



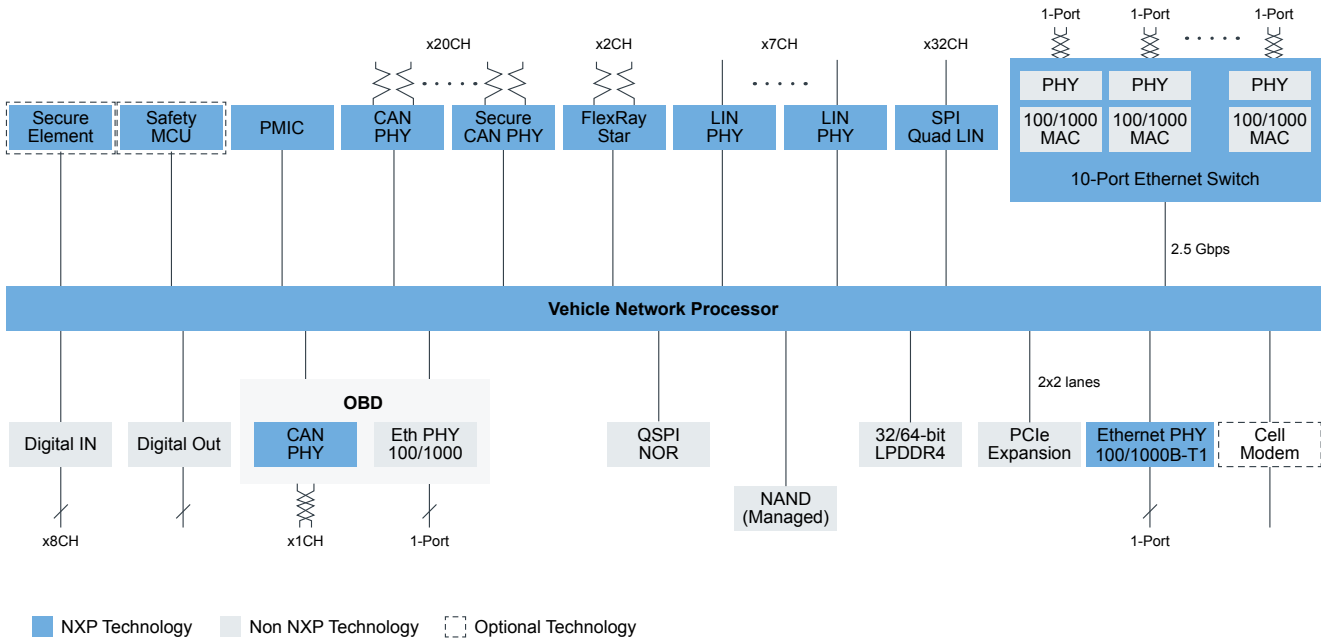
Service-Oriented Gateway

Last Updated: Nov 16, 2023

Service-oriented gateways require high performance and networking capabilities to meet the processing requirements and high-bandwidth vehicle data usage for services. Examples of services include vehicle health monitoring or prognostics, vehicle-wide OTA updates, edge data analytics and car sharing support, with many new services expected in the future.

These services can transform the automotive industry by providing disruptive opportunities that generate new revenue streams for automakers, enhance safety and security, improve user experiences and reduce costs.

Service-oriented Gateway Block Diagram



Recommended Products for Service-oriented Gateway

| | |
|----------------------------|--|
| Vehicle Network Processors | <ul style="list-style-type: none"> • S32G3: S32G3 Processors for Vehicle Networking • S32G2: S32G2 Processors for Vehicle Networking • GOLDVIP: S32G Vehicle Integration Platform (GoldVIP) |
| Safety Microcontrollers | <ul style="list-style-type: none"> • S32K1: S32K1 Microcontrollers for Automotive General Purpose |
| PMIC | <ul style="list-style-type: none"> • VR5510: Multi-Channel (9) PMIC for S32G Processor – 8 High Power, 1 Low Power, Fit for ASIL D Safety Level |
| CAN PHY | <ul style="list-style-type: none"> • TJA1046TK: Dual High-Speed CAN Transceiver with Standby Mode • TJA1046VTK: VeLIO Certified, Dual High-Speed CAN Transceivers with Standby Mode for Automotive Applications |

| | |
|---------------------------|---|
| Secure CAN PHY | <ul style="list-style-type: none"> • Secure CAN Transceivers: Secure TJA115x CAN Transceiver Family • TJA1462: CAN Signal Improvement Capability Transceiver with Standby Mode • TJA1463: CAN Signal Improvement Capability Transceiver with Sleep Mode • TJA144x: Automotive CAN FD Transceiver Family |
| LIN PHY | <ul style="list-style-type: none"> • TJA1128: LIN Mini System Basis Chip • TJA1022: Dual LIN 2.2A/SAE J2602 Transceiver • TJA1024HG: Quad LIN 2.2 A/SAE J2602 Transceiver |
| Ethernet | <ul style="list-style-type: none"> • SJA1110: Multi-Gig Safe and Secure TSN Ethernet Switch with Integrated 100BASE-T1 PHYs |
| FlexRay Star | <ul style="list-style-type: none"> • TJA1085G: FlexRay Active Star Coupler – 4 Branch • TJA1085: FlexRay Active Star Coupler – 4 Branch |
| SPI-QuadLIN | <ul style="list-style-type: none"> • SJA1124: Quad LIN Commander Transceiver with LIN Commander Controller |
| Secure Element | <ul style="list-style-type: none"> • NCJ38A: Automotive-Qualified Embedded Secure Element (SE) |
| Ethernet PHY 100/1000B-T1 | <ul style="list-style-type: none"> • TJA1103: TJA1103, ASIL B Compliant Automotive Ethernet 100BASE-T1 PHY Transceiver • TJA1120: TJA1120, ASIL B Compliant Automotive Ethernet 1000BASE-T1 PHY Transceiver |

View our complete solution for [Service-Oriented Gateway](#).

Note: The information on this document is subject to change without notice.

www.nxp.com

NXP and the NXP logo are trademarks of NXP B.V. All other product or service names are the property of their respective owners. The related technology may be protected by any or all of patents, copyrights, designs and trade secrets. All rights reserved. © 2024 NXP B.V.