

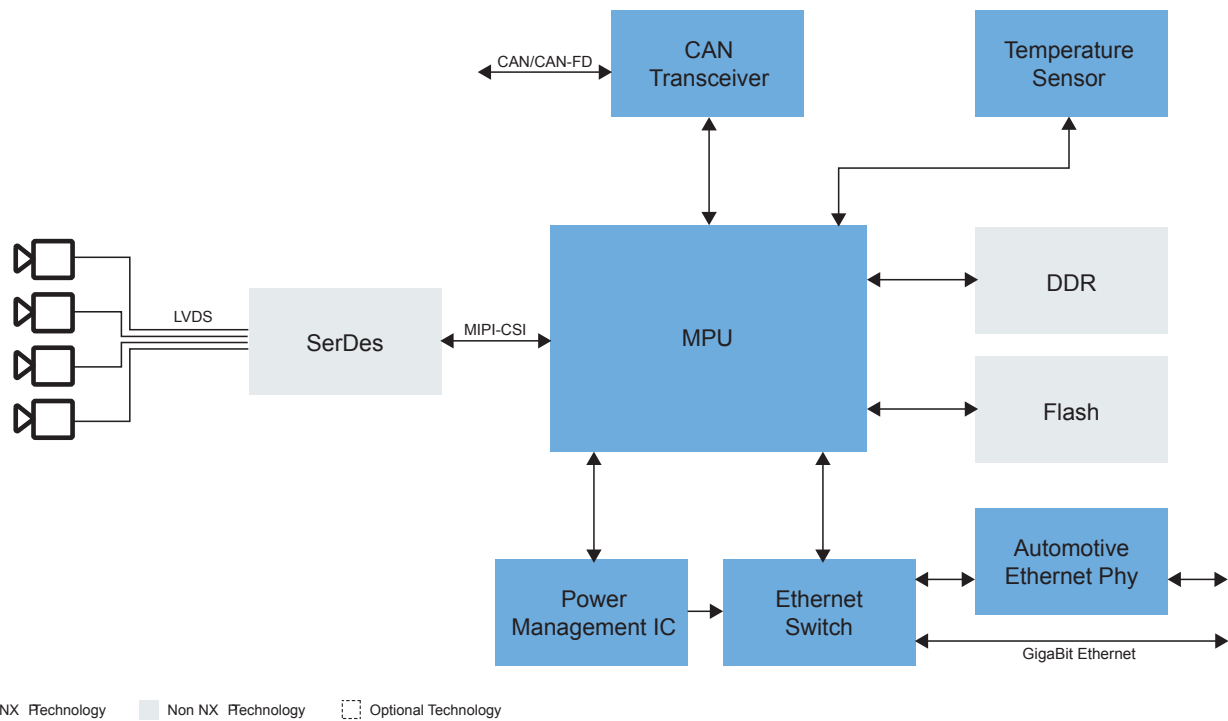


Surround View

Last Updated: Apr 15, 2025

Multi-camera surround view and sense park assist systems capture and display onscreen the area surrounding the car from a virtual 3D view. The perspective is dynamically moved depending upon the trajectory of the car, providing a 360° view around the car. Advanced parking systems deploy four to five high-dynamic range (HDR) > 1 MP cameras using a cost-effective link such as MIPI-CSI or Gb Ethernet. Our i.MX 95 applications processor family provides up to six high-performance Arm® Cortex®-A55 cores, advanced graphics, video and machine learning accelerators for high performance vision applications. It includes an integrated Image Signal Processor and can support up to eight raw camera streams for an aggregate 500 Mpixel/s throughput.

Surround View Block Diagram



Recommended Products for Surround View

MPU	<ul style="list-style-type: none"> • i.MX 6 Processors: i.MX 6 Series Applications Processors: Multicore, Arm® Cortex®-A7 Core, Cortex-A9 Core, Cortex-M4 Core • i.MX8X: i.MX 8X Family – Arm® Cortex®-A35, 3D Graphics, 4K Video, DSP, Error Correcting Code on DDR • i.MX95: i.MX 95 Applications Processor Family: High-Performance, Safety Enabled Platform with eIQ® Neutron NPU
Power Management IC	<ul style="list-style-type: none"> • FS5600: Automotive Dual Buck Regulator and Controller with Voltage Monitors and Watchdog Timer • PF09: 9-Channel PMIC for High-Performance Applications, ASIL D and SIL-2 • PF53: 12 A / 8 A / 15 A Core Supply Regulator with AVP and Watchdog • PF81-PF82: 12-Channel Power Management Integrated Circuit (PMIC) for High-Performance Processing Applications • PF5103: Multi-Channel (5) PMIC for Automotive Applications: 3 LVBUCK and 2 LDO, Fit for ASIL B Safety Level
Auto Ethernet	<ul style="list-style-type: none"> • TJA1120: TJA1120, ASIL B Compliant Automotive Ethernet 1000BASE-T1 PHY Transceiver

	<ul style="list-style-type: none"> • TJA1103: TJA1103, ASIL B Compliant Automotive Ethernet 100BASE-T1 PHY Transceiver
Ethernet Switch	<ul style="list-style-type: none"> • SJA1110: Multi-Gig Safe and Secure TSN Ethernet Switch with Integrated 100BASE-T1 PHYs • SJA1105PQRS: SJA1105PEL/QEL/REL/SEL Series Ethernet Switches
CAN Transceiver	<ul style="list-style-type: none"> • TJA1043: High-Speed CAN Transceiver with Standby and Sleep Mode • TJA1463: CAN Signal Improvement Capability Transceiver with Sleep Mode
Temperature Sensor	<ul style="list-style-type: none"> • P3T1750DP: I3C/I²C-Bus, ±1 °C Accuracy, Digital Temperature Sensor • P3T1755DP: I3C/I²C-Bus ±0.5 °C Accurate Digital Temperature Sensor

View our complete solution for [Surround View](#).

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