



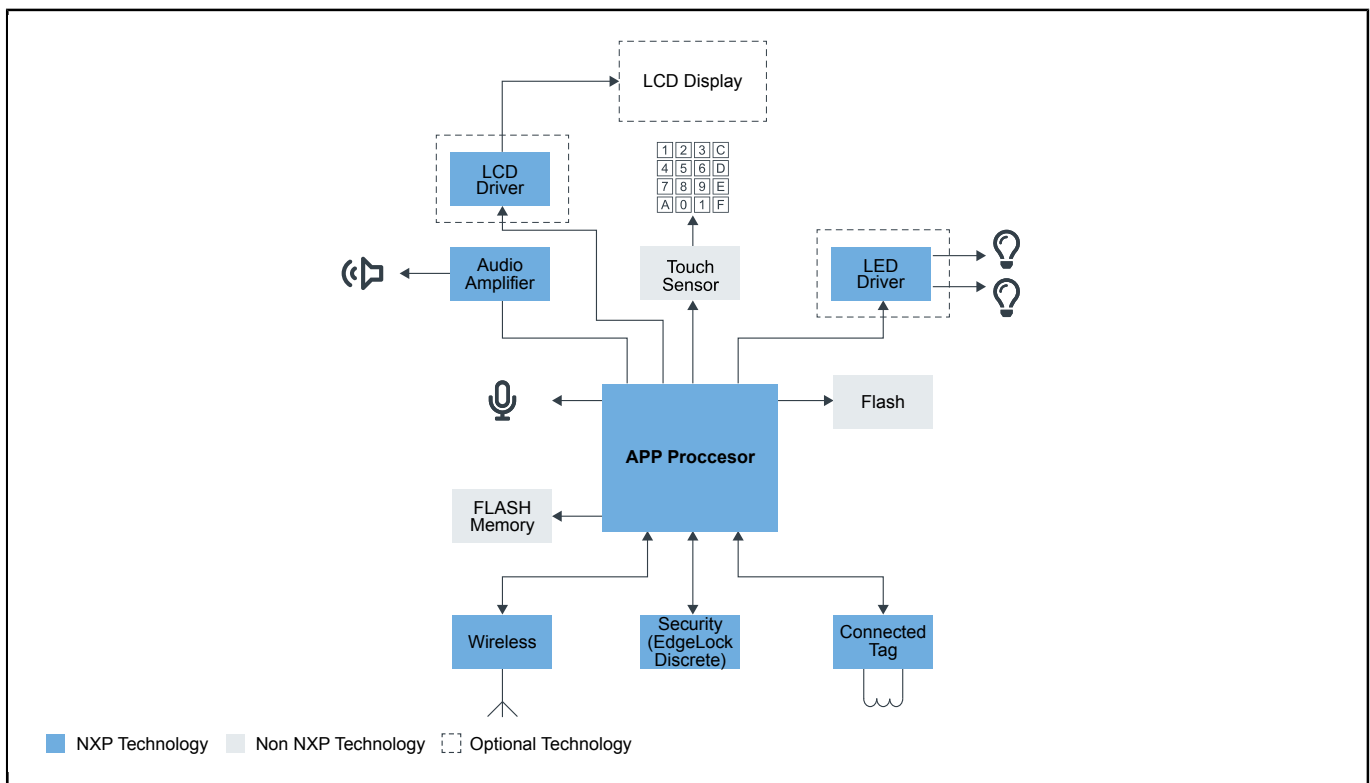
Set Top Boxes

Last Updated: Oct 13, 2023

Set-top-boxes range from very simple audio and video gateways to complex information gateways. NXP offers the right products to create and connect in parallel different types of set-top-boxes.

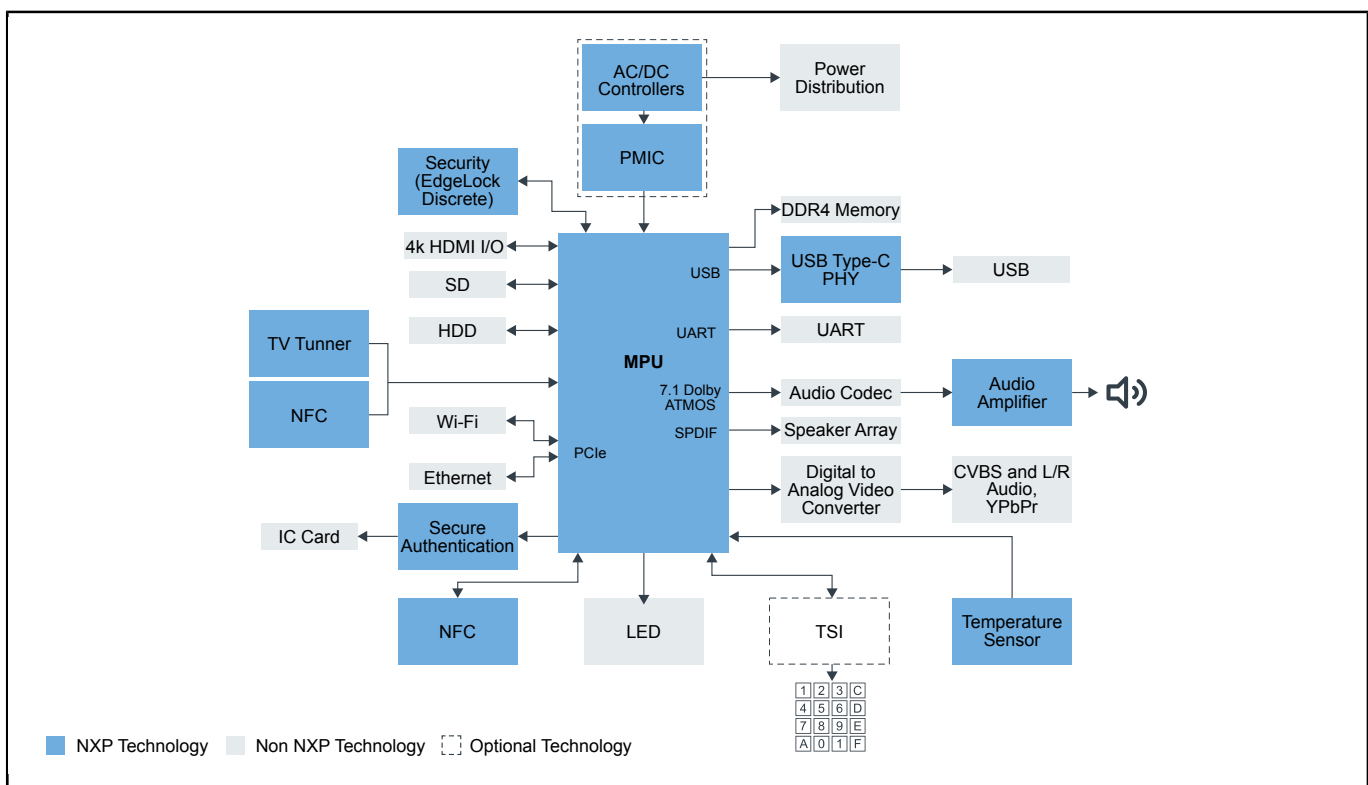
- Support for FullHD and 4K video.
- Support for 5.1 Dolby ATMOS audio
- Support for S/PDIF to directly connect a speaker array.
- NXP's zero power loop-through switches enable TV reception
- ESD protections for HDMI, USB and SATA.
- Wireless connectivity including WiFi and Bluetooth Low Energy.
- Content access secure authentication
- Voice-enabled remote control

Single Tuner Block Diagram



Recommended Products for Single Tuner	
MPU	<ul style="list-style-type: none"> • i.MX-RT1060: i.MX RT1060: Crossover MCU with Arm® Cortex®-M7
Wireless	<ul style="list-style-type: none"> • KW41Z: Kinetis® KW41Z-2.4 GHz Dual Mode: Bluetooth® Low Energy and 802.15.4 Wireless Radio Microcontroller (MCU) based on Arm® Cortex®-M0+ Core • 88W8897: 2.4/5 GHz Dual-Band 2x2 Wi-Fi® 5 (802.11ac) + Bluetooth® 5.0 Solution • QN9090-30: QN9090/30: Bluetooth Low-Energy MCU with Arm®Cortex®-M4 CPU, Energy Efficiency, Analog and Digital Peripherals and NFC Tag Option
Security (EdgeLock Discrete)	<ul style="list-style-type: none"> • SE050: EdgeLock® SE050: Plug and Trust Secure Element Family – Enhanced IoT security with high flexibility
Connected Tag	<ul style="list-style-type: none"> • NTAG_I2C: NTAG I²C Plus 2K: NFC Forum Type 2 Tag with I²C Interface
LED Driver (Voice Control Remote)	<ul style="list-style-type: none"> • PCA9955BTW: 16-Channel Fm+ I²C-Bus 57 mA/20 V Constant-Current LED Driver
LCD Driver	<ul style="list-style-type: none"> • PCF85176: 40 X 4 Universal LCD Driver for Low Multiplex Rates
Audio Amplifier	<ul style="list-style-type: none"> • TFA9879HN: TFA9879HN, Mono BTL Class D Audio Amplifier for Portable Applications with Digital Input

Multi Tuner Block Diagram



Recommended Products for Multi Tuner	
SoC	<ul style="list-style-type: none"> • i.MX8M: i.MX 8M Family - Arm® Cortex®-A53, Cortex-M4, Audio, Voice, Video
Secure Authentication	<ul style="list-style-type: none"> • SMARTMX2-P60: SmartMX2 P60: Single/Dual Contact Interface Controllers
AC/DC	<ul style="list-style-type: none"> • TEA1721DT: HV Start-up Flyback Controller with Integrated MOSFET for 5 W Applications, F~Burst = 1270 Hz • TEA1723DT: HV Start-up Flyback Controller with Integrated MOSFET for 11 W Applications, F~Burst = 1270 Hz
PMIC	<ul style="list-style-type: none"> • PF1550: PMIC with 1A Li+ Linear Battery Charger for Low Power Processor Systems
TV Tuner	<ul style="list-style-type: none"> • TDA18250_18254: Cable Silicon Tuner
USB Type C PHY	<ul style="list-style-type: none"> • PTN5150: CC Logic for USB Type-C Applications
Temperature Sensor	<ul style="list-style-type: none"> • PCT2075: I²C-Bus Fm+, 1 Degree C Accuracy, Digital Temperature Sensor and Thermal Watchdog
NFC	<ul style="list-style-type: none"> • PN7160: NFC Plug and Play Controller with Integrated Firmware and NCI Interface
Audio Amplifier	<ul style="list-style-type: none"> • TFA9879HN: TFA9879HN, Mono BTL Class D Audio Amplifier for Portable Applications with Digital Input
Security (EdgeLock Discrete)	<ul style="list-style-type: none"> • SE050: EdgeLock® SE050: Plug and Trust Secure Element Family – Enhanced IoT security with high flexibility • SE051: EdgeLock® SE051: Proven, Easy-to-Use IoT Security Solution with Support for Updatability and Custom Applets • EDGELOCK-A5000: EdgeLock® A5000 Plug and Trust Secure Authenticator: Authentication Made Secure, Scalable and Easy

View our complete solution for [Set Top Boxes](#).

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

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