

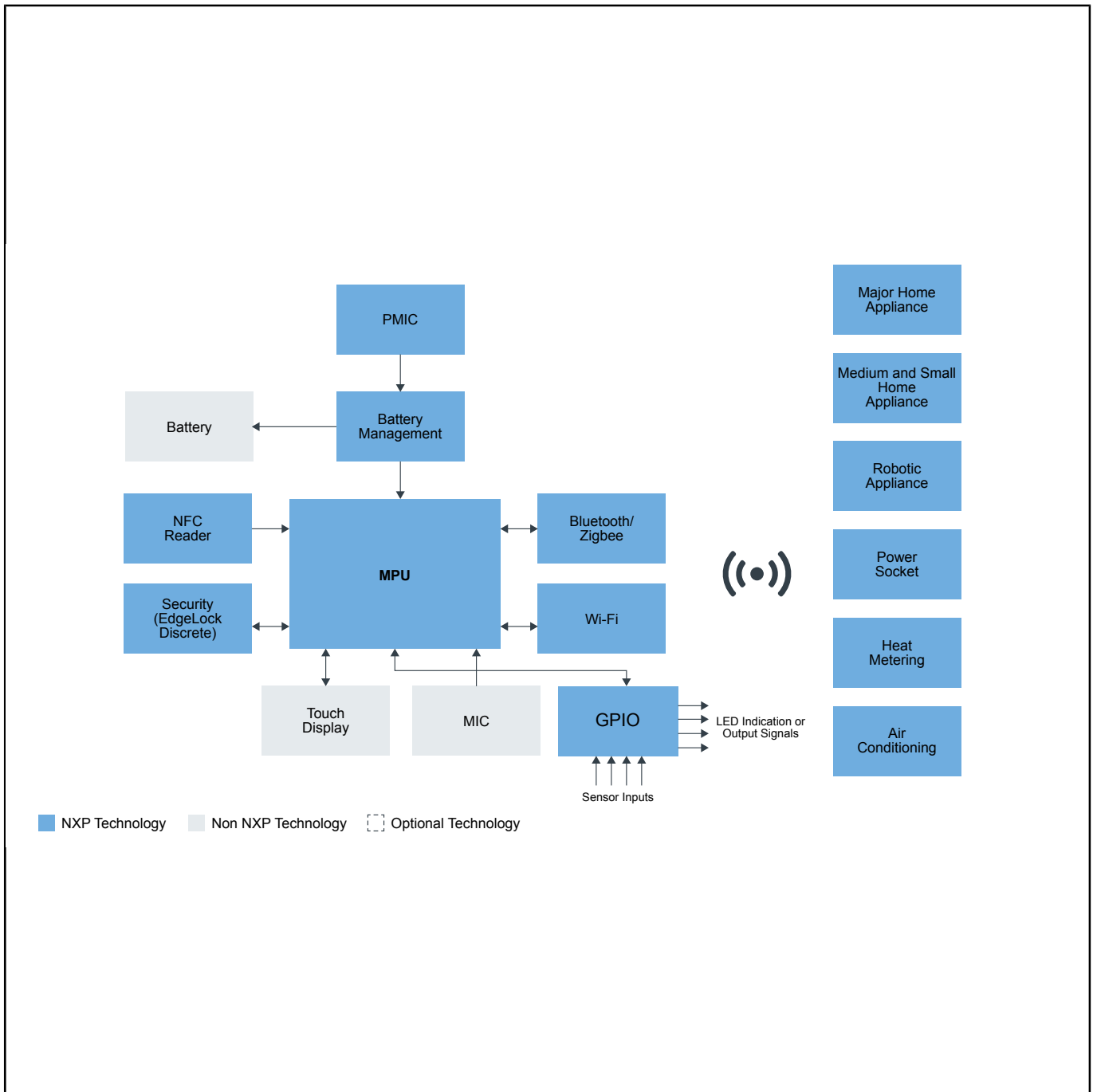


# Home Control Panel

Last Updated: Dec 6, 2023

Appliances are smarter than before. With the help of sensors and connectivity they can do more for their owners: be activated by voice or face recognition, work when electricity peaks are low or even send information to the manufacturer to create a preventive maintenance appointment. With NXP's secure connectivity applications, you can have a centralized control panel that cannot just work for appliances, but also for smart devices throughout your home.

## Home Control Panel Block Diagram



## Recommended Products for Home Control Panel

MPU	<ul style="list-style-type: none"> <li>• <a href="#">i.MX8MMINI</a>: i.MX 8M Mini - Arm® Cortex®-A53, Cortex-M4, Audio, Voice, Video</li> </ul>
PMIC	<ul style="list-style-type: none"> <li>• <a href="#">PCA9450</a>: Power Management IC (PMIC) for i.MX 8M Mini/Nano/Plus</li> </ul>
Battery Management	<ul style="list-style-type: none"> <li>• <a href="#">Battery Management</a>: Battery Management</li> </ul>
Security (EdgeLock Discrete)	<ul style="list-style-type: none"> <li>• <a href="#">SE050</a>: EdgeLock® SE050: Plug and Trust Secure Element Family – Enhanced IoT security with high flexibility</li> <li>• <a href="#">EDGELOCK-A5000</a>: EdgeLock® A5000 Plug and Trust Secure Authenticator: Authentication Made Secure, Scalable and Easy</li> </ul>
NFC Reader	<ul style="list-style-type: none"> <li>• <a href="#">PN7160</a>: NFC Plug and Play Controller with Integrated Firmware and NCI Interface</li> </ul>
Bluetooth Zigbee	<ul style="list-style-type: none"> <li>• <a href="#">K32W061_41</a>: K32W061/41: High-Performance, Secure and Ultra-Low-Power MCU for Zigbee®, Thread™, and Bluetooth® LE 5.0 with Built-In NFC Option</li> </ul>
Wi-Fi	<ul style="list-style-type: none"> <li>• <a href="#">88MW32X 802.11n Wi-Fi® Microcontroller SoC</a></li> <li>• <a href="#">IW416</a>: 2.4/5 GHz Dual-Band 1x1 Wi-Fi® 4 (802.11n) + Bluetooth® 5.2 Solution</li> </ul>
Major Home Appliance	<ul style="list-style-type: none"> <li>• <a href="#">Major Home Appliances</a>: Major Home Appliances</li> </ul>
Small and Medium Appliance	<ul style="list-style-type: none"> <li>• <a href="#">Small and Medium Appliances</a>: Small and Medium Appliances</li> </ul>
Robotic Appliances	<ul style="list-style-type: none"> <li>• <a href="#">Robotic Appliance</a>: Robotic Appliance</li> </ul>
Power Socket	<ul style="list-style-type: none"> <li>• <a href="#">Smart Power Socket and Light Switch</a>: Smart Power Socket and Light Switch</li> </ul>
Heat Metering	<ul style="list-style-type: none"> <li>• <a href="#">Heat Metering</a>: Heat Metering</li> </ul>
Air Conditioning	<ul style="list-style-type: none"> <li>• <a href="#">Air Conditioning (AC)</a>: Air Conditioning (AC)</li> </ul>
Air Conditioning GPIO	<ul style="list-style-type: none"> <li>• <a href="#">PCAL9714</a>: 14-Bit SPI I/O Expander with Agile I/O Features</li> <li>• <a href="#">PCAL9722</a>: 22-Bit SPI I/O Expander with Agile I/O Features</li> </ul>
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Air Conditioning GPIO	<ul style="list-style-type: none"> <li>• <a href="#">MCX-A14X-A15X</a>: MCX A14x/15x MCUs with Arm® Cortex® M33, Scalable Device Options, Low Power and Intelligent Peripherals</li> <li>• <a href="#">MCX-N94X-N54X</a>: MCX N94x/54x Highly Integrated Multicore MCUs with On-Chip Accelerators, Intelligent Peripherals and Advanced Security</li> <li>• <a href="#">PCAL9714</a>: 14-Bit SPI I/O Expander with Agile I/O Features</li> <li>• <a href="#">PCAL9722</a>: 22-Bit SPI I/O Expander with Agile I/O Features</li> </ul>

View our complete solution for [Home Control Panel](#).

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

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