



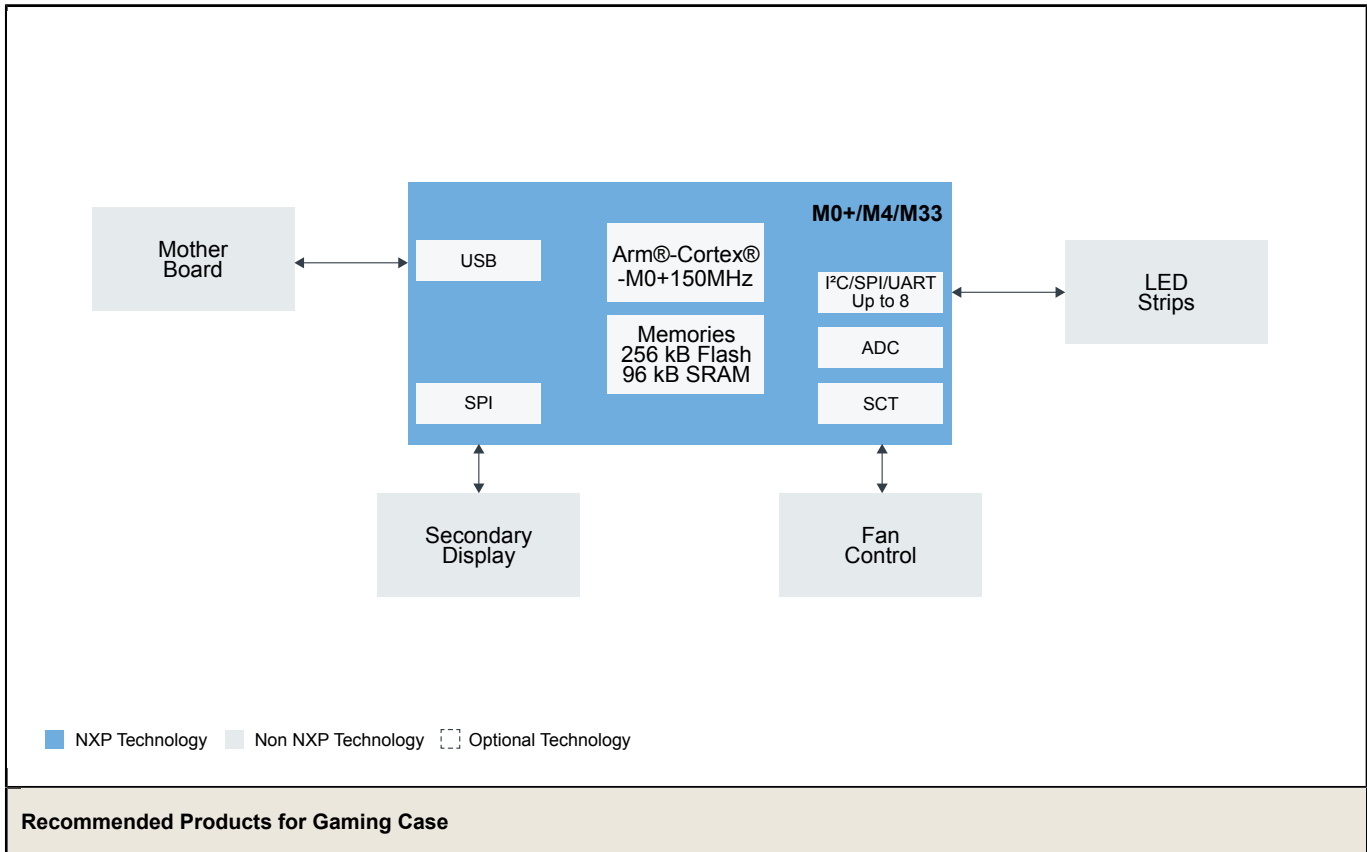
# Gaming Accessories

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).

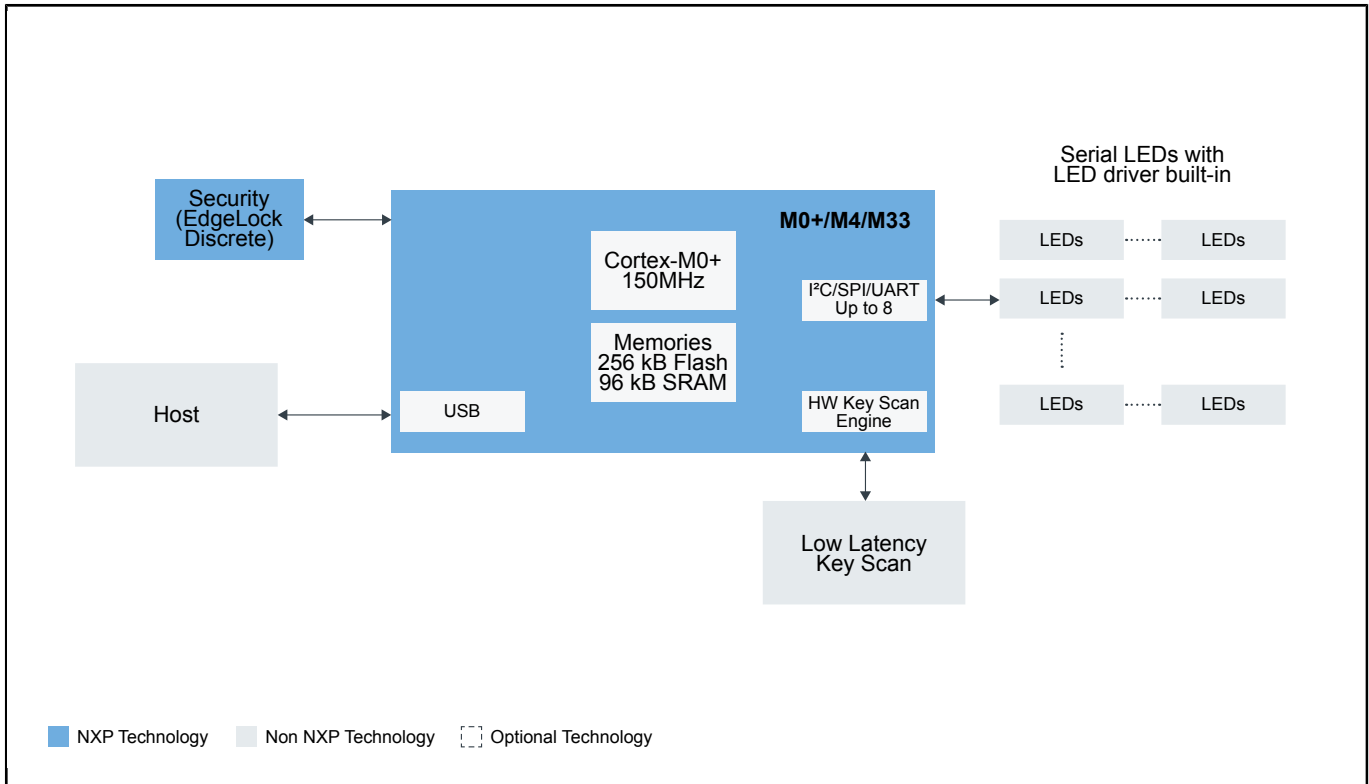
NXP offers developers the silicon, software and support they need to create a wide range of wired and wireless gaming accessories including consoles, controllers and gamepads, AR/VR headsets, hearables, gaming cases, and keyboards and mice.

## Gaming Case Block Diagram



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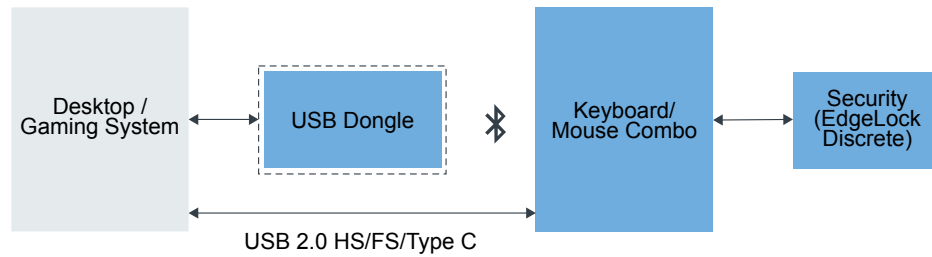
## Gaming Keyboard Block Diagram



### Recommended Products for Gaming Keyboard

MCU	<ul style="list-style-type: none"> <li>• <b>LPC11U00</b>: Scalable Entry Level 32-bit Microcontroller (MCU) based on Arm® Cortex®-M0+ and Cortex®-M0 Cores</li> <li>• <b>LPC51U68</b>: High-Performance, Power-Efficient and Cost Sensitive Arm® Cortex®-M0+ MCUs</li> <li>• <b>LPC541XX</b>: Low-Power Microcontrollers (MCUs) Based on Arm® Cortex®-M4 Cores With Optional Cortex®-M0+ Co-processor</li> <li>• <b>LPC546XX</b>: Power-Efficient Microcontrollers (MCUs) With Advanced Peripherals Based on Arm® Cortex®-M4 Core</li> <li>• <b>LPC5500 Arm Cortex-M33</b>: LPC5500 Series: Arm® Cortex®-M33 Based Microcontroller Series for Mass Market, Leveraging 40nm Embedded Flash Technology</li> </ul>
Security (EdgeLock Discrete)	<ul style="list-style-type: none"> <li>• <b>SE050</b>: EdgeLock® SE050: Plug and Trust Secure Element Family – Enhanced IoT security with high flexibility</li> <li>• <b>SE051</b>: EdgeLock® SE051: Proven, Easy-to-Use IoT Security Solution with Support for Updatability and Custom Applets</li> <li>• <b>EDGELOCK-A5000</b>: EdgeLock® A5000 Plug and Trust Secure Authenticator: Authentication Made Secure, Scalable and Easy</li> </ul>

## Keyboard and Mouse Block Diagram

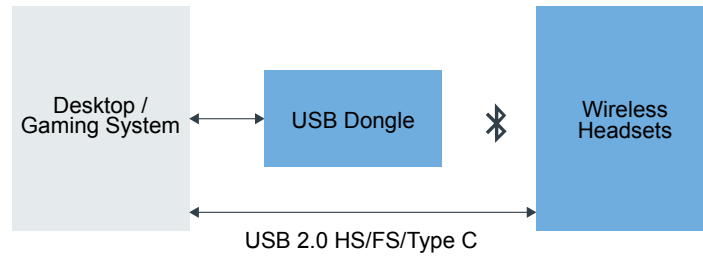


■ NXP Technology  
 ■ Non NXP Technology  
  Optional Technology

#### Recommended Products for Keyboard and Mouse

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

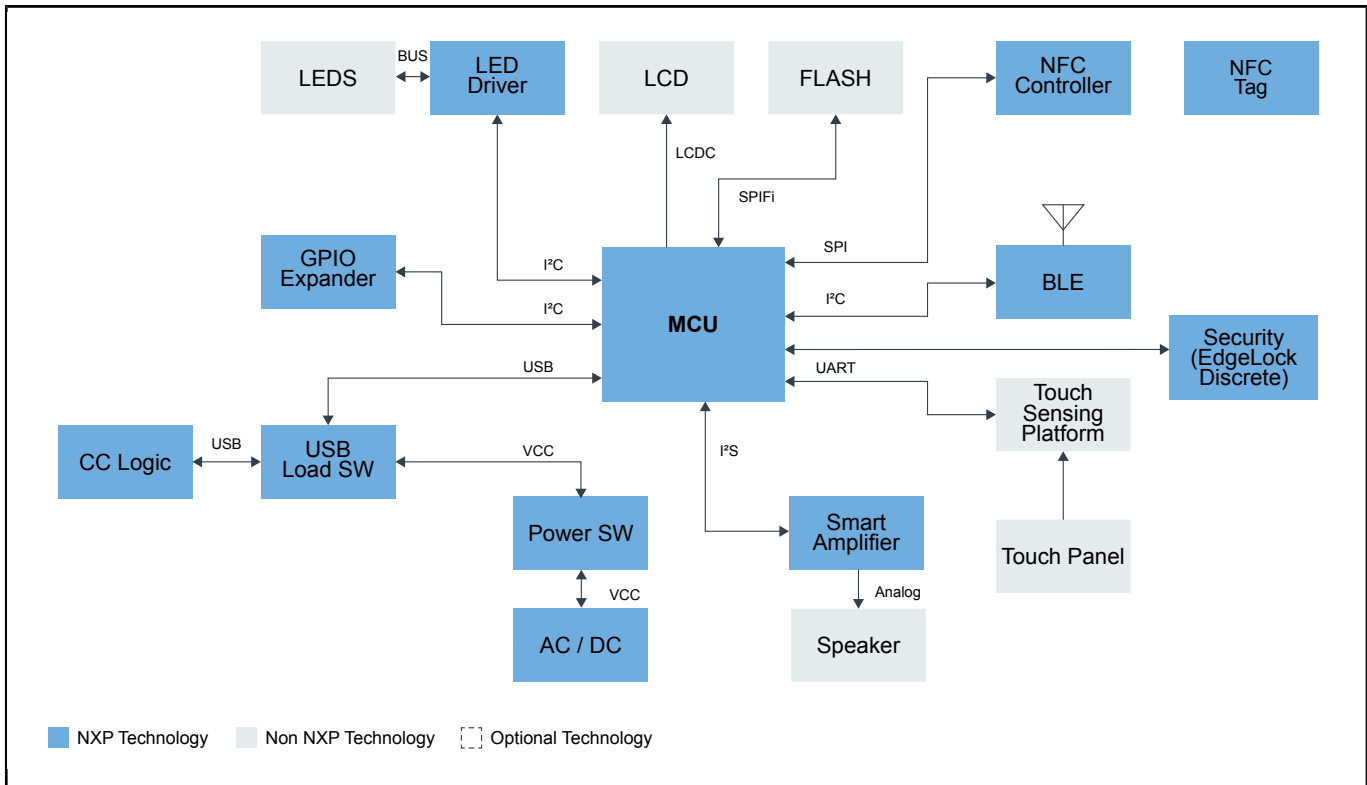


■ NXP Technology 
 ■ Non NXP Technology 
  Optional Technology

### Recommended Products for Low-Latency Headsets

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

## Gamepad Block Diagram



### Recommended Products for Gamepad

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

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

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