

# PLX PRODUCT SNAPSHOT



## PCI Express® Compliant Switches & Bridges

The World's Largest Provider of PCIe Switch and Bridge Silicon

### PCI EXPRESS ExpressLane™ Gen 2 & Gen 1 PCIe-compliant Switches

PCI-SIG® Base Spec.	Part Number	Lanes	Ports	Latency (ns)	Dual Cast™	Read Pacing™	DBA*	NT*	DMA*	HPC*	VCs*	SSC*	Power Typ. (W)	Package (mm²)
r2.0	PEX 8648	48	12	140	Yes	Yes	Yes	Yes	—	3	1	—	4.0	27x27
r2.0	PEX 8647	48	3	140	Yes	Yes	Yes	—	—	0	1	—	3.8	27x27
r2.0	PEX 8632	32	12	145	Yes	Yes	Yes	Yes	—	3	1	—	2.8	27x27
r2.0	PEX 8624	24	6	145	Yes	Yes	Yes	Yes	—	3	1	—	3.0	19x19
r2.0	PEX 8619	16	16	140	Yes	Yes	Yes	Yes	Yes	^^	2	Yes	2.0	19x19
r2.0	PEX 8618	16	16	140	Yes	Yes	Yes	Yes	—	^^	2	Yes	1.9	19x19
r2.0	PEX 8616	16	4	150	Yes	Yes	Yes	Yes	—	2	1	—	2.2	19x19
r2.0	PEX 8615	12	12	140	Yes	Yes	Yes	Yes	Yes	^^	2	Yes	1.6	19x19
r2.0	PEX 8614	12	12	140	Yes	Yes	Yes	Yes	—	^^	2	Yes	1.5	19x19
r2.0	PEX 8612	12	3	150	Yes	Yes	Yes	Yes	—	2	1	—	2.0	19x19
r2.0	PEX 8609	8	8	140	Yes	Yes	Yes	Yes	Yes	^^	2	Yes	1.2	15x15
r2.0	PEX 8608	8	8	140	Yes	Yes	Yes	Yes	—	^^	2	Yes	1.2	15x15
r2.0	PEX 8606	6	6	190	Yes	Yes	Yes	Yes	—	^^	2	Yes	1.0	15x15
r2.0	PEX 8604	4	4	190	Yes	Yes	Yes	Yes	—	^^	2	Yes	0.8	15x15
r1.1 / 1.0a	PEX 8548	48	9	110	—	—	Yes	—	—	3	1	—	4.9	37.5x37.5
r1.1 / 1.0a	PEX 8547	48	3	110	—	—	Yes	—	—	0	1	—	4.9	37.5x37.5
r1.1 / 1.0a	PEX 8533	32	6	115	—	—	Yes	—	—	3	1	—	3.3	35x35
r1.1 / 1.0a	PEX 8532	32	8	275	—	—	—	Yes	—	8	2	—	5.7	35x35
r1.1 / 1.0a	PEX 8525	24	5	115	—	—	Yes	—	—	3	1	—	2.6	31x31
r1.1 / 1.0a	PEX 8524	24	6	275	—	—	—	Yes	—	6	2	—	3.9	31x31
r1.1 / 1.0a	PEX 8518	16	5	150	—	—	—	Yes	—	5	2	Yes	2.6	23x23
r1.1 / 1.0a	PEX 8517	16	5	150	—	—	—	Yes	—	4	2	—	2.6	27x27
r1.1 / 1.0a	PEX 8516	16	4	275	—	—	—	Yes	—	4	2	—	2.6	27x27
r1.1 / 1.0a	PEX 8512	12	5	150	—	—	—	Yes	—	5	2	Yes	2.2	23x23
r1.1 / 1.0a	PEX 8509	8	8	118	—	—	Yes	—	—	3	1	—	1.2	15x15
r1.1 / 1.0a	PEX 8508	8	5	150	—	—	—	Yes	—	5	2	Yes	1.6	19x19
r1.1 / 1.0a	PEX 8505	5	5	138	—	—	Yes	—	—	3	1	—	0.8	15x15

\*DBA = Dynamic Buffer Allocation; \*NT = Non-Transparency; \*DMA = Direct Memory Access; \*HPC = Hot-Plug Controllers; ^^ = Hot-Plug control via I2C; \*VCs = Virtual Channels; \*SSC = Spread Spectrum Clock Isolation; Gen 2 devices are fully backwards compatible to r1.1/1.0a

### PCI EXPRESS ExpressLane™ PCIe-compliant Bridges

PCI-SIG® Base Spec.	Part Number	Lanes	Bus Interface	Reverse Mode	Forward Mode	Power	PCI Masters	GPIO	Package Size (mm²)
1.0a	PEX 8112	1	PCIe to PCI	Yes	Yes	400mW	4	4	10x10 13x13
1.0a	PEX 8114	4	PCIe to PCI-X	Yes	Yes	2W	4	0	17x17

### PCI EXPRESS ExpressLane™ PCIe-compliant Bridge-to-Local Bus

PCI-SIG® Base Spec.	Part Number	Lanes	Description	DMA Channels	Integrated SerDes	Power	Root Complex Mode	Package Size (mm²)
1.0a	PEX 8311	1	8/16/32-bit, 66 MHz	2	Yes	1W	Yes	21x21




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# PLX PRODUCT SNAPSHOT (continued)


## Legacy Solutions





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		<b>FastLane™ PCI to PCI, &amp; PCI to PCI-X Bridges</b>							
Part Number	PCI to	PCI Bus Type	Local Bus Support	Non-Transparency	Power	GPIO	Asynchronous	Package Size (mm <sup>2</sup> )	
PCI 6140	PCI	32-bit, 33 MHz	Rev. 2.1	No	200mW	0	No	23 x 17	
PCI 6150	PCI	32-bit, 66 MHz	Rev. 3.0	No	1.8W	4	Yes: 25-66 MHz	17 x 17	
								31 x 31	
PCI 6152	PCI	32-bit, 66 MHz	Rev. 2.2	No	300mW	4	No	15 x 15	
								32 x 32	
PCI 6154	PCI	64-bit, 66 MHz	Rev. 3.0	No	2W	4	Yes: 25-66 MHz	31 x 31	
PCI 6254	PCI	64-bit, 66 MHz	Rev. 3.0	Yes	2W	16	Yes: 25-66 MHz	31 x 31	
PCI 6466	PCI	64-bit, 66 MHz	Rev. 3.0	Yes	1W	16	Yes: 25-66 MHz	27 x 27	
PCI 6520	PCI-X	64-bit, 133 MHz	Rev. 3.0	No	2.4W	8	Yes: 25-133 MHz	27 x 27	
PCI 6540	PCI-X	64-bit, 133 MHz	Rev. 3.0	Yes	3.0W	16	Yes: 25-133 MHz	27 x 27	

PLX FastLane PCI 6000 series include the industry's broadest set of PCI-to-PCI and PCI-X to PCI-X bridges. These bridges allow more devices to be attached to the PCI bus, and provide the ability to include intelligent adapters on a PCI bus.

		<b>PCI to Local Bus I/O Accelerators</b>						
Part Number	PCI Bus Type	Local Bus Speed (max)	Core Voltage	PICMG Support	Industrial Temperature	Package Size (mm <sup>2</sup> )		
PCI 9030	32-bit, 33 MHz, PCI r2.2	60 MHz	3.3V	r2.0 Hot-Swap	Yes	26 x 26		
						12 x 12		
PCI 9052	32-bit, 33 MHz, PCI r2.1	40 MHz	5.0V	--	Yes	31.2 x 31.2		
PCI 9054	32-bit, 33 MHz, PCI r2.2	50 MHz	3.3V	r2.0 Hot-Swap	Yes	26 x 26		
						27 x 27		
PCI 9056	32-bit, 66 MHz, PCI r2.2	66 MHz	2.5V	r2.0 Hot-Swap	Yes	17 x 17		
PCI 9656	64-bit, 66 MHz, PCI r2.2	66 MHz	2.5V	r2.0 Hot-Swap	Yes	27 x 27		

PLX PCI 9000 series provide the most advanced and broadest range of general-purpose, PCI-to-local bus bridges in the industry. Our product offering includes two types of I/O Accelerators: Targets and Masters.

		<b>USB 2.0 High Speed Controllers</b>						
Part Number	CPU Interface	Performance	Active Power	Suspended Power	I/O Voltage	Package Size (mm <sup>2</sup> )		
NET 2270	8/16-bit, Asynchronous Local Bus	Up to 40MB per second	n/a	n/a	3.3V to 5V	10 x 10		
NET 2272	8/16-bit, Asynchronous Local Bus	Up to 40MB per second	186mW	8.1μW	1.8V to 5V	10 x 10		
						6 x 6		
NET 2280	32-bit, 33 MHz, PCI v3.0 Compliant	Up to 40MB per second	260mW	0.25μW	3.3V to 5V	14 x 14		
						8 x 8		
NET 2282	32-bit, 66 MHz, PCI v3.0 Compliant	Up to 40MB per second	220mW	316μW	3.3V to 5V	14 x 14		

PLX USB Controllers offer superior performance, strict compliance to industry standards, and dramatic power savings. These USB controllers are widely used in printers, portable media players, GPS systems, TV tuners, PCs, laptops, notebooks, WLAN devices, mobile phones, digital cameras and camcorders.