50Ω
- N type to SMA 50Ω
- BNC to MCX 50Ω
- MS-M multi-way to SMB 50Ω
- MS-M multi-way to unterminated 50Ω
- BNC to BNC 75Ω
- SMZ/type43 to SMZ/type43 75Ω
- 1.0/2.3 to 1.0/2.3 75Ω
- Mini SMB to Mini SMB 75Ω
- MCX to MCX 75Ω
- F type to F type 75Ω
- 1.6/5.6 to 1.6/5.6 75Ω
- Mini SMB to BNC 75Ω
- Mini SMB to SMZ/type43 75Ω
- Mini SMB to 1.0/2.3 75Ω
- BNC to MCX 75Ω

CUSTOMER-SPECIFIED MICROWAVE SWITCH SYSTEMS



Design

Simulation

3D Model

Final Product

60-891 Turnkey LXI Ethernet Integrated Solutions

Do you have limited engineering resources or demand performance that can only be delivered with a fully integrated solution? Pickering have the expertise and ability to turn your high-level requirements for a microwave switching sub-system into the fully integrated solution that you need. You provide us with your unique configuration and specification, and our engineers will work closely with you to provide a well-defined, fully integrated and supportable end product that will satisfy your microwave testing needs.

- A turnkey subsystem with a COTS foundation, optimized for size and performance
- Simulated RF performance, 3D model, and datasheet provided before the build
- Fully documented and tested, with results shared prior to delivery
- Integrated into Pickering's commercial manufacturing process
- Tied to commercial obsolescence mitigation strategy
- Support for a wide variety of software application languages
- Endpoint-to-endpoint signal routing application included
- 3-year warranty and typical 20-year support

Visit pickeringtest.com/turnkey to learn more.

Flexible PXI & LXI Ethernet Switching Platforms

These flexible, configurable PXI & LXI microwave switch platforms may be specified with a mix of high-performance microwave relays up to 110GHz bandwidth with 50 Ω impedance or up to 2.5 GHz with 75 Ω impedance and with a range of connector types.

- Available relays include Transfer, SPDT, SP4T, SP6T, SP8T, SP10T and SP12T in unterminated and terminated versions
- Flexibility in front-panel relay positioning helps minimize external interconnecting cable lengths
- LED indication of energized switch paths
- PXI & PXIe available in 1 to 6 slot wide modules
- Compact 1U to 6U form factors. An example is our LXI Microwave Multiplexers, offering the highest density configuration possible, packaging up to 16 multiplexers in a 2U high rack-mount enclosure
- Excellent RF and repeatability characteristics



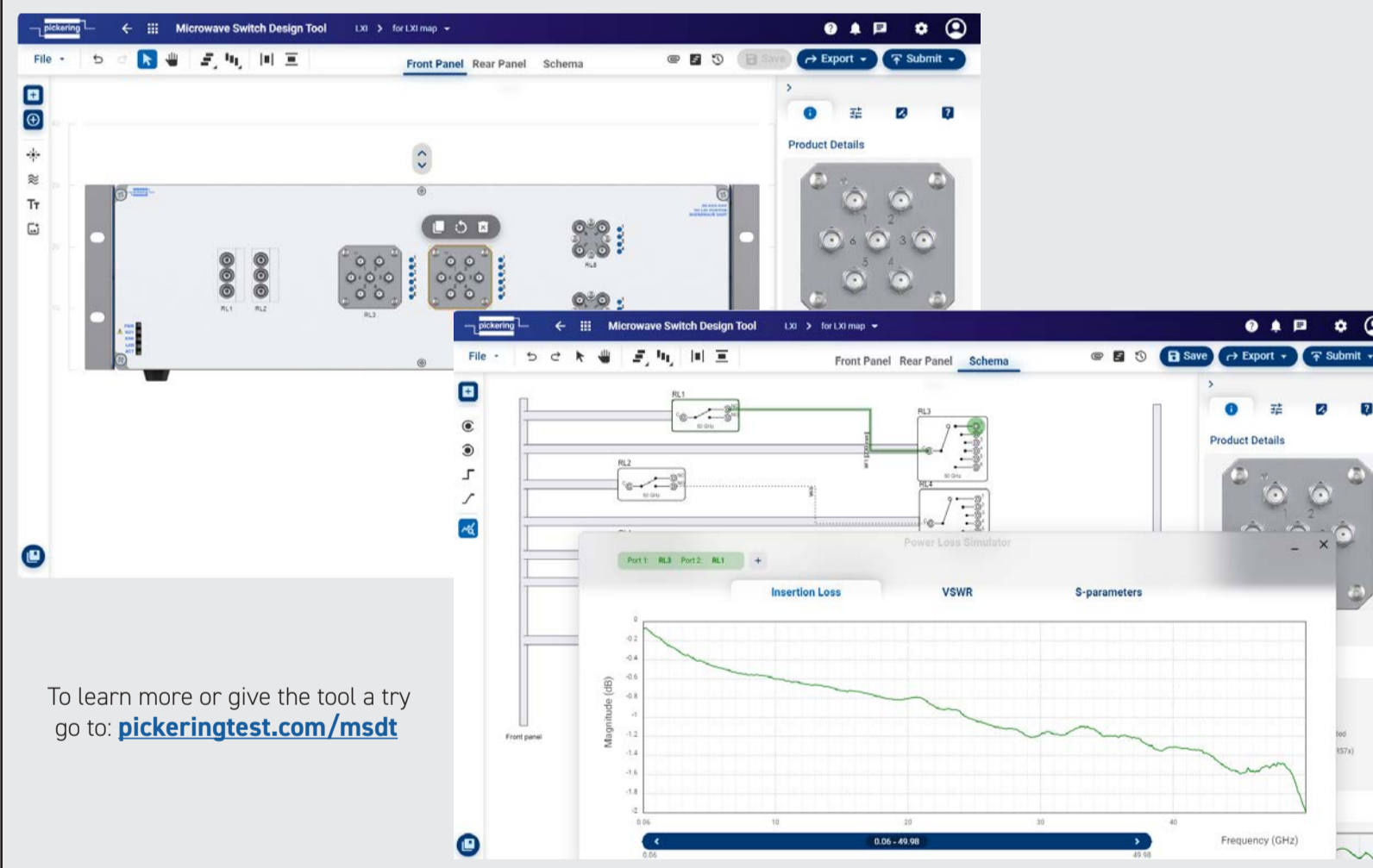
Examples of PXI & LXI Flexible Microwave Switch Platforms

Visit pickeringtest.com/flexible

MICROWAVE SWITCH DESIGN TOOL

Configuring an application-specific PXI or LXI microwave signal routing system, or RF Interface Unit (RFIU), has never been easier than with our new **Microwave Switch Design Tool (MSDT)**. This free on-line graphical tool lets test system designers quickly and easily model and verify their RFIU designs in a virtual modelling environment, reducing risk and accelerating design-to-production. It couples intuitive graphical schematic design, using a comprehensive internal library of components and cables, with the ability to simulate every RF path's power loss performance.

System test engineers can create and optimize the design to meet their required specifications, and then seamlessly model the external interface panel of a flexible or turnkey RFIU. They can then electronically share the completed project with Pickering's engineering team and collaborate to further optimize the design and help overcome any technical challenges. Once the design is fit for purpose and approved for production, our experienced microwave team will rapidly manufacture a complete application-specific RFIU as detailed in the turnkey and flexible sections left.



To learn more or give the tool a try go to: pickeringtest.com/msdt

Microwave Switch Options

Switch Type	Termination	Bandwidth & Connector Type											
		2.5 GHz DIN 1.6/5.6 (75 Ω)	3 GHz SMA (50 Ω)	6 GHz SMA (50 Ω)	8 GHz N-Type (50 Ω)	12.4 GHz N-Type (50 Ω)	18 GHz SMA (50 Ω)	22 GHz SMA (50 Ω)	26.5 GHz SMA (50 Ω)	40 GHz SMA 2.9 (50 Ω)	50 GHz SMA 2.4 (50 Ω)	67 GHz SMA 1.85 (50 Ω)	110 GHz SMA 1.0 (50 Ω)
Transfer (DPDT)	Unterminated	SPDT	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SP4T	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SP6T	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SP8T	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SP10T	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SP12T	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Transfer (DPDT)	Terminated	SPDT	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SP4T	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SP6T	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SP8T	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SP10T	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		SP12T	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Non-switching Components

To provide functionality in addition to switching, we also offer power dividers, attenuators, couplers and terminations. To maximize system flexibility other component types/specifications can be supplied upon request.

- RF Switching to 8 GHz with Microwave to 110 GHz
- 8 GHz Solid State
- Matrices
- MUXs
- SPDT Switches
- Transfer Switches
- Attenuators
- Turnkey LXI Ethernet Microwave Subsystems



Pickering's RF & Microwave Switching Map is a single-sheet reference to over 500 modules in PXI, PXIe, LXI Ethernet & USB formats, including their basic specifications and cabling options.

pickeringtest.com
2025



pickering RF & Microwave Switching Map

What to expect when you engage with Pickering for your RF/Microwave switching

Defining your signal routing and distribution systems can be challenging. Work with an experienced global supplier who possesses the necessary skills to complete the task within the agreed timeline and budget. When you work with us, you get the following:

- Direct collaboration with our engineers during the design phase
- Optimized solutions tailored to your high-level requirements
- A fully documented end product
- Platform and component flexibility to meet your specific needs
- Whether you need one or 20 systems, our process treats them all the same

Exciting NEW Industry-first Technologies

PXI & PXIe microwave relay modules capable of switching 110 GHz signals.

PXI & PXIe MEMS-based RF MUXs deliver 300x operational life and 60x test system throughput compared to EMR-based equivalents.

Switching | Simulation | Programmable Resistors | Custom Design | Software | Reed Relays | Connectivity & Cables

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