

PLX TECHNOLOGY PCI Bridges and USB Controllers



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NEW!
TECHNOLOGY

EXPRESSLANE™ PCI EXPRESS SWITCHES

ExpressLane™ PEX 86xx Series

These devices include the highest PCIe switch lane counts in the industry, at 96 and 80 lanes. These switches are PCI-SIG® PCIe 2.0 (Gen 2) specification-compliant with unique PLX-only features, including support for 16 port configurations, integrated non-transparency (NT) ports and a suite of performance-enhancing and system de-bug tools that empower system architects. The PLX ExpressLane™ PEX 8696 (96 lanes, 24 ports), PEX 8680 (80 lanes, 20 ports), PEX 8664 (64 lanes, 16 ports) and PEX 8649 (48 lanes, 12 ports) allow designers to build switch fabrics, redundant backplanes and complex storage applications without having to deal with high latency, high power consumption and bandwidth limitations associated with using multiple smaller switch chips.

For quantities of 5 and up, call for quote.

MOUSER STOCK NO.	PLX Part No.	Description	Price Each
862-PEX8649-AA50BCF	PEX 8649-AA50BC F	48-Lane, 12-Port PCI Express Gen 2 (5.0 GT/s) Switch, 27 x 27mm FCBGA	167.01
862-PEX8664-AA50BCF	PEX 8664-AA50BC F	64-Lane, 16-Port PCI Express Gen 2 (5.0 GT/s) Switch, 35 x 35mm FCBGA	225.46
862-PEX8680-AA50BCF	PEX 8680-AA50BC F	80-Lane, 20-Port PCI Express Gen 2 (5.0 GT/s) Switch, 35 x 35mm FCBGA	272.22
862-PEX8696-AA50BCF	PEX 8696-AA50BC F	96-Lane, 24-Port PCI Express Gen 2 (5.0 GT/s) Switch, 35 x 35mm FCBGA	315.64

ExpressLane™ PEX 8112 PCI Express to PCI Bridge

The ExpressLane™ PEX 8524 device offers 24 PCI Express lanes, capable of configuring to 6 flexible ports. The switch conforms to the PCI Express Base Specification, rev. 1.0a. The 24-lane switch enables users to add scalable, high bandwidth I/Os to a wide variety of applications including servers, communications, storage, blade servers, and embedded systems. The device is hardware configurable and software programmable, allowing users to tailor their port configurations and QoS operating characteristics to suit their application requirements. The PEX 8524 is offered in a 31 x 31mm 644-ball or a 35 x 35mm 680-ball PBGA.

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	PLX Part No.	Description	Price Each		
			1	50	100
862-PEX8112-AA66BIF	PEX8112-AA66BIF	1 Lane PCI Express to PCI Bridge, 144-ball PBGA (Lead-Free)	15.56	14.62	13.67

PEX 8525 PCI Express Switch

The ExpressLane™ PEX 8525/8525S device offers 24 PCI Express lanes, capable of configuring up to 5 flexible ports. The switch conforms to the PCI Express Base Specification, rev. 1.1. The 24-lane switch enables users to add scalable, high bandwidth I/Os to a wide variety of applications including servers, storage, communications, blade servers, and embedded-control systems. The PEX 8525/8525S is well suited for fan-out, aggregation, dual-graphics, peer-to-peer, and intelligent I/O module applications. The architecture supports packet cut-thru with the industry's lowest latency of 115ns (x8 to x8) for a 24-lane switch. This, combined with large packet memory (1024 byte maximum payload size) and non-blocking internal switch architecture, provide full line-rate on all ports for performance-hungry applications.

862-PEX8525-AA25BIG	PEX8525-AA25BIG	24 Lane 5 Port PCI Express Switch (Lead-Free)	74.10	69.50	64.90
862-PEX8525-AARDK	PEX8525-AARDK	Rapid Dev Kit For PEX 8525	1062.50	-	-

PEX 8533 PCI Express Switch

The ExpressLane™ PEX 8533/8533S device offers 32 PCI Express lanes, capable of configuring up to 6 flexible ports. The switch conforms to the PCI Express Base Specification, rev. 1.1. The 32-lane switch enables users to add scalable, high bandwidth I/Os to a wide variety of applications including servers, storage, communications, blade servers, and embedded-control systems. The PEX 8533S is well suited for fan-out, aggregation, peer-to-peer, backplane, and switch fabric applications. The architecture supports packet cut-thru with the industry's lowest latency of 115ns (x8 to x8) for a 32-lane switch. This, combined with large packet memory (1024 byte maximum payload size) and non-blocking internal switch architecture, provide full line-rate on all ports for performance-hungry applications.

862-PEX8533-AA25BIG	PEX8533-AA25BIG	32 Lane 6 Port PCI Express Switch (Lead-Free)	108.14	101.90	98.00
862-PEX8533-AARDK	PEX8533-AARDK	Rapid Dev Kit For PEX 8533	1056.25	-	-

PEX 8508 PCI Express Switch

The ExpressLane™ PEX 8508 8-lane, 5-port switch product offers PCI Express switching capability conforming to the PCI Express Specification r1.1. This device enables users to add low cost, scalable high bandwidth switching, both fan-in/out and peer-to-peer, to a wide variety of applications including office automation, network interface adapters, docking stations, AMC cards, and processor isolation for servers, storage, and communications. Non-transparent bridging allows the designer to isolate processors in multi-host designs. This switch is hardware configurable and software programmable, allowing users to tailor their port configurations and quality-of-service system needs to suit their application requirements. The PEX 8508 is offered in a 19 x 19mm 296-ball PBGA.

862-PEX8508-AC25BIG	PEX8508-AC25BIG	2.5GHz SerDes, BGA, Industrial Temperature (Lead-Free)	34.72	-	-
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FASTLANE™ 32-BIT PCI-TO-PCI BRIDGES

PCI 6140 33MHz PCI-to-PCI Bridge

The FastLane™ PCI 6140 PCI-to-PCI Bridge (HB1) is optimized to provide PCI masters the ability to achieve optional zero clock latency in bursting data through the PCI-PCI bridge. It supports up to four secondary PCI master devices. The PCI 6140 is offered in a 23 x 17mm 128-pin PQFP.

862-PCI6140-AA33PC	PCI6140-AA33PC	PCI to PCI Bridge, 32bit, 33MHz, 128pin PQFP Package	13.30	12.50	11.70
862-PCI6140-AA33PC-G	PCI6140-AA33PC G	PCI to PCI Bridge, 32bit, 33MHz, 128pin PQFP Package (Lead-Free)	13.30	12.50	11.70

PCI 6150 66MHz PCI-to-PCI Bridge

The FastLane™ PCI 6150 PCI-to-PCI Bridge (HB4) is designed for high performance, high availability applications in hot swap, bus expansions, programmable data transfer rate control, frequency conversions from slower PCI to faster PCI or from faster PCI to slower PCI buses. The PCI 6150 has sophisticated buffer management and buffer configuration options designed to provide customizable performance optimization. The PCI 6150 is offered in a 17 x 17mm 256-ball BGA or 31 x 31mm 208-pin PQFP.

862-PCI6150-BB66BC-G	PCI6150-BB66BC G	Asynchronous PCI-to-PCI Bridge, 32bit, 66MHz, 256pin BGA (Lead-Free)	16.50	15.50	14.50
862-PCI6150-BB66PC-G	PCI6150-BB66PC G	Asynchronous PCI to PCI Bridge, 32bit, 66MHz, 208pin PQFP (Lead-Free)	14.90	14.00	13.10

FASTLANE™ PCI 6154 ASYNCHRONOUS FASTLANE™ PCI-TO-PCI BRIDGE

The PCI 6154 (HB2) asynchronous 64-bit 66MHz PCI-to-PCI bridge is designed for high performance, high availability applications in bus expansions, programmable data transfer rate control, frequency conversions from slower PCI to faster PCI or from faster PCI to slower PCI buses. The PCI 6154 has sophisticated buffer management and buffer configuration options designed to provide customizable performance optimization.

For quantities of 500 and up, call for quote.

862-PCI6154-BB66BC-G	PCI6154-BB66BC-G	PCI 6154 PCI-to-PCI Bridge Chip (PBGA) (Lead-Free)	32.50	30.50	28.50
862-PCI6154-RDK	PCI6154RDK	PCI 6154 Development Kit	500.00	-	-

FASTLANE™ PCI 6254 PCI-TO-PCI BRIDGE

For quantities of 500 and up, call for quote.

862-PCI6254-BB66BC-G	PCI6254-BB66BC G	PCI 6254 PCI-to-PCI Bridge Chip (Lead-Free)	43.22	40.55	37.88
862-PCI6254-RDK	PCI6254RDK	PCI 6254 Development Kit	500.00	-	-

NETCHIP™ 227x 16-BIT USB 2.0 HIGH-SPEED PROGRAMMABLE PERIPHERAL CONTROLLER

NetChip's NET2270 16-bit USB 2.0 high-speed programmable peripheral controller is optimized for single or bi-directional data transfer devices such as printers, scanners, digital cameras, mass storage, and audio products. NET2270, the latest addition to our General Purpose USB Peripheral Controller family, complements our flagship, world's first NET2290 32-bit USB 2.0 highspeed peripheral controller.

USB Transceiver:

- Supports Full Speed (12 MHz) or High Speed (480MHz)
- Serial data transmitter and receiver
- Parallel data interface to SIE
- Single parallel data clock output with on-chip PLL to generate higher speed serial data clocks
- Data and clock recovery from USB serial data stream
- SYNC/EOP generation and checking
- Bit stuffing/unstuffing; bit stuff error detection
- Logic to facilitate Resume signaling
- Logic to facilitate Wake Up and Suspend detection
- Ability to switch between FS and HS terminations/signaling

Endpoint FIFOs:

- 4 Choices of preset configurations
- 2 Kbytes of configurable FIFO memory for endpoints
- Supports max packet size up to 1K bytes, double buffered

Serial Interface Engine (SIE):

- Interface between FIFOs and USB transceiver
- CRC generator and checker
- Packet identifier (PID) decoder
- Forced error conditions
- USB 2.0 Test Modes

USB Protocol Controller:

- Host to device communication
- USB bit level protocol (Serial Interface Engine)
- Automatic retry of failed packets
- Up to 3 Isochronous, Bulk or Interrupt endpoints, each with a configurable FIFO
- Configurable Control Endpoint 0
- Interface to FIFOs
- Simulated disconnect signaling allows device controlled enumeration
- Software control of USB suspend and root port reset detection
- Software control of device remote wakeup
- Software control of root port wakeup

For quantities of 500 and up, call for quote.

862-NET2270-3B-LF	NET2270REV3B-LF	Local Bus to USB 2.0 High Speed Peripheral Controller - 10x10mm 64-Pin TQFP Package	15.38	14.45	13.52
862-NET2272-1A-LF	NET2272REV1A-LF	Local Bus to USB 2.0 High Speed Peripheral Controller - 10x10mm 64-Pin TQFP Package	12.82	12.05	11.28
862-NET2272-1A-BCF	NET2272REV1A-BC F	Local Bus to USB 2.0 High Speed Peripheral Controller - 6x6mm 64-Ball BGA Package	12.82	12.05	11.28
862-NET2272RDK-II	NET2272RDK-II	NET2272 RAPID Development Kit	795.00	-	-