



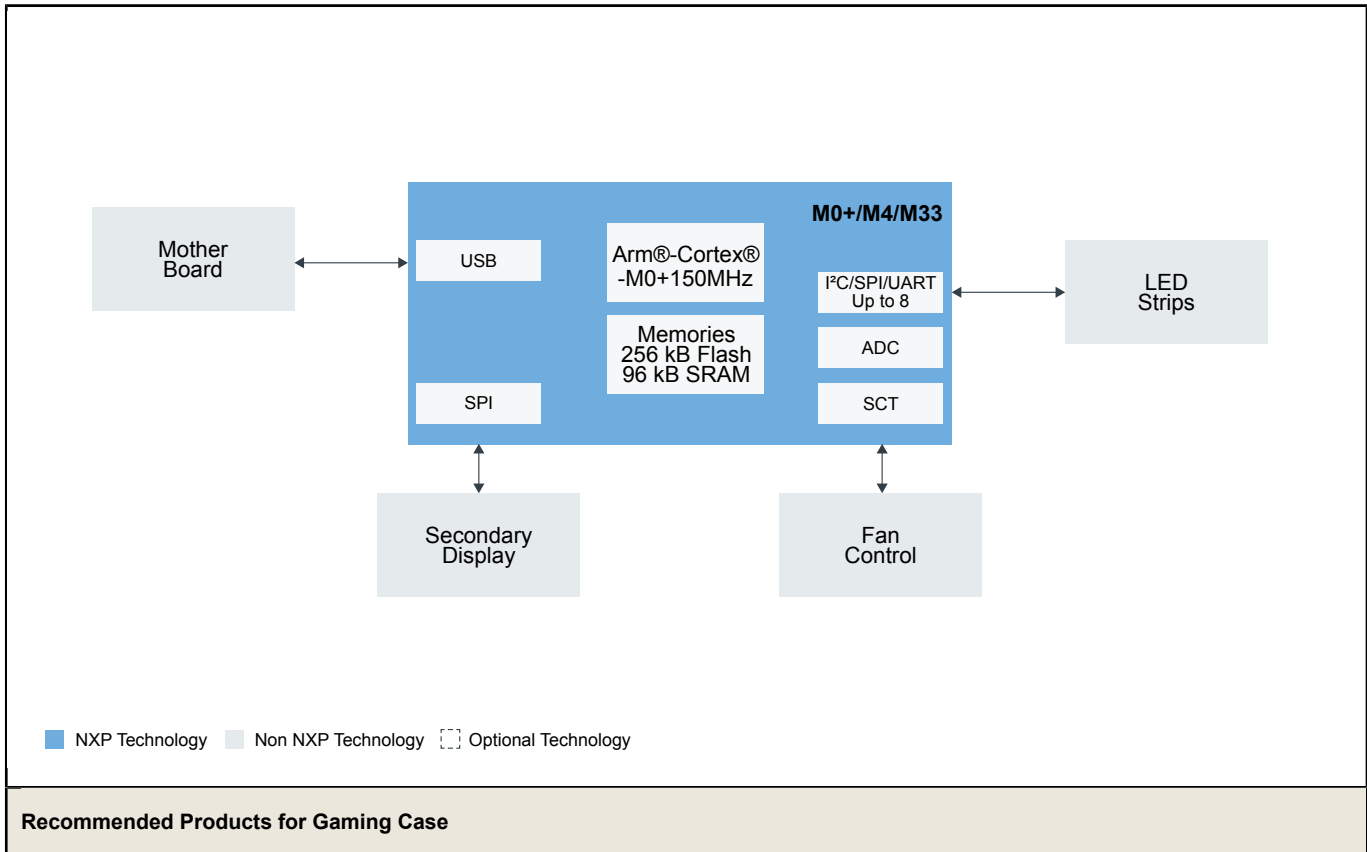
Gaming Accessories

Last Updated: Mar 21, 2023

NXP’s comprehensive edge computing portfolio extends across general-purpose LPC and Kinetis MCUs, i.MX RT crossover MCUs and i.MX applications processors based on Arm® Cortex®-M and A class cores, multicore architectures, hardware accelerators, coprocessors, on-chip USB controllers, multimedia interfaces and rich peripheral sets. Our wireless SoCs support a broad array of connectivity options including Bluetooth® Low Energy, Wi-Fi, ultra-wideband (UWB), near field communication (NFC) and MiGLO technology with near field magnetic induction (NFMI).

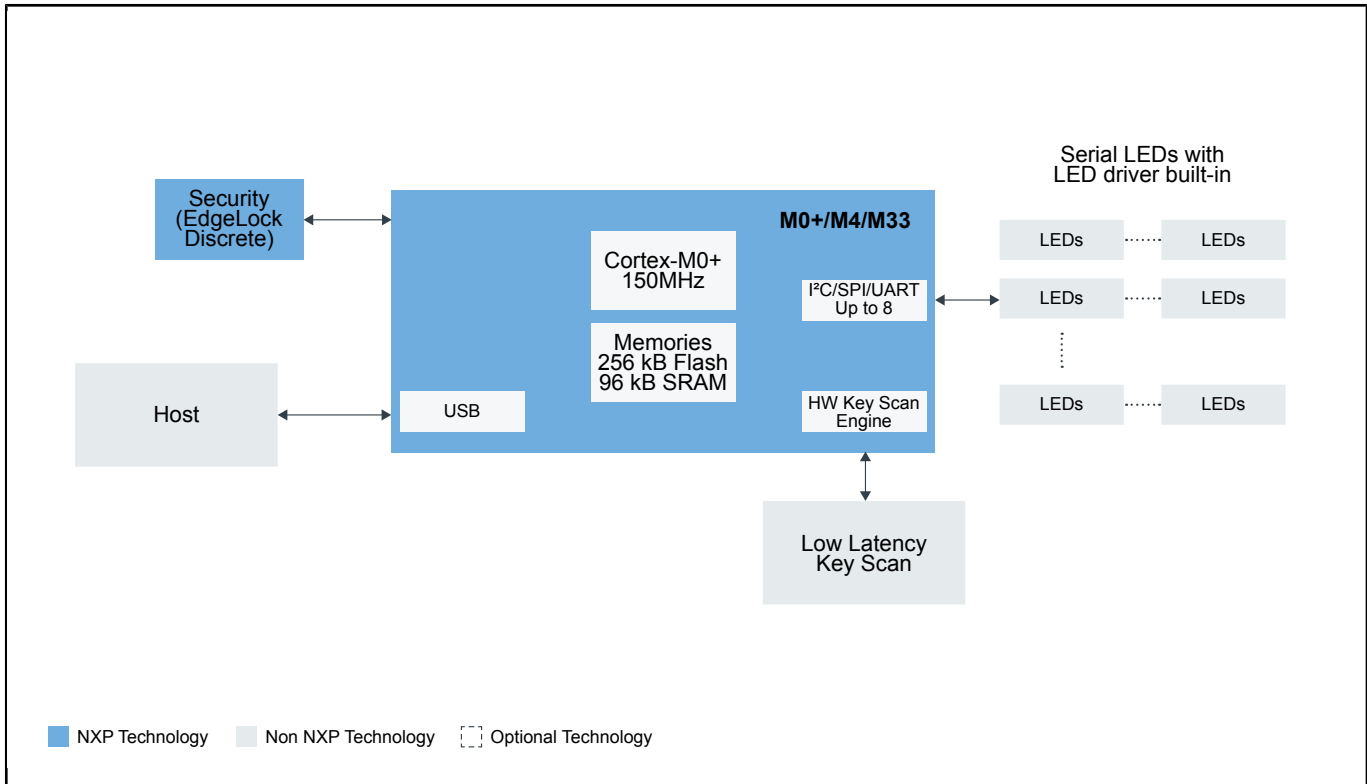
NXP offers developers the silicon, software and support they need to create a wide range of wired and wireless gaming accessories including consoles, controllers and gamepads, AR/VR headsets, hearables, gaming cases, and keyboards and mice.

Gaming Case Block Diagram



MCU	<ul style="list-style-type: none"> • LPC11U00: Scalable Entry Level 32-bit Microcontroller (MCU) based on Arm® Cortex®-M0+ and Cortex®-M0 Cores • LPC51U68: High-Performance, Power-Efficient and Cost Sensitive Arm® Cortex®-M0+ MCUs • LPC541XX: Low-Power Microcontrollers (MCUs) Based on Arm® Cortex®-M4 Cores With Optional Cortex®-M0+ Co-processor • LPC546XX: Power-Efficient Microcontrollers (MCUs) With Advanced Peripherals Based on Arm® Cortex®-M4 Core • LPC5500 Arm Cortex-M33: LPC5500 Series: Arm® Cortex®-M33 Based Microcontroller Series for Mass Market, Leveraging 40nm Embedded Flash Technology
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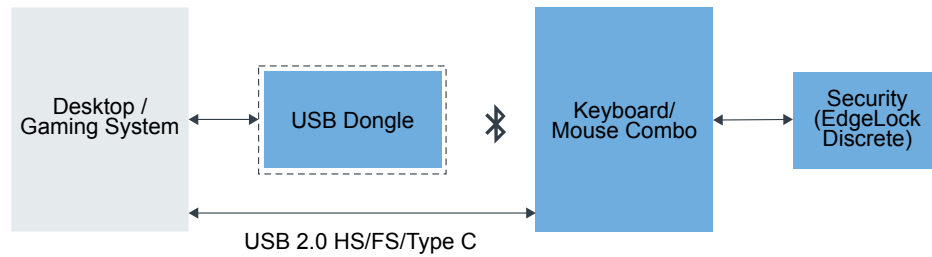
Gaming Keyboard Block Diagram



Recommended Products for Gaming Keyboard

MCU	<ul style="list-style-type: none"> • LPC11U00: Scalable Entry Level 32-bit Microcontroller (MCU) based on Arm® Cortex®-M0+ and Cortex®-M0 Cores • LPC51U68: High-Performance, Power-Efficient and Cost Sensitive Arm® Cortex®-M0+ MCUs • LPC541XX: Low-Power Microcontrollers (MCUs) Based on Arm® Cortex®-M4 Cores With Optional Cortex®-M0+ Co-processor • LPC546XX: Power-Efficient Microcontrollers (MCUs) With Advanced Peripherals Based on Arm® Cortex®-M4 Core • LPC5500 Arm Cortex-M33: LPC5500 Series: Arm® Cortex®-M33 Based Microcontroller Series for Mass Market, Leveraging 40nm Embedded Flash Technology
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

Keyboard and Mouse Block Diagram

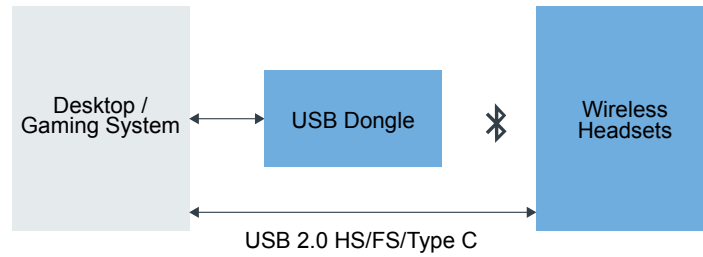


■ NXP Technology
 ■ Non NXP Technology
 Optional Technology

Recommended Products for Keyboard and Mouse

USB Dongle	<ul style="list-style-type: none"> • QN9080: QN908x: Ultra-Low-Power Bluetooth Low Energy System on Chip Solution
Keyboard/Mouse	<ul style="list-style-type: none"> • QN9090-30: QN9090/30: Bluetooth Low-Energy MCU with Arm®Cortex®-M4 CPU, Energy Efficiency, Analog and Digital Peripherals and NFC Tag Option • PTN5150: CC Logic for USB Type-C Applications • LPC5500 Arm Cortex-M33: LPC5500 Series: Arm® Cortex®-M33 Based Microcontroller Series for Mass Market, Leveraging 40nm Embedded Flash Technology
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Low-Latency Headsets Block Diagram

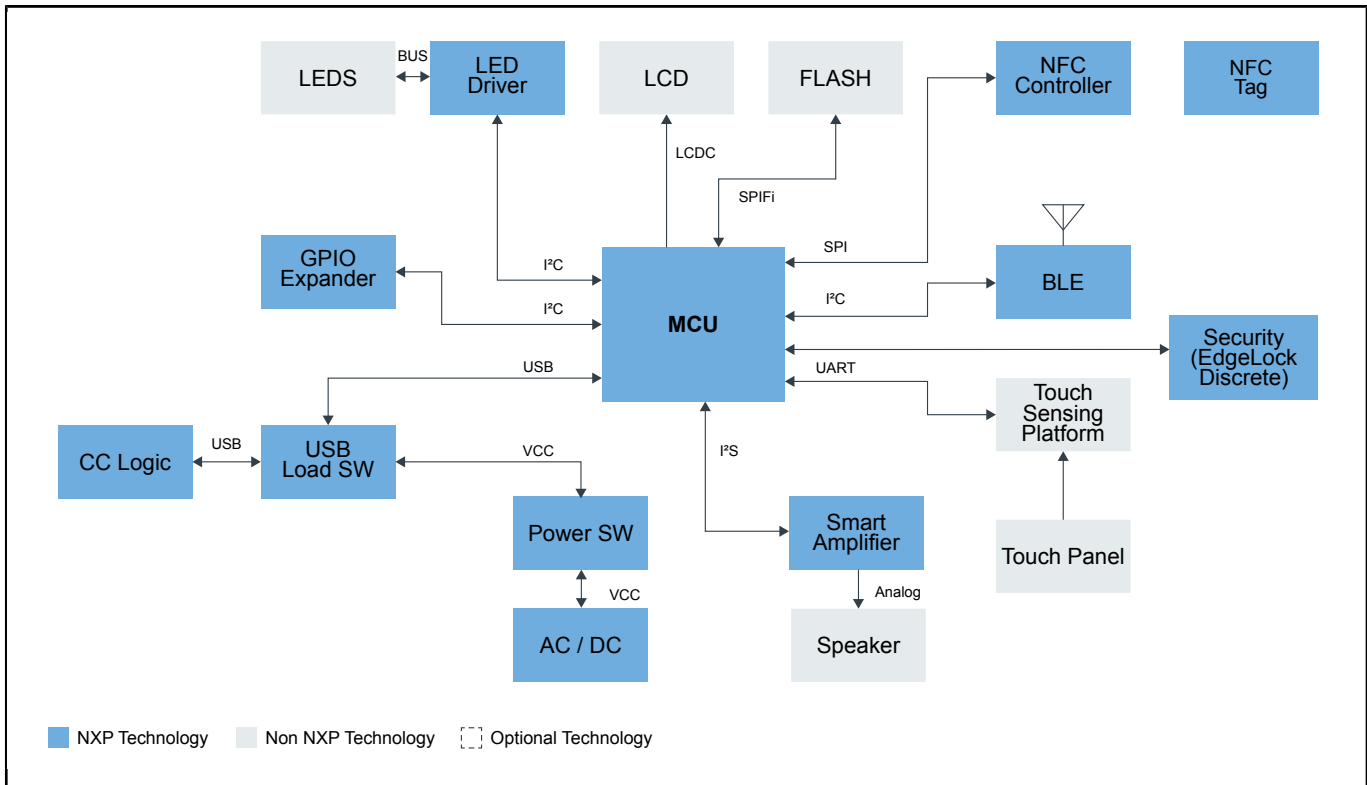


■ NXP Technology
 ■ Non NXP Technology
 Optional Technology

Recommended Products for Low-Latency Headsets

USB Dongle	<ul style="list-style-type: none"> • NXH3675: Ultra-Low Power Bluetooth Low Energy Audio Solution with Integrated Flash • NXH3670: Ultra-low Power, Low Latency Audio for Wireless Gaming Headphone • KL2x: Kinetis[®] KL2x-72/96 MHz, USB Ultra-Low-Power Microcontrollers (MCUs) based on Arm[®] Cortex[®]-M0+ Core • LPC5500 Arm Cortex-M33: LPC5500 Series: Arm[®] Cortex[®]-M33 Based Microcontroller Series for Mass Market, Leveraging 40nm Embedded Flash Technology
Wireless Headsets	<ul style="list-style-type: none"> • NXH3675: Ultra-Low Power Bluetooth Low Energy Audio Solution with Integrated Flash • NXH3670: Ultra-low Power, Low Latency Audio for Wireless Gaming Headphone • KL2x: Kinetis[®] KL2x-72/96 MHz, USB Ultra-Low-Power Microcontrollers (MCUs) based on Arm[®] Cortex[®]-M0+ Core

Gamepad Block Diagram



Recommended Products for Gamepad

MCU	<ul style="list-style-type: none"> • LPC546XX: Power-Efficient Microcontrollers (MCUs) With Advanced Peripherals Based on Arm[®] Cortex[®]-M4 Core
Drivers	<ul style="list-style-type: none"> • PCA9955BTW: 16-Channel Fm+ I²C-Bus 57 MA/20 V Constant-Current LED Driver • TEA1721AT: HV Start-Up Flyback Controller with Integrated MOSFET for 5 W Applications, F~burst = 430 Hz
USB	<ul style="list-style-type: none"> • NX5P3290UK: USB PD and Type-C Current-Limited Power Switch • PTN5150: CC Logic for USB Type-C Applications
Wireless	<ul style="list-style-type: none"> • PN7160: NFC Plug and Play Controller with Integrated Firmware and NCI Interface • NTAG213F_216F: NTAG213F, NTAG216F: NFC Forum Type 2 Tag Compliant IC with 144/888 B User Memory and Field Detection • QN9080: QN908x: Ultra-Low-Power Bluetooth Low Energy System on Chip Solution
GPIO Expander	<ul style="list-style-type: none"> • PCAL9554B_PCAL9554C: Low-Voltage 8-Bit I²C-Bus and SMBus Low-Power I/O Port with Interrupt, Weak Pull-Up and Agile I/O
Wireless	<ul style="list-style-type: none"> • PN7160: NFC Plug and Play Controller with Integrated Firmware and NCI Interface • NTAG213F_216F: NTAG213F, NTAG216F: NFC Forum Type 2 Tag Compliant IC with 144/888 B User Memory and Field Detection • QN9080: QN908x: Ultra-Low-Power Bluetooth Low Energy System on Chip Solution
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Drivers	<ul style="list-style-type: none"> • PCA9955BTW: 16-Channel Fm+ I²C-Bus 57 MA/20 V Constant-Current LED Driver • TEA1721AT: HV Start-Up Flyback Controller with Integrated MOSFET for 5 W Applications, F~burst = 430 Hz

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View our complete solution for [Gaming Accessories](#).

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