



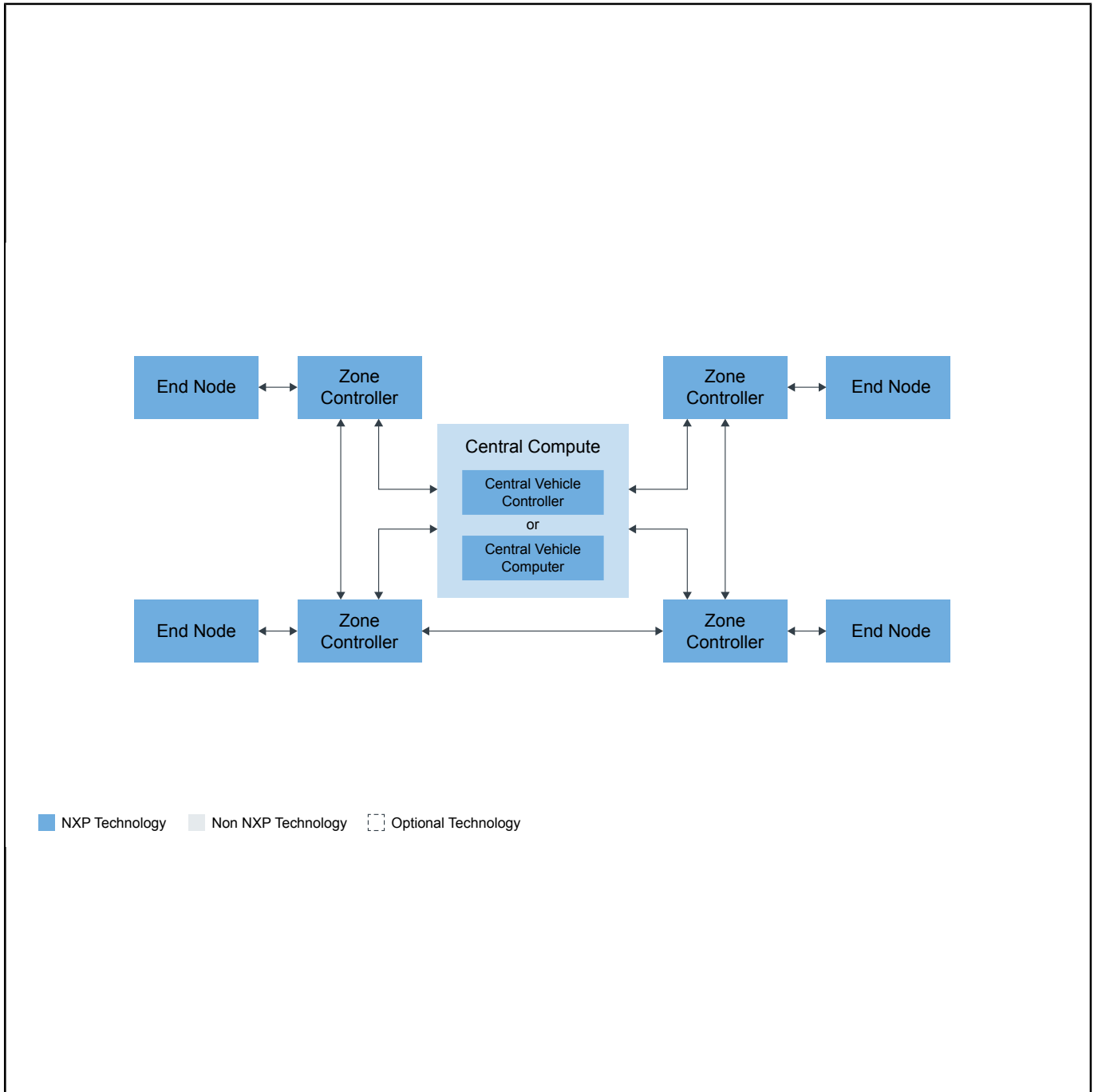
# Central Compute

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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



## Recommended Products for Zonal Architecture

|                                 |   |
|---------------------------------|---|
| <p>Zone Controller</p>          | <ul style="list-style-type: none"> <li>• <a href="#">S32K3</a>: S32K3 Microcontrollers for Automotive General Purpose</li> <li>• <a href="#">S32Z2</a>: S32Z2 Safe and Secure High-Performance Real-Time Processors</li> <li>• <a href="#">S32E2</a>: S32E2 Safe and Secure High-Performance Real-Time Processors with Actuation Support</li> <li>• <a href="#">S32G3</a>: S32G3 Processors for Vehicle Networking</li> <li>• <a href="#">S32G2</a>: S32G2 Processors for Vehicle Networking</li> <li>• <a href="#">VR5510</a>: Multi-Channel (9) PMIC for S32G Processor – 8 High Power, 1 Low Power, Fit for ASIL D Safety Level</li> <li>• <a href="#">PF53</a>: 12 A / 8 A / 15 A Core Supply Regulator with AVP and Watchdog</li> <li>• <a href="#">FS26</a>: Safety System Basis Chip with Low Power, for ASIL D Systems</li> <li>• <a href="#">PF5030</a>: Multi-Channel PMIC for Automotive Applications</li> <li>• <a href="#">SJA1110</a>: Multi-Gig Safe and Secure TSN Ethernet Switch with Integrated 100BASE-T1 PHYs</li> <li>• <a href="#">FS86</a>: Safety System Basis Chip For Domain Controller, Fit For ASIL B and D</li> <li>• <a href="#">TJA1120</a>: TJA1120, ASIL B Compliant Automotive Ethernet 1000BASE-T1 PHY Transceiver</li> <li>• <a href="#">TJA1104</a>: TJA1104, MACsec Enabled ASIL B Compliant Automotive Ethernet 100BASE-T1 PHY Transceiver</li> </ul> |
| <p>Central Vehicle Computer</p> | <ul style="list-style-type: none"> <li>• <a href="#">S32N Vehicle Super-Integration Processors</a>: S32N Vehicle Super-Integration Processors</li> <li>• <a href="#">S32G3 Vehicle Networking Reference Design</a></li> <li>• <a href="#">GoldBox 3 Vehicle Networking Development Platform</a></li> <li>• <a href="#">GOLDVIP</a>: S32G Vehicle Integration Platform (GoldVIP)</li> <li>• <a href="#">VR5510</a>: Multi-Channel (9) PMIC for S32G Processor – 8 High Power, 1 Low Power, Fit for ASIL D Safety Level</li> <li>• <a href="#">PF53</a>: 12 A / 8 A / 15 A Core Supply Regulator with AVP and Watchdog</li> <li>• <a href="#">TJA1120</a>: TJA1120, ASIL B Compliant Automotive Ethernet 1000BASE-T1 PHY Transceiver</li> <li>• <a href="#">TJA1104</a>: TJA1104, MACsec Enabled ASIL B Compliant Automotive Ethernet 100BASE-T1 PHY Transceiver</li> <li>• <a href="#">SJA1110</a>: Multi-Gig Safe and Secure TSN Ethernet Switch with Integrated 100BASE-T1 PHYs</li> </ul>   |
| <p>End Node</p>                 | <ul style="list-style-type: none"> <li>• <a href="#">S32M2</a>: S32M2 Integrated Solution for 12V Motor Control</li> <li>• <a href="#">S32K3</a>: S32K3 Microcontrollers for Automotive General Purpose</li> <li>• <a href="#">S32K1</a>: S32K1 Microcontrollers for Automotive General Purpose</li> <li>• <a href="#">FS24</a>: Safety Mini CAN FD SBC for Automotive Applications Fit for ASIL-B</li> <li>• <a href="#">FS23</a>: Safety System Basis Chip (SBC) Family with Power Management, CAN and LIN</li> <li>• <a href="#">FS26</a>: Safety System Basis Chip with Low Power, for ASIL D Systems</li> <li>• <a href="#">TJA1463</a>: CAN Signal Improvement Capability Transceiver with Sleep Mode</li> <li>• <a href="#">TJA1103</a>: TJA1103, ASIL B Compliant Automotive Ethernet 100BASE-T1 PHY Transceiver</li> <li>• <a href="#">TJA1104</a>: TJA1104, MACsec Enabled ASIL B Compliant Automotive Ethernet 100BASE-T1 PHY Transceiver</li> </ul>   |

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

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

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