



# Transmission and Gearbox

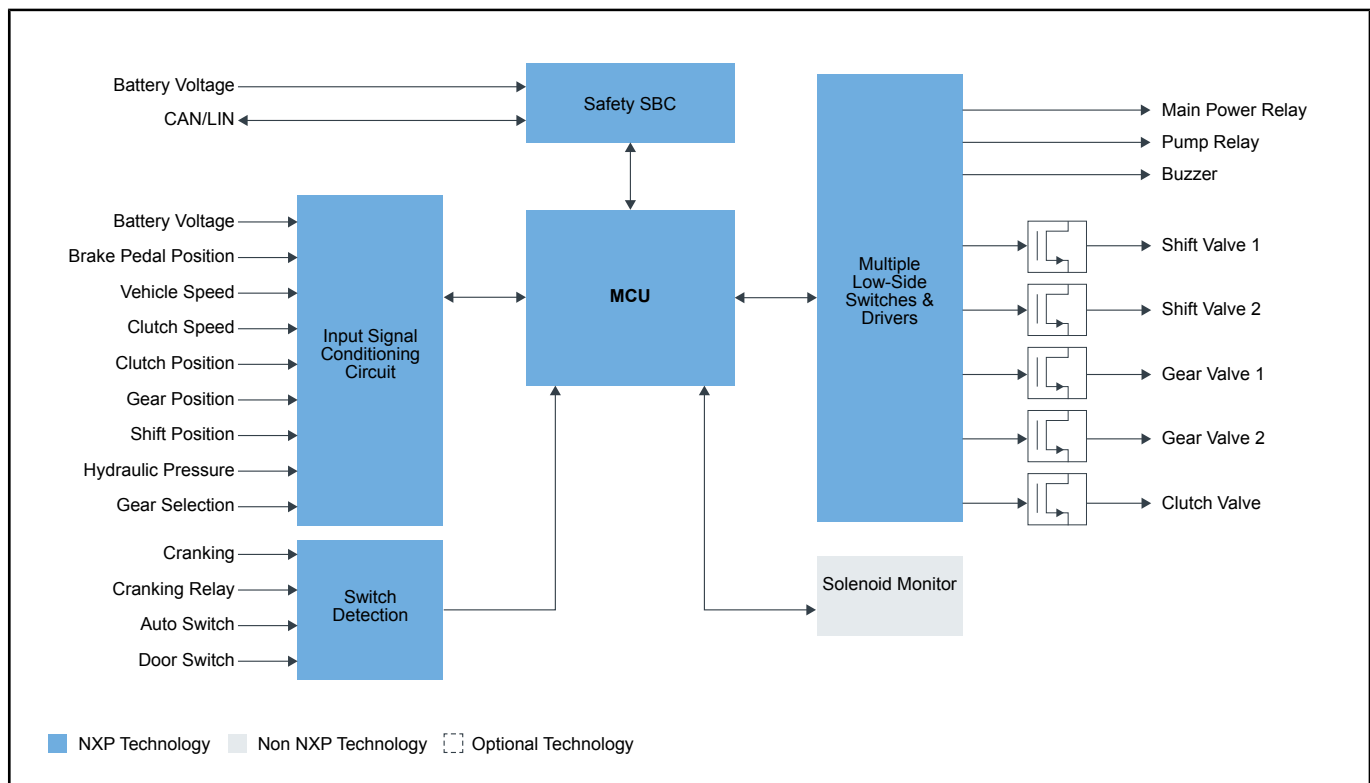
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The transmission system ensures that engine torque output is efficiently transferred to the road, providing the traction and control drivers require.

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 style="list-style-type: none"> <li>• <a href="#">S32K1 Microcontrollers for General-Purpose</a></li> <li>• <a href="#">MPC5777C</a>: Ultra-Reliable MPC5777C MCU for Automotive and Industrial Engine Management</li> <li>• <a href="#">MPC5746R</a>: Automotive &amp; Industrial Engine Management MCU</li> </ul>
Safety SBC	<ul style="list-style-type: none"> <li>• <a href="#">FS6600</a>: Safety System Basis Chip for S32S2 Microcontroller, Fit for ASIL D</li> <li>• <a href="#">FS86</a>: Safety System Basis Chip For Domain Controller, Fit For ASIL B and D</li> <li>• <a href="#">FS4500</a>: Grade 1 and Grade 0 Safety Power System Basis Chip with CAN Flexible Data Transceiver</li> <li>• <a href="#">FS26</a>: Safety System Basis Chip (SBC) with Low Power Fit for ASIL D</li> <li>• <a href="#">FS6500</a>: Grade 1 and Grade 0 Safety Power System Basis Chip with CAN Flexible Data Transceiver</li> </ul>
Input Signal Conditioning Circuit	<ul style="list-style-type: none"> <li>• <a href="#">Automotive LIN Solutions</a>: Automotive LIN Solutions</li> </ul>
Switch Detection	<ul style="list-style-type: none"> <li>• <a href="#">CD1020</a>: Low-Cost 22-CH Multiple Switch Detect Interface</li> </ul>
Multiple Low-Side Switch and Driver	<ul style="list-style-type: none"> <li>• <a href="#">MC33816</a>: SD6 Programmable Driver for Solenoid Control</li> <li>• <a href="#">PT2000</a>: Programmable Solenoid Controller Gate Driver</li> </ul>

View our complete solution for [Transmission and Gearbox](#).

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

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