

PCI Express Gen 2 : Overview

PEX 8612

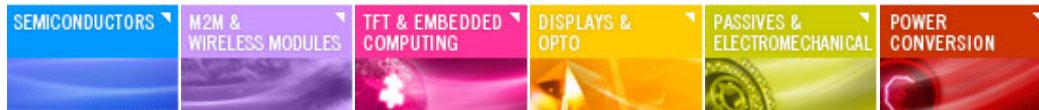
12-Lane, 3-Port PCI Express Gen 2 (5.0 GT/s) Switch, 19 x 19mm FCBGA
The ExpressLane™ PEX 8612 device offers 12 PCI Express Gen 2 (5.0 GT/s) lanes, capable of configuring up to 3 ports. The switch conforms to the PCI Express Base Specification, rev 2.0. The 12-lane switch enables users to add scalable, high bandwidth, non-blocking interconnection to a wide variety of applications including workstations, communications, storage, and embedded systems as well as intelligent I/O modules and add-in cards. The PEX 8612 boasts the industry's lowest 12-lane PCIe Gen 2 latency at 150ns and unsurpassed performance with its non-blocking architecture, capable of supporting both host-centric as well as true peer-to-peer traffic. The PEX 8612 also features an on-chip Non-Transparent port for dual-host and failover applications, as well as two on-chip Hot-Plug controllers, allowing users to implement single-chip solutions. 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 8612 is offered in a 19 x 19mm 324-ball FCBGA. This device is available in lead-free packaging.

PEX 8616

16-Lane, 4-Port PCI Express Gen 2 (5.0 GT/s) Switch, 19 x 19mm FCBGA
The ExpressLane™ PEX 8616 device offers 16 PCI Express Gen 2 (5.0 GT/s) lanes, capable of configuring up to 4 flexible ports. The switch conforms to the PCI Express Base Specification, rev 2.0. The 16-lane switch enables users to add scalable, high bandwidth, non-blocking interconnection to a wide variety of applications including workstations, communications, storage, and embedded systems as well as intelligent I/O modules and add-in cards. The PEX 8616 boasts the industry's lowest 16-lane PCIe Gen 2 latency at 150ns and unsurpassed performance with its non-blocking architecture, capable of supporting both host-centric as well as true peer-to-peer traffic. The PEX 8616 also features an on-chip Non-Transparent port for dual-host and failover applications, as well as two on-chip Hot-Plug controllers, allowing users to implement single-chip solutions. 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 8616 is offered in a 19 x 19mm 324-ball FCBGA. This device is available in lead-free packaging.

PEX 8624

24-Lane, 6-Port PCI Express Gen 2 (5.0 GT/s) Switch, 19 x 19mm FCBGA
The ExpressLane™ PEX 8624 device offers 24 PCI Express Gen 2 (5.0 GT/s) lanes, capable of configuring up to 6 flexible ports. The switch conforms to the PCI Express Base Specification, rev 2.0. The 24-lane switch enables users to add scalable, high bandwidth, non-blocking interconnection to a wide variety of applications including workstations, communications, storage, and embedded systems as well as intelligent I/O modules and add-in cards. The PEX 8624 boasts the industry's lowest 24-lane PCIe Gen 2 latency at 145ns and unsurpassed



performance with its non-blocking architecture, capable of supporting both host-centric as well as true peer-to-peer traffic. The PEX 8624 also features an on-chip Non-Transparent port for dual-host and failover applications, as well as three on-chip Hot-Plug controllers, allowing users to implement single-chip solutions. 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 8624 is offered in a 19 x 19mm 324-ball FCBGA. This device is available in lead-free packaging.

PEX 8632

32-Lane, 12- Port PCI Express Gen 2 (5.0 GT/s) Switch, 27 x 27mm FCBGA
The ExpressLane™ PEX 8632 device offers 32 PCI Express Gen 2 (5.0 GT/s) lanes, capable of configuring up to 12 flexible ports. The switch conforms to the PCI Express Base Specification, rev 2.0. The 32-lane switch enables users to add scalable, high bandwidth, non-blocking interconnection to a wide variety of applications including servers, communications, storage, blade servers, and embedded systems. The PEX 8632 boasts the industry's lowest 32-lane PCIe Gen 2 latency at 145ns and unsurpassed performance with its non-blocking architecture, capable of supporting both host-centric as well as true peer-to-peer traffic. The PEX 8632 also features an on-chip Non-Transparent port for dual-host and failover applications, as well as three on-chip Hot-Plug controllers, allowing users to implement single-chip solutions. 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 8632 is offered in a 27 x 27mm 676-ball FCBGA. This device is available in lead-free packaging.

PEX 8648

48-Lane, 12-Port PCI Express Gen 2 (5.0 GT/s) Switch, 27 x 27mm FCBGA
The ExpressLane™ PEX 8648 device offers 48 PCI Express Gen 2 (5.0 GT/s) lanes, capable of configuring up to 12 flexible ports. The switch conforms to the PCI Express Base Specification, rev 2.0. The 48-lane switch enables users to add scalable, high bandwidth, non-blocking interconnection to a wide variety of applications including servers, communications, storage, blade servers, and embedded systems. The PEX 8648 boasts the industry's lowest PCIe Gen 2 latency at 140ns and unsurpassed performance with its non-blocking architecture, capable of supporting both host-centric as well as true peer-to-peer traffic. The PEX 8648 also features an on-chip Non-Transparent port for dual-host and failover applications, as well as three on-chip Hot-Plug controllers, allowing users to implement single-chip solutions. 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 8648 is offered in a 27 x 27mm 676-ball FCBGA. This device is available in lead-free packaging.