



Hearables

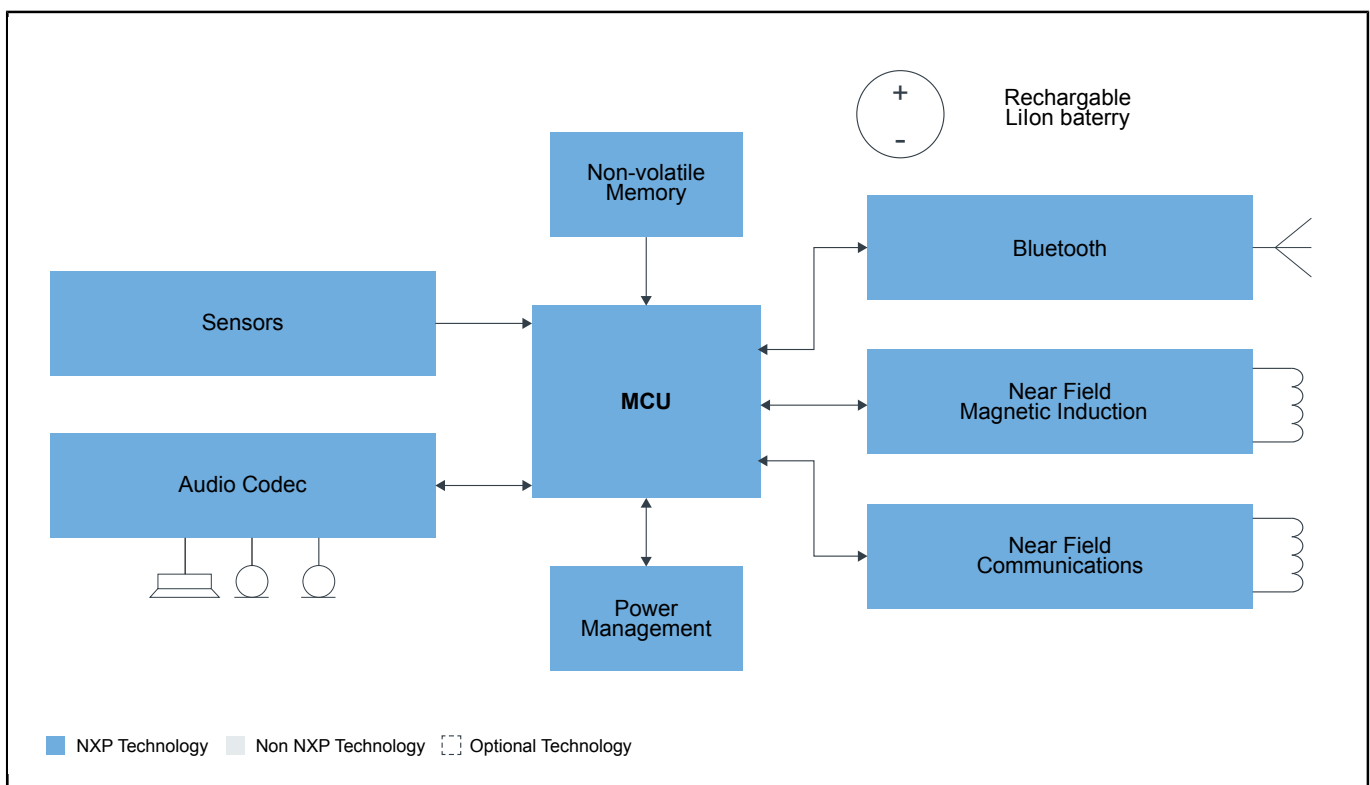
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Hearables, or smart headphones, are highly integrated, truly wireless earbuds designed to improve audio experiences across a range of consumer and healthcare applications.

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

Hearables Block Diagram



Recommended Products for Hearables	
MCU	<ul style="list-style-type: none"> • MCX-A14X-A15X: MCX A14x/15x MCUs with Arm® Cortex® M33, Scalable Device Options, Low Power and Intelligent Peripherals • MCX-N94X-N54X: MCX N94x/54x Highly Integrated Multicore MCUs with On-Chip Accelerators, Intelligent Peripherals and Advanced Security • LPC541XX: Low-Power Microcontrollers (MCUs) Based on Arm® Cortex®-M4 Cores With Optional Cortex®-M0+ Co-processor • i.MX-RT500: i.MX RT500 Crossover MCU with Arm® Cortex®-M33, DSP and GPU Cores • i.MX-RT600: i.MX RT600 Crossover MCU with Arm® Cortex®-M33 and DSP Cores
Power Management	<ul style="list-style-type: none"> • PCA9420-PCA9421: PMIC for Low Power Applications • PCA9460: 13-Channel Power Management Integrated Circuit (PMIC) for Ultra Low Power Application • Battery Management: Battery Management
NFC	<ul style="list-style-type: none"> • NFC (HF): NFC - Near Field Communication
Memory	<ul style="list-style-type: none"> • NXH5104UK: 4 Mbit Serial SPI EEPROM
NFMI Radio	<ul style="list-style-type: none"> • MiGLO®: MiGLO®
Sensors	<ul style="list-style-type: none"> • FXLS8974CF: ±2g/±4g/±8g/±16g, Low-Power 12-Bit Digital IoT Accelerometer
Bluetooth	<ul style="list-style-type: none"> • NXH2004: Ultra-Low Power Hearing Aid SoC Solution over Bluetooth® LE Audio • NXH3670: Ultra-low Power, Low Latency Audio for Wireless Gaming Headphone • NXH3675: Ultra-Low Power Bluetooth Low Energy Audio Solution with Integrated Flash
Audio Codec	<ul style="list-style-type: none"> • SGTL5000: Ultra-Low-Power Audio Codec

View our complete solution for [Hearables](#).

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