

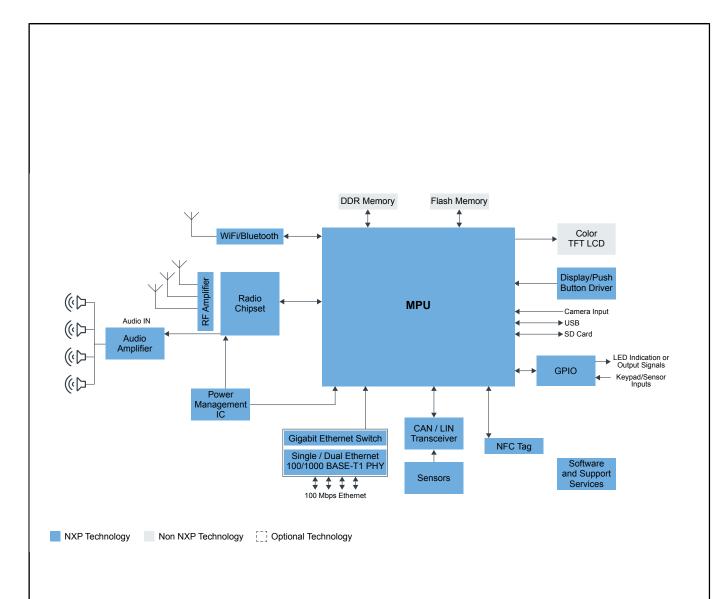
Connected Radio

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In-car audio systems today have changed from basic radio and CD systems to connected systems that can access content from various sources. Customers are expecting to plug in USB drives, insert SD cards or to connect their Bluetooth® hands-free devices even in the low-end segment.

NXP's comprehensive portfolio of AM/FM tuner and amplifier solutions and Arm®-based microprocessors offer a scalable set of product families that helps you design entry level connected radio and infotainment systems with USB, AM/FM and Bluetooth connectivity with enhanced audio and user interface capabilities.

Connected Radio Block Diagram



Recommended	Products for	Connected Radio)

MPU	• i.MX6UL: i.MX 6UltraLite Processor - Low-Power, Secure, Arm [®] Cortex [®] -A7 Core • i.MX6SX: i.MX 6SoloX Processors - Heterogeneous Processing with Arm [®] Cortex [®] -A9 and Cortex-M4 Cores
GPIO	PCAL9722: 22-Bit SPI I/O Expander with Agile I/O Features PCAL9714: 14-Bit SPI I/O Expander with Agile I/O Features
Radio Chipset	 * TDF8541: I²C-Bus Controlled 4 x 45 W Power Amplifier * SAF4000: Multi-Standard Software Defined Radio Processor With Integrated Audio
Audio Amplifier	Car Audio Amplifiers: Car Audio Amplifiers

RF Amplifier	TLH501x: ALNA – Low Noise Active Antenna Amplifier
Display/Push Button Driver	Automotive LCD Drivers: Automotive LCD Drivers Automotive Lighting LED Driver ICs: Automotive Lighting - LED Driver ICs
CD Drive Controller	Audio Converters: Audio Converters
CAN/LIN Transceiver	TJA144x: Automotive CAN FD Transceiver Family TJA1044: High-Speed CAN Transceiver with Standby Mode - Mantis Family TJA1043: High-Speed CAN Transceiver with Standby and Sleep Mode Automotive LIN Solutions: Automotive LIN Solutions TJA1463: CAN Signal Improvement Capability Transceiver with Sleep Mode
Power Management IC	 FS5600: Automotive Dual Buck Regulator and Controller with Voltage Monitors and Watchdog Timer MMPF0100: 14-Channel Configurable PMIC PF8101-PF8201: 9-Channel Power Management Integrated Circuit (PMIC) for High-Performance Processing Applications 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 PF8100-PF8200: 12-Channel Power Management Integrated Circuit (PMIC) for High-Performance Processing Applications PF7100: 7-Channel Power Management Integrated Circuit for High Performance Applications, Fit for ASIL B Safety Level PF5020: Multi-Channel (5) PMIC for Automotive Applications – 4 High Power and 1 Low Power, Fit for ASIL B Safety Level PF5024: Multi-Channel (4) PMIC for Automotive Applications – 4 High Power, Fit for ASIL B Safety Level
Sensors	Sensors: Sensors
NFC Tag	* NCx3310: NFC Forum-Compliant Tag IC with I ² C for Automotive
Bluetooth	* 88Q9098: 2.4/5 GHz Dual-Band 2x2 Wi-Fi [®] 6 (802.11ax) + Bluetooth [®] 5.3 Automotive Solution
Software	i.MX Software: i.MX Software and Development Tools Professional Support for Processors and Microcontrollers NXP Engineering Services: NXP Engineering Services
Automotive Ethernet	TJA1120: TJA1120, ASIL B Compliant Automotive Ethernet 1000BASE-T1 PHY Transceiver TJA1104: TJA1104, MACsec Enabled ASIL B Compliant Automotive Ethernet 100BASE-T1 PHY Transceiver TJA1103: TJA1103, ASIL B Compliant Automotive Ethernet 100BASE-T1 PHY Transceiver TJA1102A: TJA1102A/TJA1102AS, Dual/Single Port Automotive Ethernet 100BASE-T1 PHY Transceiver TJA1101: TJA1101B, IEEE 100BASE-T1 Compliant Automotive Ethernet PHY Transceiver
NFC Tag	NCx3310: NFC Forum-Compliant Tag IC with I ² C for Automotive
CAN / LIN Transceiver	TJA1128: LIN Mini System Basis Chip

View our complete solution for Connected Radio.

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