Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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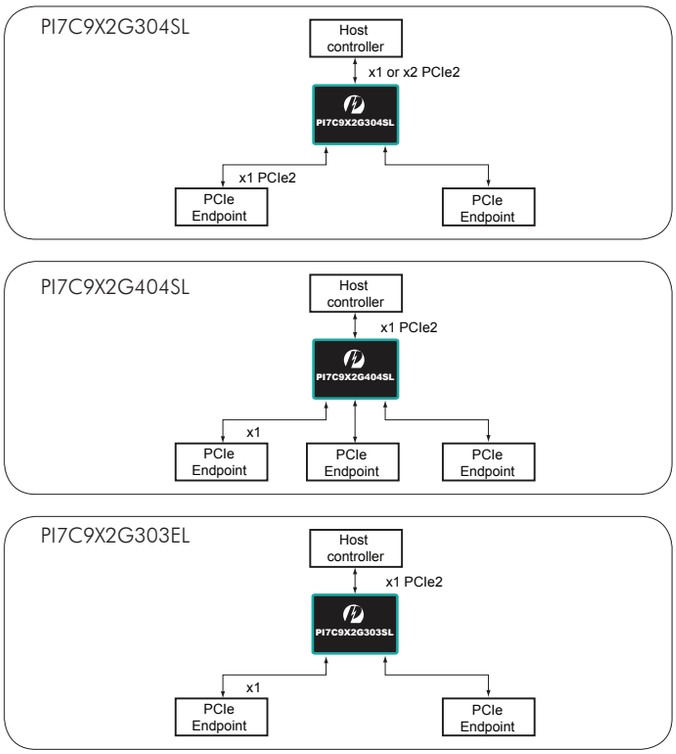
PI7C9X2G304SL, 404SL, 303EL

Gen2 PCIe® 3-Port/4-Lane, 4-Port/4-Lane SlimLine™ Packet Switch; Gen2 PCIe® 3-Port/3-Lane, ExtremeLo™ Packet Switch

The PI7C9X2G Packet Switch family is a PCI Express® 2.1 specifically designed to meet the latest low-power, lead (Pb)-free and green system requirements. The family is a high-performance, cost-effective solution that can be implemented in systems such as Embedded system, Wi-Fi Router/Gateway, Printer, Storage, combo card, HBA, Set-top box, motherboard, laptop, docking station, and other power-sensitive high performance platforms. All family products contain Pericom's proprietary power-saving PowerSave™ technology. The family provide users the flexibility to expand or fan-out from a wide range of I/O Bridges such as PCH, ICH, IOH, embedded MCU, FPGA, and other Application Specific ICs.

- The PI7C9X2G304SL provides one x1 or x2 upstream port and two x1 downstream ports.
- The PI7C9X2G404SL provides one x1 upstream port and three x1 downstream ports.
- The PI7C9X2G303EL provides one x1 upstream port and two x1 downstream ports.

Block Diagram



Features

- Non-blocking full-wired switching capability at 32 Gbps when all 4 lanes are enabled (304SL, 404SL) and at 24 Gbps when all 3 lanes are enabled (303SL)
- Integrated 100MHz Clock buffer for each downstream port
- Reliability, Availability and Serviceability
  - Supports Data Poisoning and End-to-End CRC
  - Advanced Error Reporting and Logging
  - IEEE 1149.6 JTAG interface support
- Link Power Management
  - Supports L0, L0s, L1, L2, L2/$L3_{Ready}$ and L3 link power state
  - Active state power management for L0s and L1 state
- Device State Power Management
  - Supports D0, $D3_{Hot}$ and $D3_{Cold}$
  - 3.3V Aux Power support in $D3_{Cold}$ power state
- Supports up to 256-byte maximum payload size
- Power Dissipation: 0.72 W typical in L0 normal mode and 0.2W typical in L1 mode (0.74 W for 304SL)
- Industrial Temperature Range: -40°C to 85°C
- MTBF: TBD
- Package: 128-pin LQFP 14mm x 14mm (304SL, 404SL)
  136-pin LQFP 8mm x 8mm (303EL)
  - Pb free and 100% Green

Enhanced Features

- Programmable Driver Current and De-Emphasis Level at each individual port
- 150ns typical latency for packet running through switch without blocking
- Supports "Cut-through" (Default) as well as "Store and Forward" mode for switching packets
- Advanced Power Savings
  - Empty downstream ports are set to idle
  - Clock to corresponding circuit is turned off when any port enters L1 or ASPM L1
  - Supports Access Control Service (ACS) for peer-to-peer traffic
  - Supports Address Translation (AT) packet for SR-IOV application