

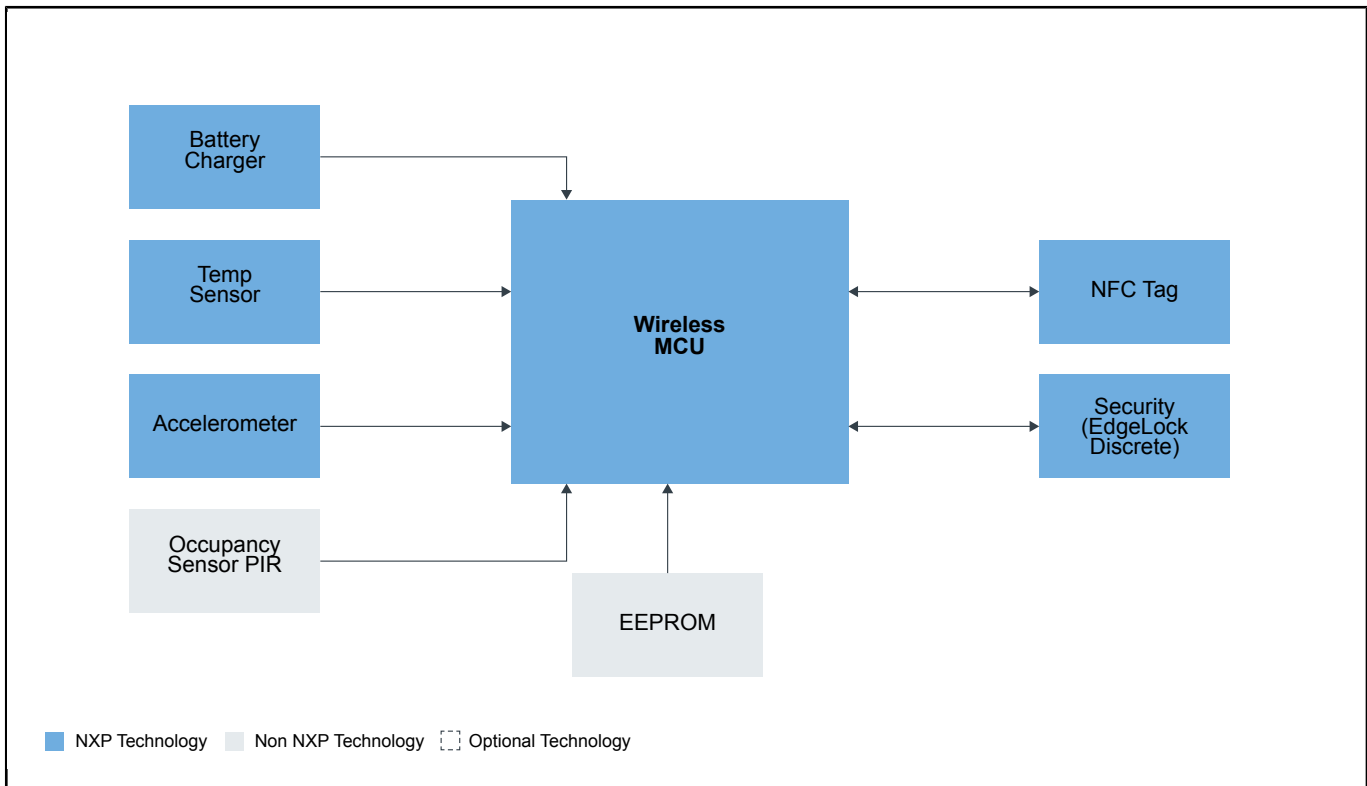


# Building Security

Last Updated: Apr 18, 2024

NXP's wide portfolio offers a number of options for buildings security solutions. Our wireless MCUs are the choice when a battery-powered, occupancy sensor or a surveillance low-power system is required. The cost-effective crossover i.MX RT MCUs offer a great solution for video processing and data management for wireless IP video cameras. NXP's WIFI 6 modules ensure low latency and high-quality connection for IP cameras solutions.

## Wireless Occupancy Sensor Block Diagram

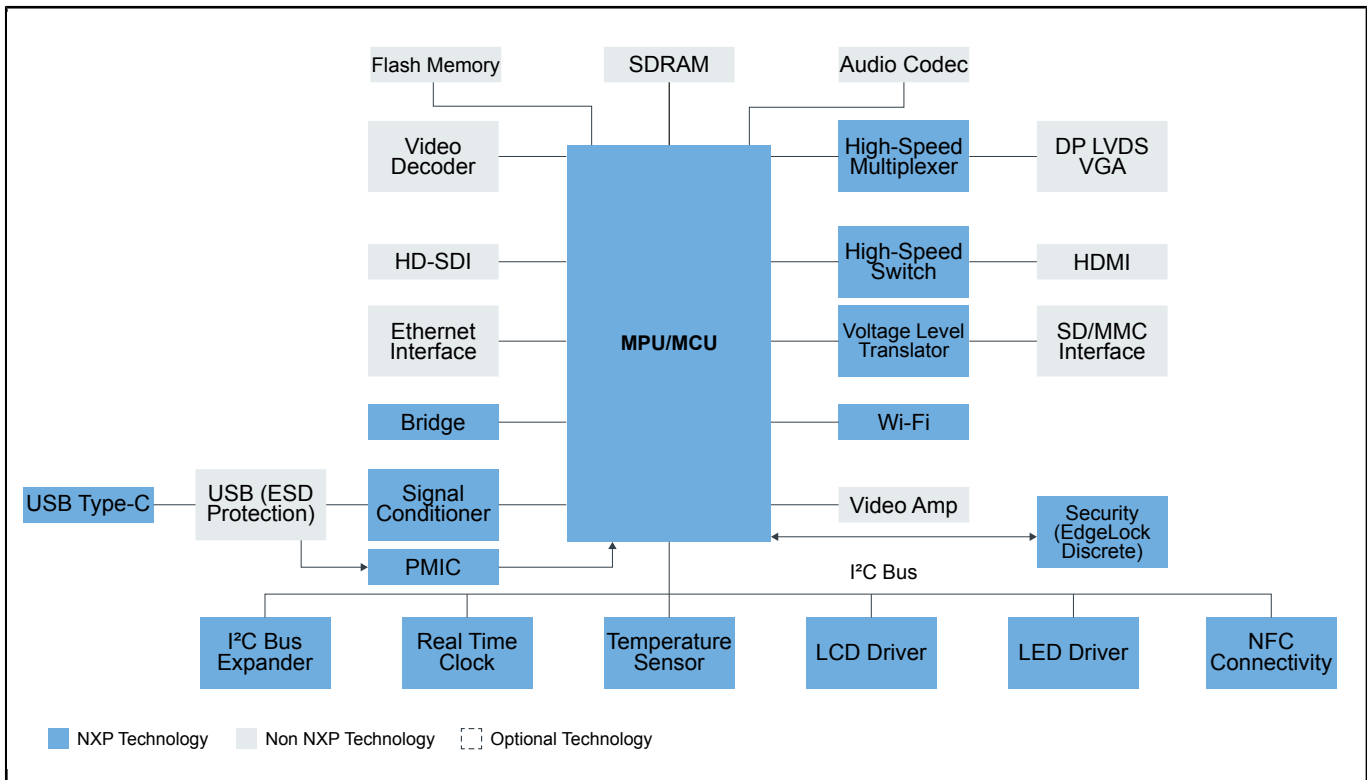


### Recommended Products for Wireless Occupancy Sensor

Wireless MCU	<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="#">JN5189_88_T</a>: JN5189/88 (T): High-Performance and Ultra-Low-Power MCUs for Zigbee® and Thread with Built-In NFC Option</li></ul>
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	<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> </ul>
Battery Charger	<ul style="list-style-type: none"> <li>• <a href="#">BC3770</a>: 2 A Switch-Mode Li-ion/Li-polymer Battery Charger</li> </ul>
NFC Tag	<ul style="list-style-type: none"> <li>• <a href="#">NTAG5-LINK</a>: NTAG® 5 Link: NFC Forum-Compliant I<sup>2</sup>C Bridge for IoT on Demand</li> </ul>
Temperature Sensor	<ul style="list-style-type: none"> <li>• <a href="#">P3T1035xUK</a>: I3C, I<sup>2</sup>C-Bus, ±0.5 °C Accuracy, Digital Temperature Sensor</li> <li>• <a href="#">P3T2030xUK</a>: I3C, I<sup>2</sup>C-Bus, 2.0 °C Accuracy, Digital Temperature Sensor</li> <li>• <a href="#">PCT2202UK</a>: Ultra-Low-Power, 1.8 V, 1 Deg. C Accuracy, Digital Temperature Sensor with I<sup>2</sup>C-Bus Interface</li> <li>• <a href="#">LM75B</a>: Digital Temperature Sensor and Thermal Watchdog</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="#">SE051</a>: EdgeLock® SE051: Proven, Easy-to-Use IoT Security Solution with Support for Updatability and Custom Applets</li> </ul>
Accelerometer	<ul style="list-style-type: none"> <li>• <a href="#">Accelerometers</a>: Accelerometers</li> </ul>

## IP Camera Surveillance Block Diagram

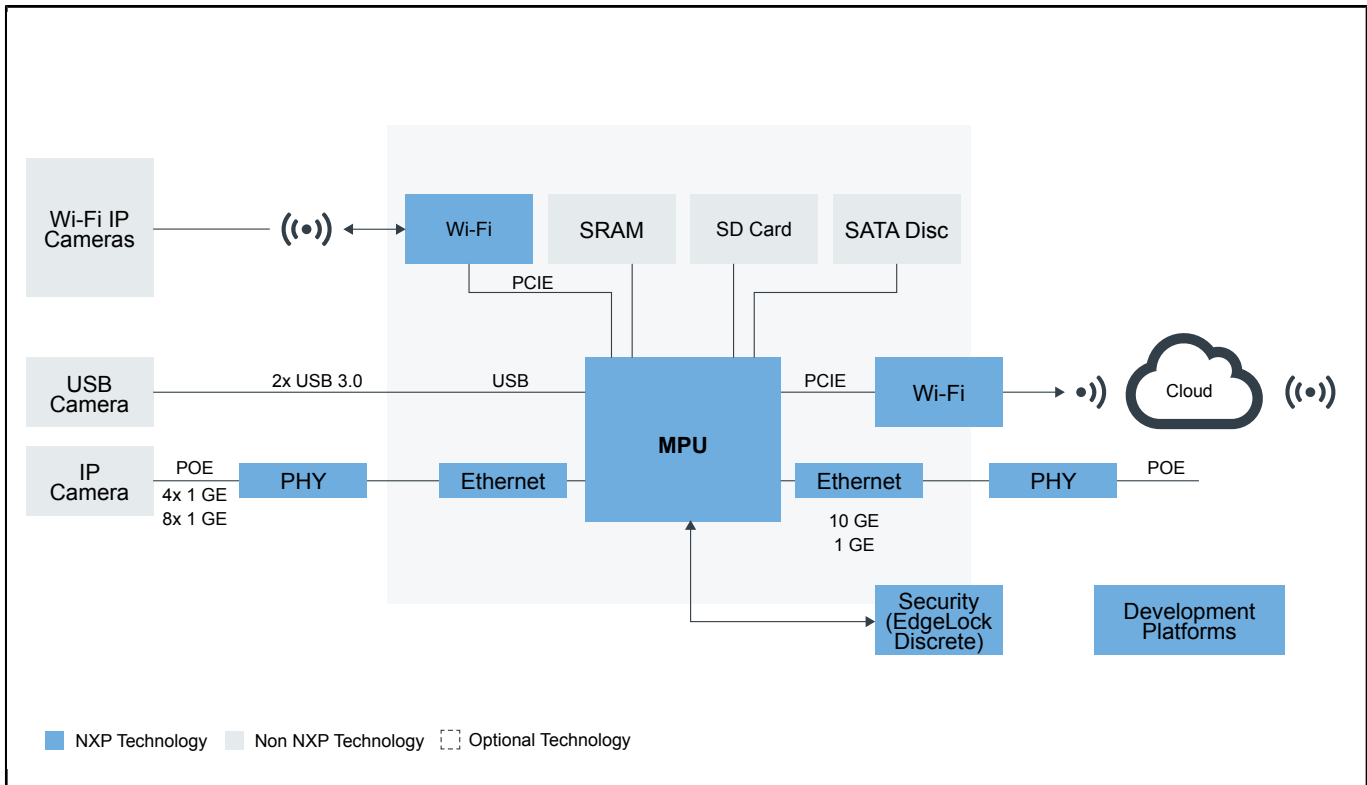


### Recommended Products for IP Camera Surveillance

MPU/MCU	<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="#">i.MX 8 Applications Processors</a>: i.MX 8 Series Applications Processors Multicore Arm® Cortex® Processors</li> <li>• <a href="#">i.MX7ULP</a>: i.MX 7ULP Family, Ultra-Low-Power with Graphics</li> </ul>
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	<ul style="list-style-type: none"> <li>• <a href="#">i.MX-RT1060</a>: i.MX RT1060: Crossover MCU with Arm® Cortex®-M7</li> </ul>
NFC Connectivity	<ul style="list-style-type: none"> <li>• <a href="#">NTAG5-LINK</a>: NTAG® 5 Link: NFC Forum-Compliant I<sup>2</sup>C Bridge for IoT on Demand</li> <li>• <a href="#">NTAG5-BOOST</a>: NTAG® 5 Boost: NFC Forum-Compliant I<sup>2</sup>C Bridge for Tiny Devices</li> </ul>
Wireless MCU	<ul style="list-style-type: none"> <li>• <a href="#">88W9098</a>: 2.4/5 GHz Dual-Band 2x2 Wi-Fi® 6 (802.11ax) + Bluetooth® 5.3</li> </ul>
Voltage Level Translator	<ul style="list-style-type: none"> <li>• <a href="#">NTS0304E</a>: 4-Bit Dual-Supply Translating Transceiver (Open-Drain, Auto-Direction Sensing)</li> <li>• <a href="#">GTL2014PW</a>: 4-Bit LVTTTL-to-GTL Transceiver</li> </ul>
High-speed Multiplexer	<ul style="list-style-type: none"> <li>• <a href="#">CBTL04083A_CBTL04083B</a>: 3.3 V, Four Differential Channel, 2-1 Multiplexer/Demultiplexer Switch for PCI Express Gen3</li> <li>• <a href="#">CBTL06DP213EE</a>: Third Generation High-Performance DisplayPort Multiplexer</li> <li>• <a href="#">CBTL08GP053EV</a>: USB Type-C High-Performance Crossbar Switch IC</li> </ul>
LED Driver	<ul style="list-style-type: none"> <li>• <a href="#">PCA9624</a>: 8-Bit Fm+ I<sup>2</sup>C-Bus 100 MA 40 V LED Driver</li> </ul>
LCD Driver	<ul style="list-style-type: none"> <li>• <a href="#">LCD Graphic Drivers</a>: LCD Graphic Drivers</li> </ul>
Real-time Clock	<ul style="list-style-type: none"> <li>• <a href="#">PCA8565</a>: Real-Time Clock/Calendar</li> </ul>
Temperature Sensor	<ul style="list-style-type: none"> <li>• <a href="#">P3T1035xUK</a>: I3C, I<sup>2</sup>C-Bus, ±0.5 °C Accuracy, Digital Temperature Sensor</li> <li>• <a href="#">P3T2030xUK</a>: I3C, I<sup>2</sup>C-Bus, 2.0 °C Accuracy, Digital Temperature Sensor</li> <li>• <a href="#">PCT2202UK</a>: Ultra-Low-Power, 1.8 V, 1 Deg. C Accuracy, Digital Temperature Sensor with I<sup>2</sup>C-Bus Interface</li> <li>• <a href="#">LM75B</a>: Digital Temperature Sensor and Thermal Watchdog</li> </ul>
I2C Bus Expander	<ul style="list-style-type: none"> <li>• <a href="#">General Purpose I/O (GPIO)</a>: General Purpose I/O (GPIO)</li> </ul>
USB Type-C	<ul style="list-style-type: none"> <li>• <a href="#">PTN5110</a>: USB PD TCPC PHY IC</li> <li>• <a href="#">PTN5150</a>: CC Logic for USB Type-C Applications</li> </ul>
High-speed Switch	<ul style="list-style-type: none"> <li>• <a href="#">CBTL08GP053EV</a>: USB Type-C High-Performance Crossbar Switch IC</li> <li>• <a href="#">CBTL06DP213EE</a>: Third Generation High-Performance DisplayPort Multiplexer</li> <li>• <a href="#">CBTL06GP213EE</a>: Second Generation High-Performance General Purpose Switch</li> </ul>
Signal Conditioner	<ul style="list-style-type: none"> <li>• <a href="#">PTN36043x</a>: USB Type-C SuperSpeed Active Switch</li> <li>• <a href="#">PTN36502</a>: Type-C USB 3.1 Gen 1 and DisplayPort V1.2 Combo Redriver</li> </ul>
Bridge	<ul style="list-style-type: none"> <li>• <a href="#">Bridges</a>: Bridge IC Solutions</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="#">SE051</a>: EdgeLock® SE051: Proven, Easy-to-Use IoT Security Solution with Support for Updatability and Custom Applets</li> <li>• <a href="#">EDGELOCK-A5000</a>: EdgeLock® A5000 Plug and Trust Secure Authenticator: Authentication Made Secure, Scalable and Easy</li> </ul>
PMIC	<ul style="list-style-type: none"> <li>• <a href="#">PCA9460</a>: 13-Channel Power Management Integrated Circuit (PMIC) for Ultra Low Power Application</li> </ul>

## Surveillance System Block Diagram



### Recommended Products for Surveillance System

Layerscape SoC	<ul style="list-style-type: none"> <li>• <a href="#">LS1046A</a>: Layerscape® 1046A and 1026A Processors</li> <li>• <a href="#">LX2160A</a>: Layerscape® LX2160A, LX2120A, LX2080A Processors</li> </ul>
Development Platforms	<ul style="list-style-type: none"> <li>• <a href="#">eIQ ML Development Environment</a>: eIQ® ML Software Development Environment</li> </ul>
Ethernet PHY	<ul style="list-style-type: none"> <li>• <a href="#">F104S8A</a>: F104S8A Four-port Gigabit Ethernet Copper PHY</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="#">SE051</a>: EdgeLock® SE051: Proven, Easy-to-Use IoT Security Solution with Support for Updatability and Custom Applets</li> </ul>
Wi-Fi	<ul style="list-style-type: none"> <li>• <a href="#">88W9068</a>: 2.4/5 GHz Dual-Band 8x8 Wi-Fi® 6 (802.11ax) Access Solution</li> </ul>
Ethernet PHY	<ul style="list-style-type: none"> <li>• <a href="#">F104S8A</a>: F104S8A Four-port Gigabit Ethernet Copper PHY</li> </ul>

View our complete solution for [Building Security](#).

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