

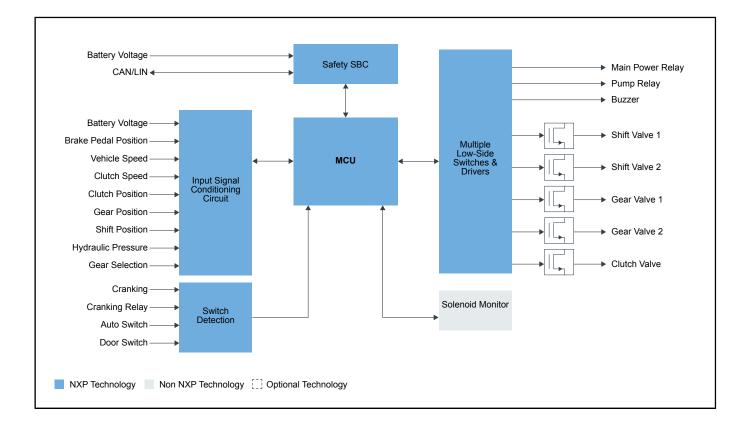
## **Transmission and Gearbox**

Last Updated: Dec 16, 2022

The transmission system ensures that engine torque output is efficiently transferred to the road, providing the traction and control drivers require.

Our comprehensive microcontrollers portfolio, together with standard analog and mixed-signal ICs, provide high-performance and high-temperature operation in harsh environments and the required reliability for automated manual transmissions and dual-clutch applications.

Our MCU portfolio offers motor control solutions with a complete development ecosystem, including low-level software tools, to speed design cycles.



## Transmission and Gearbox Block Diagram

Recommended Products for Transmission and Gearbox	
Microcontrollers (MCU)	<ul> <li>S32K1: S32K1 Microcontrollers for Automotive General Purpose</li> <li>MPC5777C: Ultra-Reliable MPC5777C MCU for Automotive and Industrial Engine Management</li> <li>MPC5746R: Automotive and Industrial Engine Management MCU</li> </ul>
Safety SBC	<ul> <li>FS23: Safety System Basis Chip (SBC) Family with Power Management, CAN and LIN</li> <li>FS24: Safety Mini CAN FD SBC for Automotive Applications Fit for ASIL-B</li> <li>FS6600: Safety System Basis Chip for S32S2 Microcontroller, Fit for ASIL D</li> <li>FS86: Safety System Basis Chip For Domain Controller, Fit For ASIL B and D</li> <li>FS4500: Grade 1 and Grade 0 Safety Power System Basis Chip with CAN Flexible Data Transceiver</li> <li>FS26: Safety System Basis Chip with Low Power, for ASIL D Systems</li> <li>FS6500: Grade 1 and Grade 0 Safety Power System Basis Chip with CAN Flexible Data Transceiver</li> </ul>
Input Signal Conditioning Circuit	Automotive LIN Solutions: Automotive LIN Solutions
Switch Detection	CD1020: Low-Cost 22-CH Multiple Switch Detect Interface
Multiple Low-Side Switch and Driver	MC33816: SD6 Programmable Driver for Solenoid Control     PT2000: Programmable Solenoid Controller Gate Driver

## View our complete solution for Transmission and Gearbox.

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

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