DIODES
INCORPORATED

PI7C9X2G404SLQ
PI7C9X2G304SLQ

Automotive Compliant 3 & 4 Ports, 4 Lanes PCIe2.1 Packet Switches

The PI7C9X2G404SLQ and PI7C9X2G304SLQ are the industry's first PCIe Packet Switch to be AEC-Q100 qualified from TS16949 approved manufacturing sites, offering full PPAP documentation.

The PI7C9X2G404SLQ is an Automotive compliant PCI Express® 2.1 4-port/4-lane Packet Switch and the PI7C9X2G304SLQ is an Automotive compliant PCI Express 2.1 3-port/4-lane Packet Switch.

Both are specifically designed to meet the automotive market's requirements offering the latest low-power performance.

The PI7C9X2G404SLQ/304SLQ have an integrated Clock Buffer and provide high-performance, cost-effective solutions that can be implemented in systems such as Car Infotainment and Telematics Platforms, Automotive Safety, Security and Traffic Mapping.

The PI7C9X2G404SLQ offers one x1 PCIe2 upstream port and three x1 PCIe2 downstream ports.

The PI7C9X2G304SLQ offers one x1/ x2 PCIe2 upstream port and two x1 PCIe2 downstream ports.

Both are available in the -40°C to +85°C automotive temperature range in a 128-pin 14mm x 14mm LQFP.

The Diodes' Advantage

Industry's First AEC-Q100 Qualified PCIe Packet Switches

- **Qualified to AEC-Q100 Grade 3 (-40 ≤ T_A ≤ +85°C) PCIe Packet Switches**
  Meets the requirements of Automotive Infotainment and Telematics

- **Integrated Clock Buffer**
  Ease of design and lower BOM cost

- **Compliant to PCISIG PCIe Rev 2.1**
  Ensures good interoperability

- **Low Latency with Low Power consumption**
  High performance solution with eased thermal concerns

- **Supports Serial Hot-Plug**
  Plug & Play Capable

Applications

- Automotive Telematics and Infotainment
- In-Vehicle Wireless AP/Router
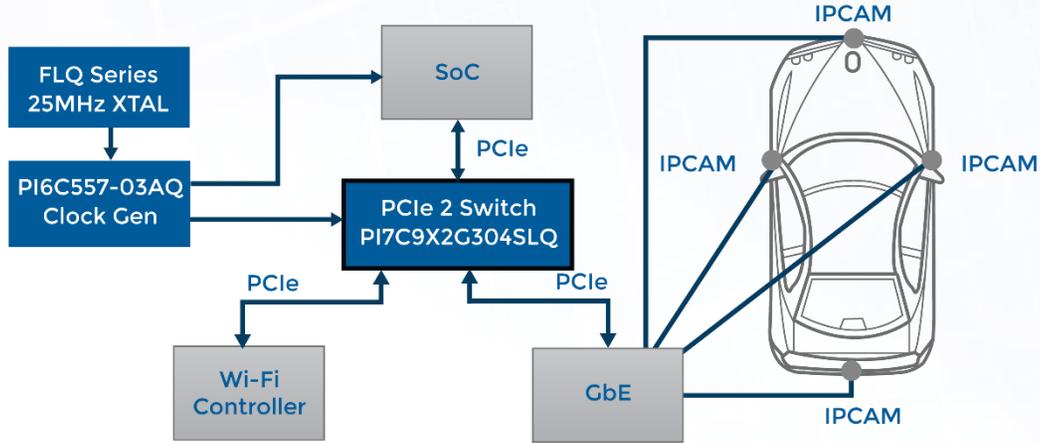- V2V
- ADAS
- Navigation
- Safety and Security
- V2G

DIODES
I N C O R P O R A T E D

Typical Application Example

- **PI7C9X2G304SLQ in Automotive**

Automotive 3-4 Ports, 4 Lanes PCIe2.1 Packet Switch

Part Number	Description	AEC-Q100	PCIe Specification	Ports	Lanes	Power L0 (mw)	Latency (ns)	Operating Temperature (°C)	Package
PI7C9X2G404SLQ	Automotive 4-port, 4-lane, PCIe2 Packet Switch	Grade3	2.1	4	4	650	150	-40 to +85	LQFP
PI7C9X2G304SLQ	Automotive 3-port, 4-lane, PCIe2 Packet Switch	Grade3	2.1	3	4	650	150	-40 to +85	LQFP

Visit Diodes website to get more product information
PI7C9X2G404SLQ
https://www.diodes.com/products/connectivity-and-timing/pcie-packet-switchbridges/pcie-switch/part/PI7C9X2G404SLQ
PI7C9X2G304SLQ
https://www.diodes.com/products/connectivity-and-timing/pcie-packet-switchbridges/pcie-switch/part/PI7C9X2G304SLQ

Ordering Information

Orderable Part Number	Base Part Number	Package Code	Pin Count	AEC-Q100	Operating Temperature (°C)	Quantity per Tray	Quantity per Tape & Reel
PI7C9X2G404SLBQFDE[†]	PI7C9X2G404SLQ	FDE	128	Grade3	-40 to +85	90	1,000
PI7C9X2G404SLBEVB	PI7C9X2G404SL	Evaluation Board	-	-	-	-	-
PI7C9X2G304SLBQFDE[†]	PI7C9X2G304SLQ	FDE	128	Grade3	-40 to +85	90	1,000
PI7C9X2G304SLBEVB-X1U	PI7C9X2G304SL	Evaluation Board	-	-	-	-	-

[†] Note: Adding an X suffix = Tape/Reel