Automotive Advanced Exterior Lighting

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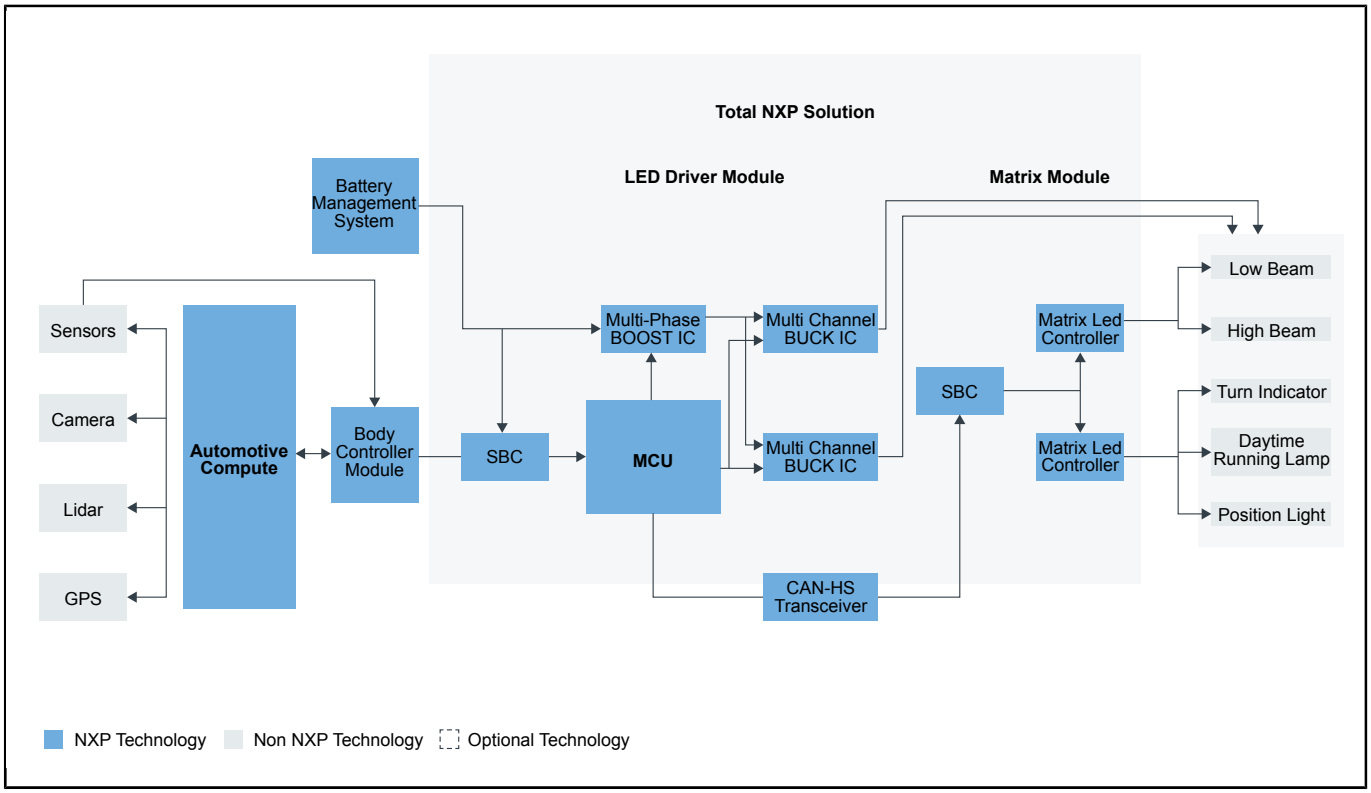
LED technology has evolved to enable advanced automotive lighting applications by providing small form factors, higher power levels, longer lifetime and lower power consumption. Intelligent LED applications such as Glare Free High Beam, Adaptive Driving Beam, Dynamic Signaling and Rear lighting, make our roads safer to drive.

These systems require efficient, robust, flexible and scalable cost effective devices for automotive applications. NXPs highly integrated LED Drivers and Controllers are specifically designed to maximize the performance and efficiency of lighting electronics. They combine our understanding of LED performance and our automotive A-BCD mixed-signal high voltage technology.

Automotive Smart Lighting Block Diagram



Recommended Products for Automotive Smart Lighting	
Multi-Phase Boost IC	• ASL150ySHN: Single-Phase Automotive LED Boost Driver with Limp Home Mode • ASL250ySHN: Two-Phase Automotive LED Boost Driver with a Limp Home Mode • ASL4500SHN: Four-Phase Automotive LED Boost Driver
Multi Channel Buck IC	• ASL241ySHN: Two-Channel Automotive LED Buck Driver • ASL341ySHN: Three-Channel Automotive LED Buck Driver
Matrix LED Controller	• ASL5XXXYHZ: Smart Matrix LED Controller for Automotive Lighting
Mini SBC	• TJA1128: LIN Mini System Basis Chip • FS23: Safety System Basis Chip (SBC) Family with Power Management, CAN and LIN • UJA1161ATK: Self-Supplied High-Speed CAN Transceiver with Standby Mode • FS24: Safety Mini CAN FD SBC for Automotive Applications Fit for ASIL B • FS26: Safety System Basis Chip with Low Power, for ASIL D Systems
CAN-HS-Transceiver	• TJA1120: TJA1120, ASIL B Compliant Automotive Ethernet 1000BASE-T1 PHY Transceiver • TJA1103: TJA1103, ASIL B Compliant Automotive Ethernet 100BASE-T1 PHY Transceiver • TJA144x: Automotive CAN FD Transceiver Family • TJA1057: High-Speed CAN Transceiver - Mantis Family
Microcontrollers (MCUs)	• S32M2: S32M2 Integrated Solution for 12V Motor Control • S32K1: S32K1 Microcontrollers for Automotive General Purpose • S32K3: S32K3 Microcontrollers for Automotive General Purpose
Automotive Compute	• Automotive High Performance Compute: Automotive High Performance Compute
Body Controller Module	• S32K1: S32K1 Microcontrollers for Automotive General Purpose
Battery Management System	• Battery Management System (BMS): Battery Management System (BMS)

View our complete solution for Automotive Advanced Exterior Lighting.

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