Automotive and Industrial Vision Systems

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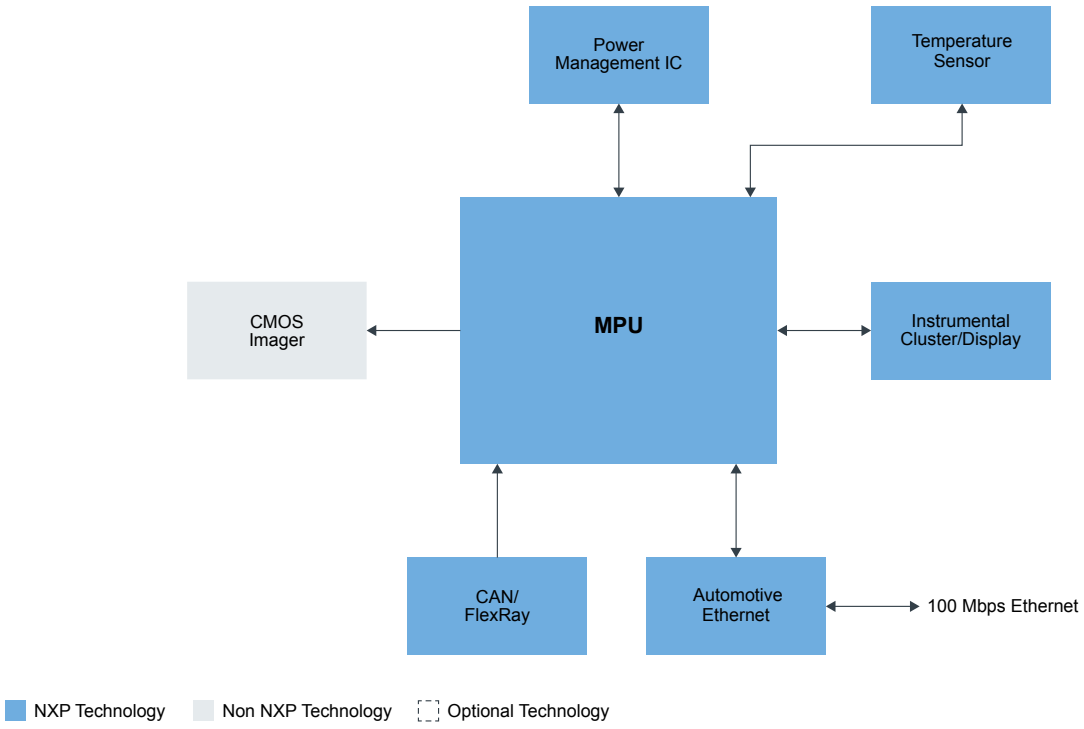
Accelerating innovation in automotive vision technology is fueling a transformation in advanced driver assistance systems (ADAS) and will help to enable the achievement of fully autonomous L5 vehicles. ADAS Vision Systems currently provide many assist functions for today's driver. The vision system is a key part of that capability as cars perceive their surroundings and decide on the actions required to maintain the safety of all road users. Co-piloting and then fully automating a car requires technology with automotive grade reliability, safety and security. Our S32V vision processor provides the requisite performance and features for vision system applications.

Automotive Vision System Block Diagram



Recommended Products for Automotive Vision System	
MPU	• MPC560xE: Ultra-Reliable 32-bit MCU for Automotive ADAS and Industrial Ethernet Applications • S32V234: S32V2 Processors for Vision, Machine Learning and Sensor Fusion • MAC57D5xx: Ultra-Reliable Multi-Core Arm®-Based MCU for Clusters and Display Management
Power Management IC	• PF5024: Multi-Channel (4) PMIC for Automotive Applications – 4 High Power, Fit for ASIL B Safety Level • FS86: Safety System Basis Chip For Domain Controller, Fit For ASIL B and D • PF8101-PF8201: 9-Channel Power Management Integrated Circuit (PMIC) for High-Performance Processing Applications • PF5200: Dual-Channel PMIC for Automotive Applications – 2 High Efficient LVBUCK, Fit for ASIL B Safety Level • PF5020: Multi-Channel (5) PMIC for Automotive Applications – 4 High Power and 1 Low Power, Fit for ASIL B Safety Level • FS84: Safety System Basis Chip for S32 Microcontrollers, Fit for ASIL B • VR5510: Multi-Channel (9) PMIC for S32G Processor – 8 High Power, 1 Low Power, Fit for ASIL D Safety Level • FS5600: Automotive Dual Buck Regulator and Controller with Voltage Monitors and Watchdog Timer • PF7100: 7-Channel Power Management Integrated Circuit for High Performance Applications, Fit for ASIL B Safety Level

Automotive Ethernet	• TJA1120: TJA1120, ASIL B Compliant Automotive Ethernet 1000BASE-T1 PHY Transceiver • TJA1104: TJA1104, MACsec Enabled ASIL B Compliant Automotive Ethernet 100BASE-T1 PHY Transceiver • TJA1103: TJA1103, ASIL B Compliant Automotive Ethernet 100BASE-T1 PHY Transceiver • TJA1101: TJA1101B, IEEE 100BASE-T1 Compliant Automotive Ethernet PHY Transceiver
CAN/FLexRay	• TJA1043: High-Speed CAN Transceiver with Standby and Sleep Mode • TJA1081G: FlexRay™ Node Transceiver - Clamp 30 • TJA1463: CAN Signal Improvement Capability Transceiver with Sleep Mode
Instrumental Cluster/Display	• TJA1101: TJA1101B, IEEE 100BASE-T1 Compliant Automotive Ethernet PHY Transceiver • TJA1103: TJA1103, ASIL B Compliant Automotive Ethernet 100BASE-T1 PHY Transceiver
Temperature Sensor	• P3T1755DP: I3C/I²C-Bus ±0.5 °C Accurate Digital Temperature Sensor • P3T1750DP: I3C/I2C-Bus, ±1 °C Accuracy, Digital Temperature Sensor

View our complete solution for Automotive and Industrial Vision Systems.

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