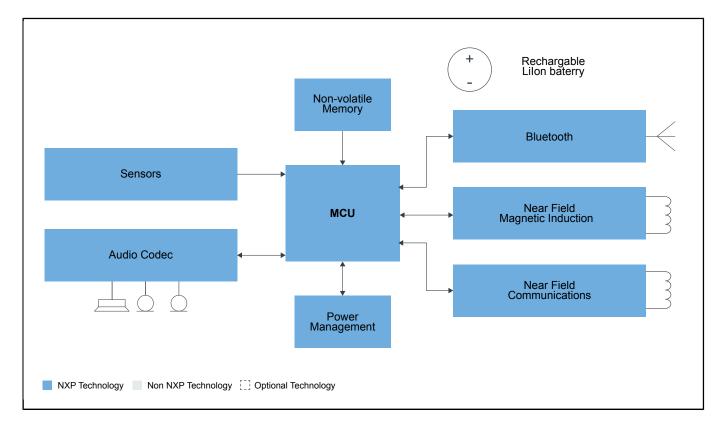




Hearables, or smart headphones, are highly integrated, truly wireless earbuds designed to improve audio experiences across a range of consumer and healthcare applications.

Small form factors, ultra-lightweight, and wireless operation increase user comfort. The continued challenge for hearables is how to combine audio quality, user experience, and better battery life in a tiny package while offering a multitude of possibilities, all of which demands digital signal processing.

NXP<sup>®</sup> offers a growing portfolio of ultra-low-power MiGLO<sup>™</sup> hearables solutions based on digital signal processing, NFMI and Bluetooth<sup>®</sup> Low-Energy technologies. MiGLO delivers the power of wireless audio today.



## Hearables Block Diagram

Recommended Products for Hearables	
мси	<ul> <li>MCX-A14X-A15X: MCX A14x/15x MCUs with Arm<sup>®</sup> Cortex<sup>®</sup> M33, Scalable Device Options, Low Power and Intelligent Peripherals</li> <li>MCX-N94X-N54X: MCX N94x/54x Highly Integrated Multicore MCUs with On-Chip Accelerators, Intelligent Peripherals and Advanced Security</li> <li>LPC541XX: Low-Power Microcontrollers (MCUs) Based on Arm<sup>®</sup> Cortex<sup>®</sup>-M4 Cores With Optional Cortex<sup>®</sup>-M0+ Co-processor</li> <li>i.MX-RT500: i.MX RT500 Crossover MCU with Arm<sup>®</sup> Cortex<sup>®</sup>-M33, DSP and GPU Cores</li> <li>i.MX-RT600: i.MX RT600 Crossover MCU with Arm<sup>®</sup> Cortex<sup>®</sup>-M33 and DSP Cores</li> </ul>
Power Management	<ul> <li>PCA9420-PCA9421: PMIC for Low Power Applications</li> <li>PCA9460: 13-Channel Power Management Integrated Circuit (PMIC) for Ultra Low Power Application</li> <li>Battery Management: Battery Management</li> </ul>
NFC	NFC (HF): NFC - Near Field Communication
Memory	NXH5104UK: 4 Mbit Serial SPI EEPROM
NFMI Radio	• MiGLO <sup>®</sup> : MiGLO <sup>®</sup>
Sensors	FXLS8974CF: ±2g/±4g/±8g/±16g, Low-Power 12-Bit Digital IoT Accelerometer
Bluetooth	<ul> <li>NXH2004: Ultra-Low Power Hearing Aid SoC Solution over Bluetooth® LE Audio</li> <li>NXH3670: Ultra-low Power, Low Latency Audio for Wireless Gaming Headphone</li> <li>NXH3675: Ultra-Low Power Bluetooth Low Energy Audio Solution with Integrated Flash</li> </ul>
Audio Codec	SGTL5000: Ultra-Low-Power Audio Codec

## View our complete solution for Hearables.

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

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