



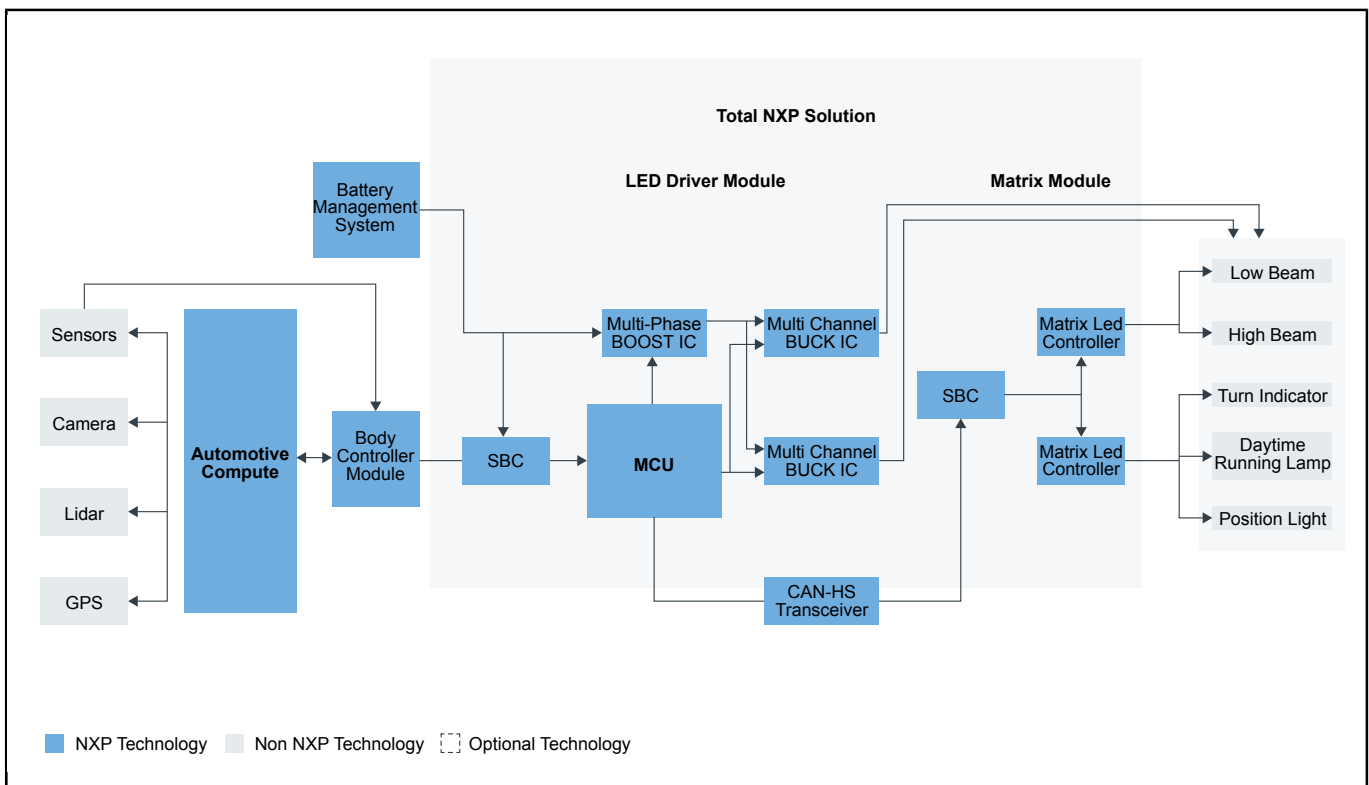
Automotive Advanced Exterior Lighting

Last Updated: Jun 7, 2023

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. NXP's 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 System Block Diagram



Recommended Products for Automotive Smart Lighting	
Multi-Phase Boost IC	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • ASL241ySHN: Two-Channel Automotive LED Buck Driver • ASL341ySHN: Three-Channel Automotive LED Buck Driver
Matrix LED Controller	<ul style="list-style-type: none"> • ASL5XXXHZ: Smart Matrix LED Controller for Automotive Lighting
Mini SBC	<ul style="list-style-type: none"> • TJA1128: LINミニ・システムベース・チップ • FS23: パワー・マネジメント、CAN、LINの機能を備えたセーフティ・システムベース・チップ (SBC) ファミリ • UJA1161ATK: Self-Supplied High-Speed CAN Transceiver with Standby Mode • FS24: ASIL-Bに適合した、車載アプリケーション専用セーフティ・ミニCAN FD SBC • FS26: 低消費電力セーフティ・システムベース・チップ、ASIL Dシステム対応
CAN-HSトランシーバ	<ul style="list-style-type: none"> • TJA1120: TJA1120、ASIL B準拠、車載用イーサネット1000BASE-T1 PHYトランシーバ • TJA1103: TJA1103、ASIL B準拠車載イーサネット100BASE-T1 PHYトランシーバ • TJA144x: Automotive CAN FD Transceiver Family • TJA1057: 高速CANトランシーバ - Mantisファミリ
マイクロコントローラ (MCU)	<ul style="list-style-type: none"> • S32M2: S32M2 12 Vモータ制御向け統合ソリューション • S32K1: S32K1 車載向け汎用マイクロコントローラ • S32K3: S32K3 車載向け汎用マイクロコントローラ
Automotive Compute	<ul style="list-style-type: none"> • 車載高性能コンピューティング: 車載高性能コンピューティング
Body Controller Module	<ul style="list-style-type: none"> • S32K1: S32K1 車載向け汎用マイクロコントローラ
Battery Management System	<ul style="list-style-type: none"> • バッテリー・マネジメント・システム (BMS): バッテリー・マネジメント・システム (BMS)

View our complete solution for [Automotive Advanced Exterior Lighting](#).

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

www.nxp.com

NXP and the NXP logo are trademarks of NXP B.V. All other product or service names are the property of their respective owners. The related technology may be protected by any or all of patents, copyrights, designs and trade secrets. All rights reserved. © 2024 NXP B.V.