



New Product Announcement

PI7C9X2G404SV/EV
PI7C9X2G304SV/EV

Diodes Incorporated Extends its Range of PCI Express 2.0 Packet Switches with Low Power Solutions

The PI7C9X2G404SV/EV are low-power PCI Express® 2.1 4-port/ 4-lane Packet Switches and the PI7C9X2G304SV/EV are low-power PCI Express 2.1 3-port/ 4-lane Packet Switches.

The family has been specifically designed to meet the various applications in a small package with the latest low-power requirements.

The PI7C9X2G404SV/EV and 2G304SV/EV have integrated Clock Buffer and provide high-performance, cost-effective solutions in systems such as AI, IoT, IPC, Wi-Fi router, Printer, NAS, HBA, STB, PC and other power-sensitive high-performance platforms.

The PI7C9X2G404SV and the PI7C9X2G404EV offer one x1 PCIe2 upstream port and three x1 PCIe2 downstream ports.

The PI7C9X2G304SV and the PI7C9X2G304EV offer one x1/ x2 PCIe2 upstream port and two x1 PCIe2 downstream ports.

The PI7C9X2G404SV and the PI7C9X2G304SV are available in the -40°C to 85°C industrial temperature range in a 128-pin 14mm x 14mm LQFP.

The PI7C9X2G404EV and the PI7C9X2G304EV are available in the -40°C to 85°C industrial temperature range in a 136-pin 10mm x 10mm aQFN.

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The Diodes Advantage

- **Low Power consumption**
Better thermal solution and improved fit for power-sensitive applications
- **Integrated Clock Buffer**
Simplifies design and lowers the BOM cost
- **Compliant to PCISIG PCIe rev 2.1**
Ensures good interoperability
- **Supports DPC**
Eases implementation of Surprise Hot Removal in systems
- **Supports Peer-to-Peer Traffic**
Enhanced system performance
- **Footprint compatible with current parts**
Eases migration from existing designs

Applications

- Wireless AP/ Router/ Gateway
- Networking/ Telecom
- Embedded system/ IPC/ Industrial control
- Set-top box and consumer devices
- NAS/ Storage
- Peripheral/ Printer/ MFP
- Surveillance/ Security and Combo cards
- IoT/ AI
- PC/ NB PCIe slot expansion

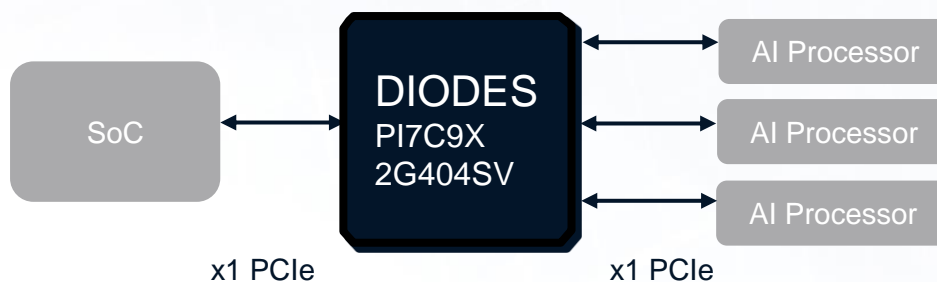


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Typical Application Example

- PI7C9X2G404SV in AI/ Deep Learning



Product Portfolio

Part Number	Description	PCIe Specification	Ports	Lanes	Power L0 (mw)	Latency (ns)	Operating Temperature (°C)	Package
PI7C9X2G404SV	4-port, 4-lane, PCIe2 Packet Switch	2.1	4	4	300	150	-40~ +85	128 LQFP
PI7C9X2G404EV	4-port, 4-lane, PCIe2 Packet Switch	2.1	4	4	300	150	-40~ +85	136 aQFN
PI7C9X2G304SV	3-port, 4-lane, PCIe2 Packet Switch	2.1	3	4	300	150	-40~ +85	128 LQFP
PI7C9X2G304EV	3-port, 4-lane, PCIe2 Packet Switch	2.1	3	4	300	150	-40~ +85	136 aQFN

Ordering Information

Orderable Part Number	Base Part Number	Package Code	Package	Pin Count	Quantity per Tape & Reel
PI7C9X2G404SVAFDEEX†	PI7C9X2G404SV	FDE	14x14mm 128 LQFP	128	1000
PI7C9X2G404EVAZXAEX†	PI7C9X2G404EV	ZXA	10x10mm 136 aQFN	136	3000
PI7C9X2G304SVAFDEEX†	PI7C9X2G304SV	FDE	14x14mm 128 LQFP	128	1000
PI7C9X2G304EVAZXAEX†	PI7C9X2G304EV	ZXA	10x10mm 136 aQFN	136	3000

† Note: X suffix denotes Tape and Reel

More Information

<https://www.diodes.com/products/connectivity-and-timing/pcie-packet-switchbridges/pcie-switch/>