Building Security

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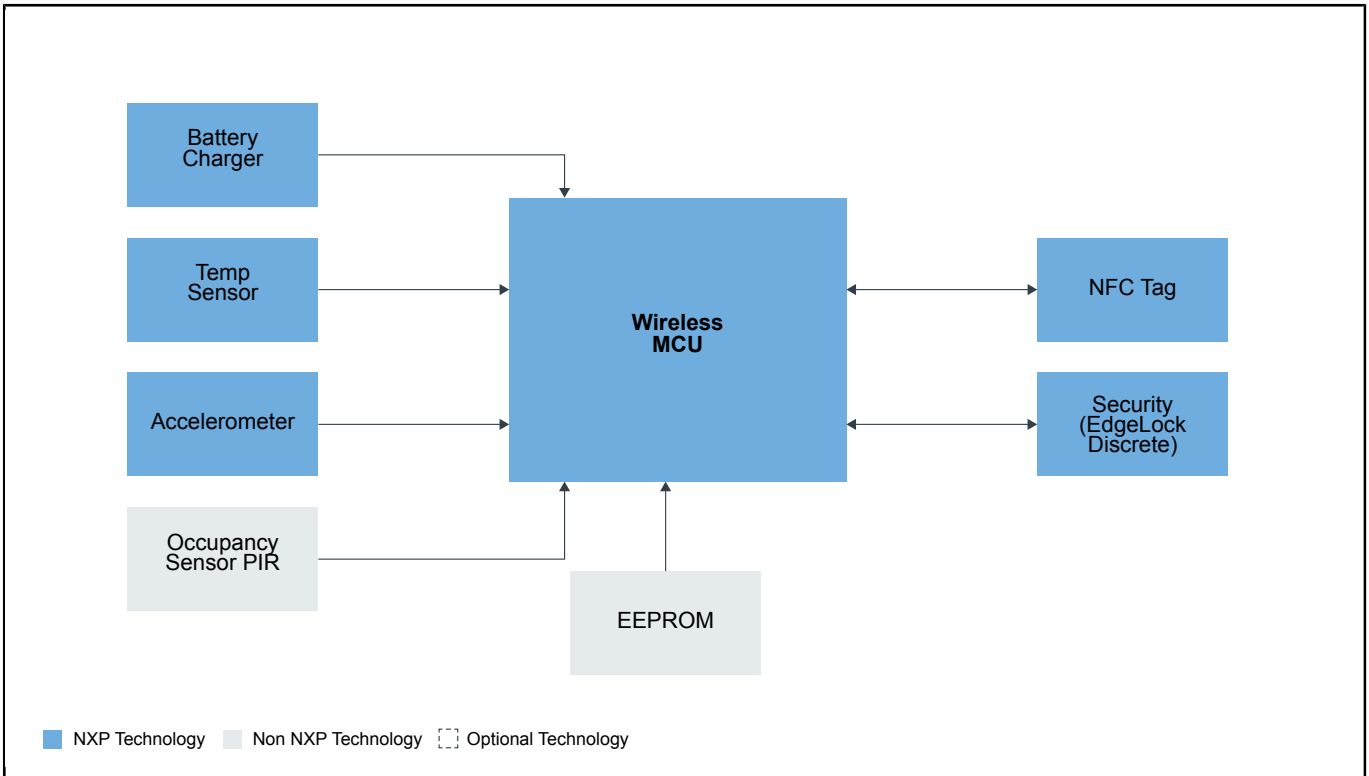
NXP's wide portfolio offers a number of options for buildings security solutions. Our wireless MCUs are the choice when a battery-powered, occupancy sensor or a surveillance low-power system is required. The cost-effective crossover i.MX RT MCUs offer a great solution for video processing and data management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

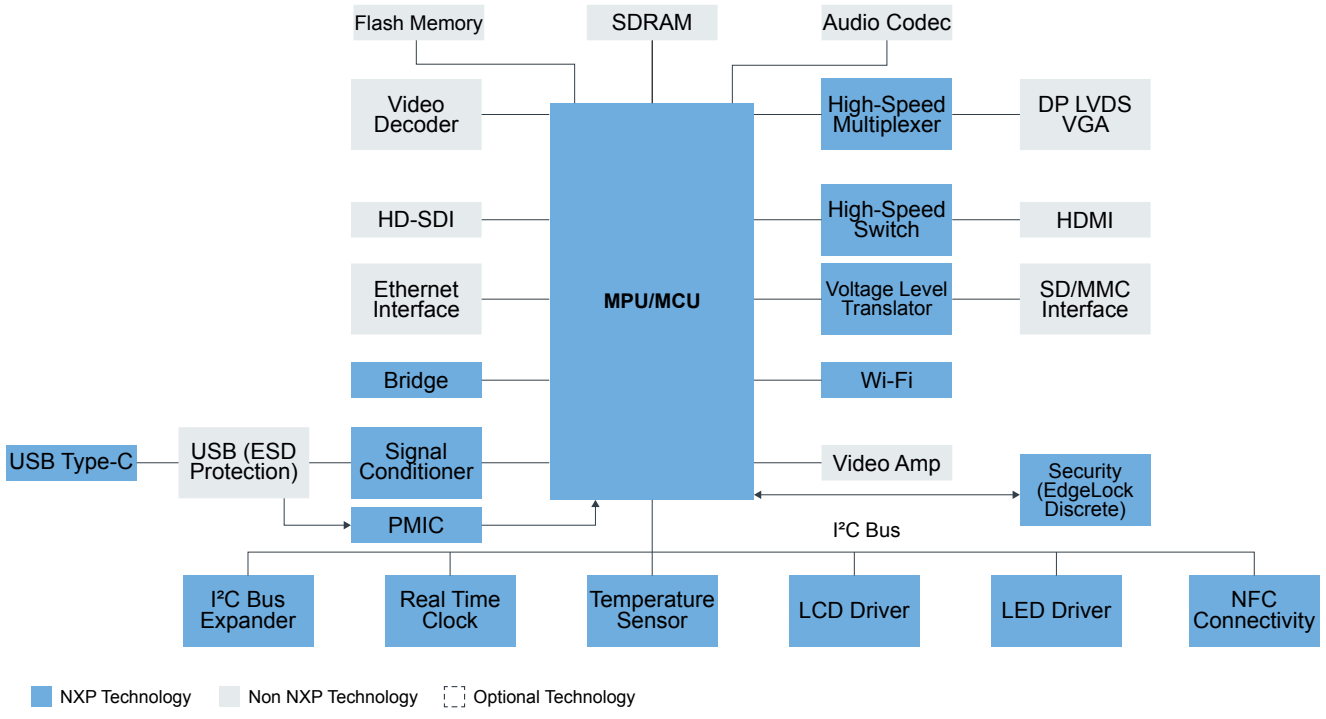
Wireless Occupancy Sensor Block Diagram



Recommended Products for Wireless Occupancy Sensor	
Wireless MCU	• 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 • JN5189_88_T: JN5189/88 (T): High-Performance and Ultra-Low-Power MCUs for Zigbee® and Thread with Built-In NFC Option

	• QN9090-30: QN9090/30: Bluetooth Low-Energy MCU with Arm®Cortex®-M4 CPU, Energy Efficiency, Analog and Digital Peripherals and NFC Tag Option
Battery Charger	• BC3770: 2 A Switch-Mode Li-ion/Li-polymer Battery Charger
NFC Tag	• NTAG5-LINK: NTAG® 5 Link: NFC Forum-Compliant I²C Bridge for IoT on Demand
Temperature Sensor	• P3T1035xUK: I3C, I2C-Bus, ±0.5 °C Accuracy, Digital Temperature Sensor • P3T2030xUK: I3C, I2C-Bus, 2.0 °C Accuracy, Digital Temperature Sensor • PCT2202UK: Ultra-Low-Power, 1.8 V, 1 Deg. C Accuracy, Digital Temperature Sensor with I2C-Bus Interface • LM75B: Digital Temperature Sensor and Thermal Watchdog
Security (EdgeLock Discrete)	• SE050: EdgeLock® SE050: Plug and Trust Secure Element Family – Enhanced IoT security with high flexibility • SE051: EdgeLock® SE051: Proven, Easy-to-Use IoT Security Solution with Support for Updatability and Custom Applets
Accelerometer	• Accelerometers: Accelerometers

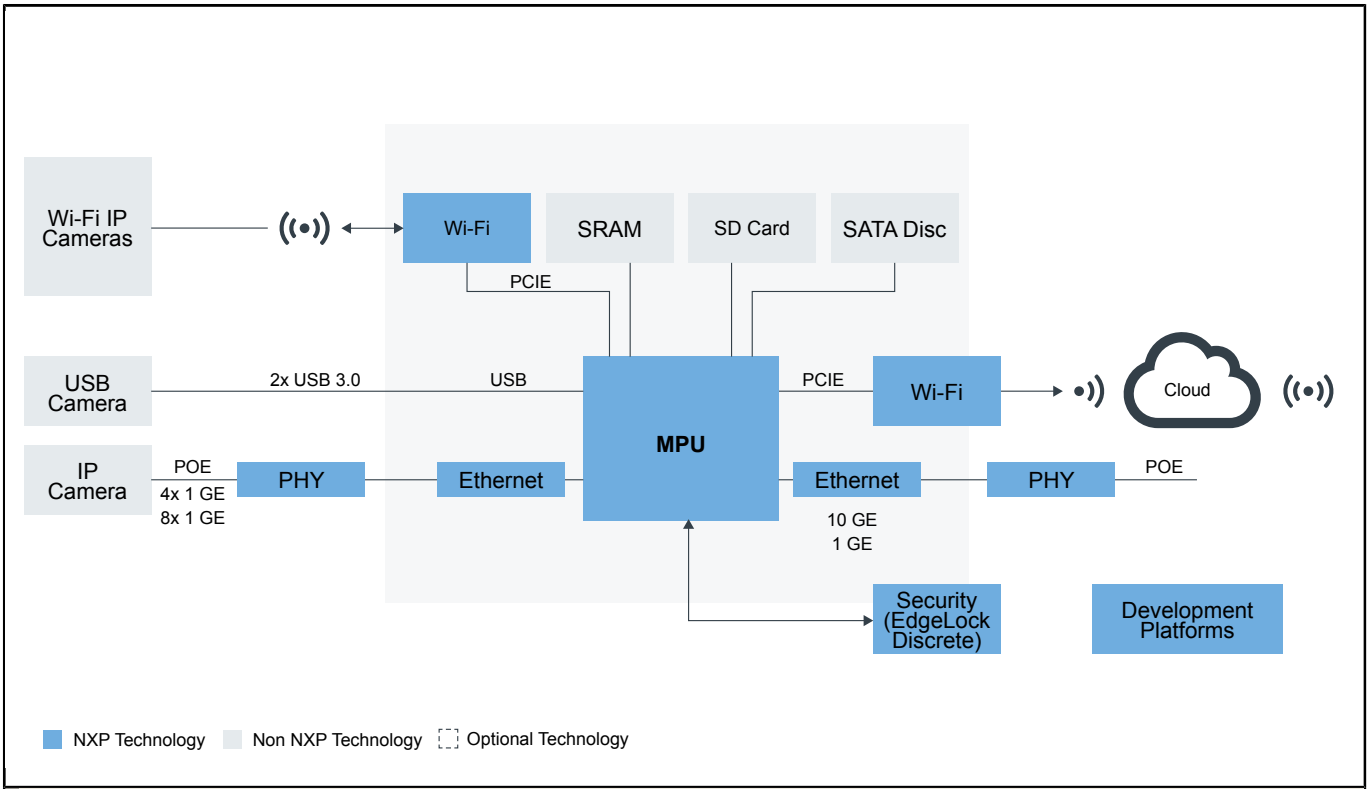
IP Camera Surveillance Block Diagram



Recommended Products for IP Camera Surveillance	
MPU/MCU	• 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 • i.MX 8 Applications Processors: i.MX 8 Series Applications Processors Multicore Arm® Cortex® Processors • i.MX7ULP: i.MX 7ULP Family, Ultra-Low-Power with Graphics

	• i.MX-RT1060: i.MX RT1060: Crossover MCU with Arm® Cortex®-M7
NFC Connectivity	• NTAG5-LINK: NTAG® 5 Link: NFC Forum-Compliant I²C Bridge for IoT on Demand • NTAG5-BOOST: NTAG® 5 Boost: NFC Forum-Compliant I²C Bridge for Tiny Devices
Wireless MCU	• 88W9098: 2.4/5 GHz Dual-Band 2x2 Wi-Fi® 6 (802.11ax) + Bluetooth® 5.3
Voltage Level Translator	• NTS0304E: 4-Bit Dual-Supply Translating Transceiver (Open-Drain, Auto-Direction Sensing) • GTL2014PW: 4-Bit LVTTL-to-GTL Transceiver
High-speed Multiplexer	• CBTL04083A_CBTL04083B: 3.3 V, Four Differential Channel, 2-1 Multiplexer/Demultiplexer Switch for PCI Express Gen3 • CBTL06DP213EE: Third Generation High-Performance DisplayPort Multiplexer • CBTL08GP053EV: USB Type-C High-Performance Crossbar Switch IC
LED Driver	• PCA9624: 8-Bit Fm+ I²C-Bus 100 MA 40 V LED Driver
LCD Driver	• LCD Graphic Drivers: LCD Graphic Drivers
Real-time Clock	• PCA8565: Real-Time Clock/Calendar
Temperature Sensor	• P3T1035xUK: I3C, I2C-Bus, ±0.5 °C Accuracy, Digital Temperature Sensor • P3T2030xUK: I3C, I2C-Bus, 2.0 °C Accuracy, Digital Temperature Sensor • PCT2202UK: Ultra-Low-Power, 1.8 V, 1 Deg. C Accuracy, Digital Temperature Sensor with I2C-Bus Interface • LM75B: Digital Temperature Sensor and Thermal Watchdog
I2C Bus Expander	• General Purpose I/O (GPIO): General Purpose I/O (GPIO)
USB Type-C	• PTN5110: USB PD TCPC PHY IC • PTN5150: CC Logic for USB Type-C Applications
High-speed Switch	• CBTL08GP053EV: USB Type-C High-Performance Crossbar Switch IC • CBTL06DP213EE: Third Generation High-Performance DisplayPort Multiplexer • CBTL06GP213EE: Second Generation High-Performance General Purpose Switch
Signal Conditioner	• PTN36043x: USB Type-C SuperSpeed Active Switch • PTN36502: Type-C USB 3.1 Gen 1 and DisplayPort V1.2 Combo Redriver
Bridge	• Bridges: Bridge IC Solutions
Security (EdgeLock Discrete)	• SE050: EdgeLock® SE050: Plug and Trust Secure Element Family – Enhanced IoT security with high flexibility • SE051: EdgeLock® SE051: Proven, Easy-to-Use IoT Security Solution with Support for Updatability and Custom Applets • EDGELOCK-A5000: EdgeLock® A5000 Plug and Trust Secure Authenticator: Authentication Made Secure, Scalable and Easy
PMIC	• PCA9460: 13-Channel Power Management Integrated Circuit (PMIC) for Ultra Low Power Application

Surveillance System Block Diagram



Recommended Products for Surveillance System	
Layerscape SoC	• LS1046A: Layerscape® 1046A and 1026A Processors • LX2160A: Layerscape® LX2160A, LX2120A, LX2080A Processors
Development Platforms	• eIQ ML Development Environment: eIQ® ML Software Development Environment
Ethernet PHY	• F104S8A: F104S8A Four-port Gigabit Ethernet Copper PHY
Security (EdgeLock Discrete)	• SE050: EdgeLock® SE050: Plug and Trust Secure Element Family – Enhanced IoT security with high flexibility • SE051: EdgeLock® SE051: Proven, Easy-to-Use IoT Security Solution with Support for Updatability and Custom Applets
Wi-Fi	• 88W9098: 2.4/5 GHz Dual-Band 2x2 Wi-Fi® 6 (802.11ax) + Bluetooth® 5.3
Ethernet PHY	• F104S8A: F104S8A Four-port Gigabit Ethernet Copper PHY

View our complete solution for Building Security.

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