

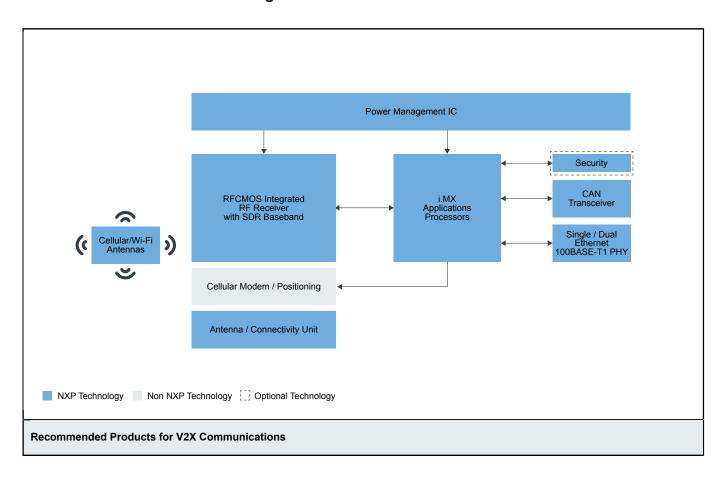
V2X Communications

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Vehicle-to-Everything (V2X) technology enables cars to communicate with their surroundings and makes driving safer and more efficient for everyone. By making the invisible visible, V2X warns the driver of road hazards, helping reduce traffic injuries and fatalities. In addition to improving safety, V2X helps to optimize traffic flow, reduce traffic congestion and lessen the environmental impact of transportation.

We provide a complete solution for Vehicle-to-Vehicle (V2V) and Vehicle-to-Infrastructure (V2I) communications for active safety systems and intelligent transport system (ITS) management.

V2X Communications Block Diagram



i.MX Applications Processors	i.MX6SX: i.MX 6SoloX Processors - Heterogeneous Processing with Arm® Cortex®-A9 and Cortex-M4 Cores i.MX 8X Family – Arm® Cortex®-A35, 3D Graphics, 4K Video, DSP, Error Correcting Code on DDR
Automotive Ethernet	TJA1101/TJA1101B: Robust, Low Power 100BASE-T1 PHY Transceiver TJA1103: ASIL B Compliant 100BASE-T1 Ethernet PHY
CAN Transceiver	TJA144x: Automotive CAN FD Transceiver Family TJA1463: CAN Signal Improvement Capability Transceiver with Sleep Mode TJA1043: High-Speed CAN Transceiver with Standby and Sleep Mode TJA1463: CAN Signal Improvement Capability Transceiver with Sleep Mode
Dual RF Transceiver	TEF5100: V2X RF Transceiver
Power Management IC	 FS5600: Automotive Dual Buck Regulator and Controller with Voltage Monitors and Watchdog Timer PF7100: 7-Channel Power Management Integrated Circuit for High Performance Applications, Fit for ASIL B Safety Level VR5500: High Voltage PMIC with Multiple SMPS VR5510: Multi-Channel (9) PMIC for S32G Processor – 8 High Power, 1 Low Power, Fit for ASIL D Safety Level FS86: Safety System Basis Chip For Domain Controller, Fit For ASIL B and D PF8100-PF8200: 12-Channel Power Management Integrated Circuit (PMIC) for High-Performance Processing Applications PF5020: Multi-Channel (5) PMIC for Automotive Applications – 4 High Power and 1 Low Power, Fit for ASIL B Safety Level
Security	SXF1800: Secure Element IC for V2X Communication
Software Defined Radio Baseband	SAF5100: Software Defined Radio Processor for V2X Communication RoadLINK® SAF5400 Single Chip Modem for V2X
Wi-Fi / Antennas	* 88Q9098: 2.4/5 GHz Dual-Band 2x2 Wi-Fi [®] 6 (802.11ax) + Bluetooth [®] 5.3 Automotive Solution
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View our complete solution for V2X Communications.

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

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