



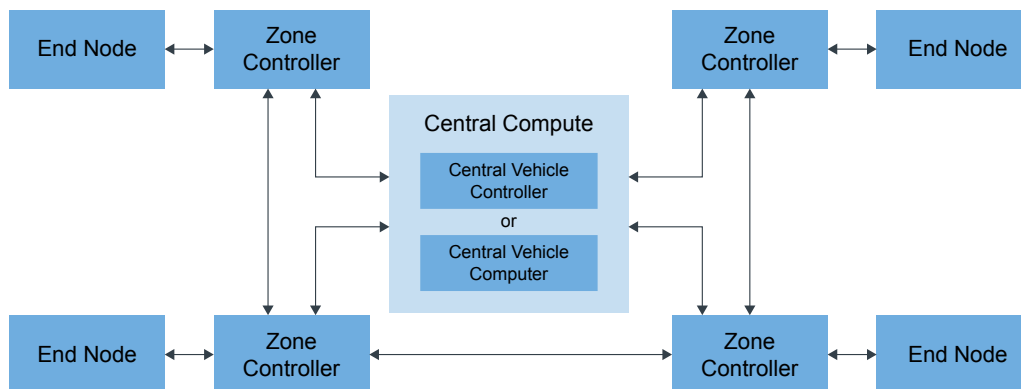
Central Compute

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Central compute is the centralized consolidation of vehicle control, management and services processing in a software-defined vehicle (SDV). It provides automakers a consistent way to update, customize and reconfigure vehicle functionality in a safe and secure manner.

Central compute can include a central vehicle controller, which focuses on real-time applications and a central vehicle computer, which addresses applications processing.

Zonal Architecture Block Diagram



■ NXP Technology ■ Non NXP Technology □ Optional Technology

Recommended Products for Zonal Architecture

Zone Controller	<ul style="list-style-type: none"> • S32K5: S32K5 Automotive Microcontrollers • S32K3: S32K3 Microcontrollers for Automotive General Purpose • S32Z2: S32Z2 Safe and Secure High-Performance Real-Time Processors • S32E2: S32E2 Safe and Secure High-Performance Real-Time Processors with Actuation Support • S32G3: S32G3 Processors for Vehicle Networking • S32G2: S32G2 Processors for Vehicle Networking • VR5510: Multi-Channel (9) PMIC for S32G Processor – 8 High Power, 1 Low Power, Fit for ASIL D Safety Level • PF53: 12 A / 8 A / 15 A Core Supply Regulator with AVP and Watchdog • FS26: Safety System Basis Chip with Low Power, for ASIL D Systems • PF5030: Multi-Channel PMIC for Automotive Applications • SJA1110: Multi-Gig Safe and Secure TSN Ethernet Switch with Integrated 100BASE-T1 PHYs • FS86: Safety System Basis Chip For Domain Controller, Fit For ASIL B and D • TJA1120: TJA1120, ASIL B Compliant Automotive Ethernet 1000BASE-T1 PHY Transceiver • TJA1104: TJA1104, MACsec Enabled ASIL B Compliant Automotive Ethernet 100BASE-T1 PHY Transceiver
Central Vehicle Computer	<ul style="list-style-type: none"> • S32N55: S32N55 Vehicle Super-Integration Processor • S32G3 Vehicle Networking Reference Design • GoldBox 3 Vehicle Networking Development Platform • GOLDVIP: S32G Vehicle Integration Platform (GoldVIP) • VR5510: Multi-Channel (9) PMIC for S32G Processor – 8 High Power, 1 Low Power, Fit for ASIL D Safety Level • PF53: 12 A / 8 A / 15 A Core Supply Regulator with AVP and Watchdog • TJA1120: TJA1120, ASIL B Compliant Automotive Ethernet 1000BASE-T1 PHY Transceiver • TJA1104: TJA1104, MACsec Enabled ASIL B Compliant Automotive Ethernet 100BASE-T1 PHY Transceiver • SJA1110: Multi-Gig Safe and Secure TSN Ethernet Switch with Integrated 100BASE-T1 PHYs
End Node	<ul style="list-style-type: none"> • S32M2: S32M2 Integrated Solution for 12V Motor Control • S32K3: S32K3 Microcontrollers for Automotive General Purpose • S32K1: S32K1 Microcontrollers for Automotive General Purpose • FS24: Safety Mini CAN FD SBC for Automotive Applications Fit for ASIL B • FS23: Safety System Basis Chip (SBC) Family with Power Management, CAN and LIN • FS26: Safety System Basis Chip with Low Power, for ASIL D Systems • TJA1463: CAN Signal Improvement Capability Transceiver with Sleep Mode • TJA1103: TJA1103, ASIL B Compliant Automotive Ethernet 100BASE-T1 PHY Transceiver • TJA1104: TJA1104, MACsec Enabled ASIL B Compliant Automotive Ethernet 100BASE-T1 PHY Transceiver

View our complete solution for [Central Compute](#).

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