

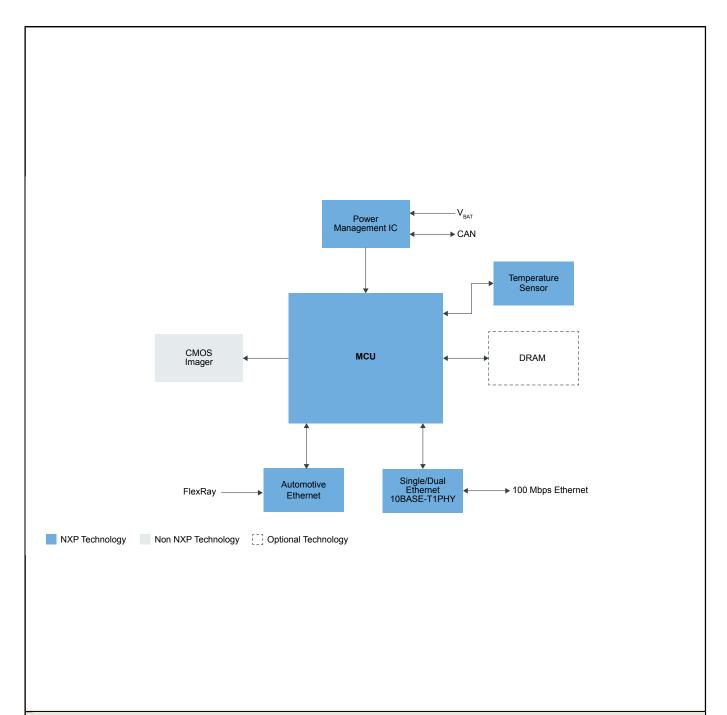
Front View Camera

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Camera systems in advanced driver assistance systems can analyze the video content for lane departure warning (LDW), automatic lane keeping assist (LKA), high/low beam headlight control and traffic sign recognition (TSR).

For a front view camera, an image sensor provides incoming video frames to a dual-core MCU optimized with DSP extensions for image processing. Additional system requirements include an appropriate physical communication interface, a power supply, an optional DRAM and embedded flash for low system cost.

Front View Camera Block Diagram



Recommended Products for Front View Camera	
MCU	MPC567xK: Ultra-Reliable MPC567xK MCU for Automotive and Industrial Radar Applications S32V234: S32V2 Processors for Vision, Machine Learning and Sensor Fusion
Automotive Ethernet	SJA1110: Multi-Gig Safe and Secure TSN Ethernet Switch with Integrated 100BASE-T1 PHYs TJA1103: TJA1103, ASIL B Compliant Automotive Ethernet 100BASE-T1 PHY Transceiver TJA1120: TJA1120, ASIL B Compliant Automotive Ethernet 1000BASE-T1 PHY Transceiver SJA1105TEL: Five- Ports AVB and TSN Automotive Ethernet Switch TJA1101: TJA1101B, IEEE 100BASE-T1 Compliant Automotive Ethernet PHY Transceiver
Power Management IC	 FS8400: Safety System Basis Chip for S32 Microcontrollers, Fit for ASIL B 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 PF5024: Multi-Channel (4) PMIC for Automotive Applications – 4 High Power, Fit for ASIL B Safety Level

Automotive Ethernet	SJA1105TEL: Five- Ports AVB and TSN Automotive Ethernet Switch TJA1101: TJA1101B, IEEE 100BASE-T1 Compliant Automotive Ethernet PHY Transceiver
Temperature Sensor	• P3T1750DP: I3C/I ² C-Bus, ±1 °C Accuracy, Digital Temperature Sensor • P3T1755DP: I3C/I ² C-Bus ±0.5 °C Accurate Digital Temperature Sensor

View our complete solution for Front View Camera.

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