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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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PRODUCT BRIEF

PI7C9X2G912GP

PCIe2 9-Port/12-Lane Packet Switch, GreenPacket Family

The PI7C9X2G912GP is a 12-lane PCI Express Gen 2 Switch with 9 PCI Express ports specifically designed to meet high performance and the latest GREEN low-power, lead (Pb)-free system requirements, such as Networking/ Telecom, Embedded, Server, Storage and other platforms. The PI7C9X2G-912GP supports x 2 configurations apply for high performance and multiple functional applications

The PI7C9X2G912GP provides elastic configuration as below.

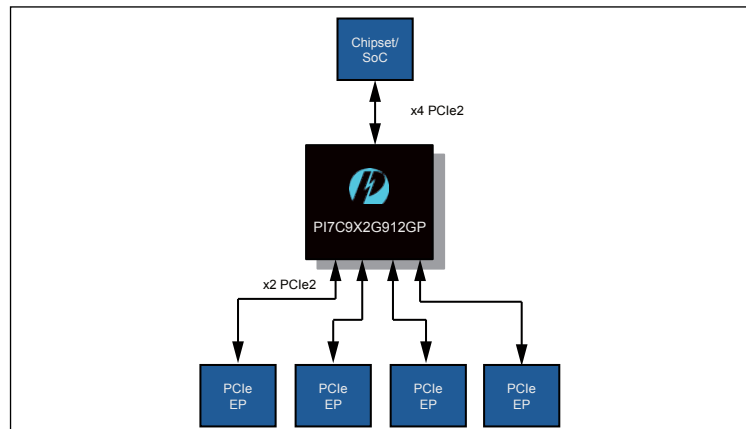
Upstream port	Downstream port
x4 PCIe2	8 x1 PCIe2
x4 PCIe2	4 x2 PCIe2
x4 PCIe2	1 x4 + 4 x1 PCIe2

Industry Specifications Compliance

- PCI Express® Base Specification, Revision 2.1
- PCI Express CEM Specification, Revision 2.0
- PCI-to-PCI Bridge Architecture Spec., Rev 1.2
- Advanced Configuration Power Interface (ACPI) Specification
- SMBus interface support
- I2C Slave interface support

Applications

- Networking Switch Router
- Wired/ Wireless Telecom/ data communication
- Control plane
- NAS/ Storage
- Server
- Embedded system
- HBA / Combo cards
- IPC/ Industrial control
- Printer/ MFP/ Peripheral
- Surveillance/ Security



Features

- PCISIG PCI Express 2.1 certificated
- Reliability, Availability and Serviceability
 - Supports Data Poisoning and End-to-End CRC
 - Advanced Error Reporting and Logging
- Device State Power Management
 - Supports D0, D3Hot and D3Cold device power states
- Advanced Power Savings
 - Empty downstream ports are set to idle
- Support Multicast
- Programmable driver current and de-emphasis level at each individual port
- Port Arbitration: Round Robin (RR), Weighted RR and Time-based Weighted RR
- Extended Virtual Channel capability
 - Two Virtual Channels (VC) and Eight Traffic Class (TC) support
 - Independent TC/VC mapping for each port
- Supports Isochronous Traffic
 - Isochronous traffic class mapped to VC1 only
- Supports “Cut-through”(Default) as well as “Store and Forward” mode for switching packets
- Supports up to 512-byte maximum payload size
- Power Dissipation: 2.0 W typical in L0 normal mode
- Industrial Temperature Range: -40°C to 85°C
- MTBF: 50,927,360 hours
- Package: 196-pin PBGA 15mm x 15mm
 - Pb free and 100% Green

Enhanced Features

- 150ns typical latency for packet running through switch without blocking
- Link Power Management
 - Supports L0, L0s, L1, L2, L2/L3Ready and L3 link power states
 - Active state power management for L0s and L1 states
 - Supports PCI-PM and ASPM of L1.1 PM Sub-state
- Supports Device Specific PME Turn-Off Message for each downstream port
- Support Access Control Service (ACS)
- Support Address Translation (AT) packet for SR-IOV application
- Support Alternative Routing ID Interpretation (ARI)
- Support Serial Hot Plug Controller

Order Information

Part Number	Package	PB-Free& Green	Temperature
PI7C9X2G912GPANJEX*	196 PBGA	YES	-40°C TO 85°C
PI7C9X2G912GPAEVB	Board	Evaluation kit for PI7C9X2G912GPA	

*Note: Adding an X suffix = Tape/Reel