



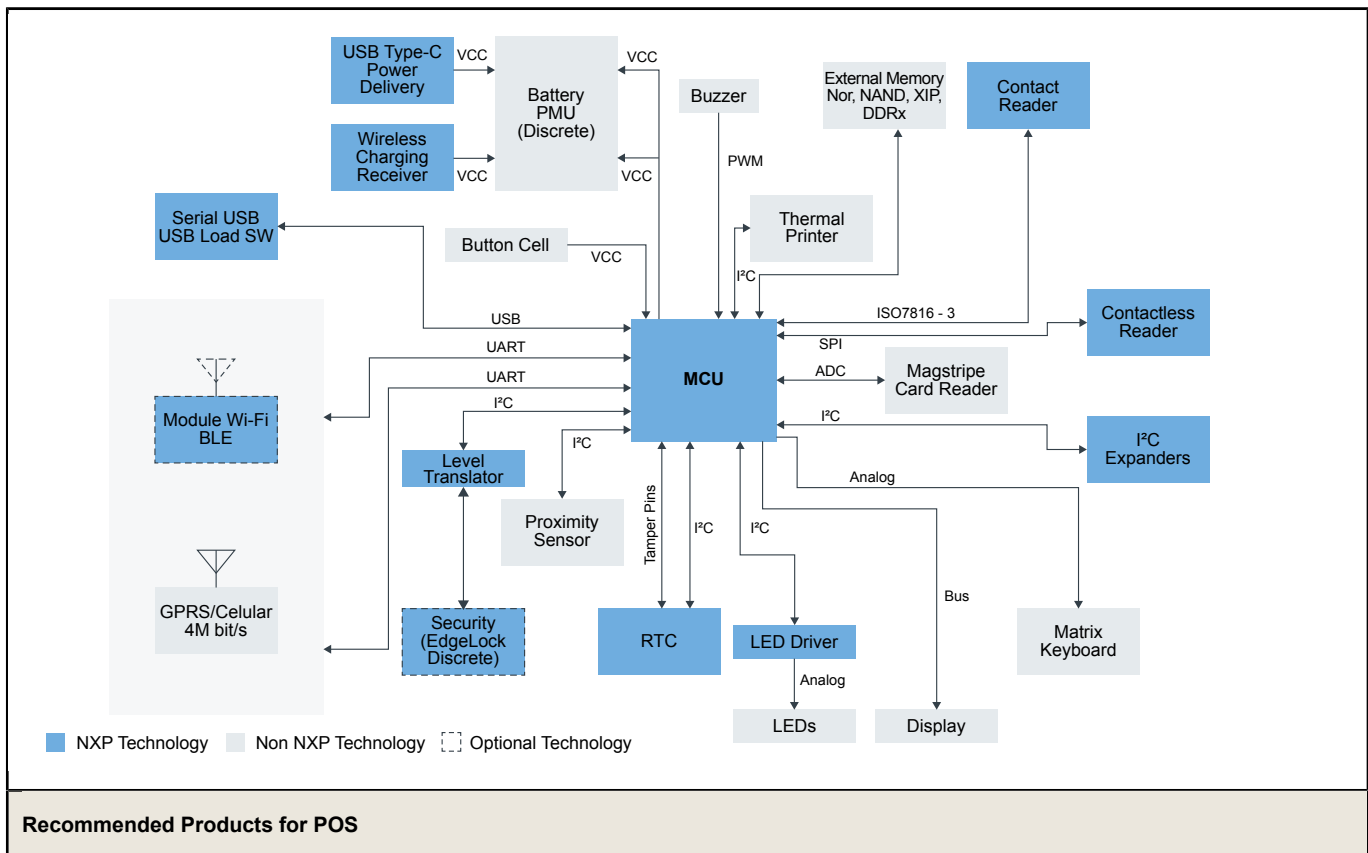
POS Terminal

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Point of Sale (PoS) terminals are key elements in payment systems for retailers or restaurants in Smart Cities. These battery-powered terminals have small form factors and can integrate functions such as a display, a card reader, a keypad and a printer. Terminals usually include wireless communication to a back-office server or a main stationary ePOS terminal. They also support magnetic, smart and contactless payment cards.

NXP solutions power secure, on-the-go mobile payment terminals, providing end users the ease-of-use of contact and contactless payment. Our security features help the designer to get the necessary PCI PTS PIN entry device (PED) and EMVCo certifications.

POS Block Diagram



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 • K81_150: Kinetis K81-150 MHz HW Cryptographic Co-Processor, Anti-Tamper and QuadSPI Microcontrollers (MCUs) Based on Arm® Cortex®-M4 Core • i.MX-RT1170: i.MX RT1170: 1 GHz Crossover MCU with Arm® Cortex® Cores
USB Type C Delivery	<ul style="list-style-type: none"> • USB Type-C Power Delivery PHY and Protocol IC
RTC	<ul style="list-style-type: none"> • PCF85053A: Bootable CPU RTC with Two I²C Buses, 128 Byte SRAM and Alarm Function • PCA2131: Nano-Power Highly Accurate RTC with Integrated Quartz Crystal for Automotive Applications • PCF2131: Nano-Power Highly Accurate RTC with Integrated Quartz Crystal
Contact Reader	<ul style="list-style-type: none"> • TDA8035HN: High-Integrated and Low-Power Smart Card Interface • TDA8026ET: Multiple Smart Card Slot Interface
Contactless Reader	<ul style="list-style-type: none"> • PN5190: NFC Frontend supporting challenging RF environment for payment, physical access control
I2C Expander	<ul style="list-style-type: none"> • PCAL6408A: Low-Voltage Translating, 8-Bit I²C-Bus/SMBus I/O Expander • PCAL9722: 22-Bit SPI I/O Expander with Agile I/O Features • PCAL9714: 14-Bit SPI I/O Expander with Agile I/O Features
Wireless Charging receiver	<ul style="list-style-type: none"> • MWPR1516: 15 Watt Wireless Charging Receiver ICs
Wi-Fi + Bluetooth	<ul style="list-style-type: none"> • QN9080: QN908x: Ultra-Low-Power Bluetooth Low Energy System on Chip Solution • IW416: 2.4/5 GHz Dual-Band 1x1 Wi-Fi® 4 (802.11n) + Bluetooth® 5.2 Solution • 88MW32X 802.11n Wi-Fi® Microcontroller SoC • 88W8987: 2.4/5 GHz Dual-Band 1x1 Wi-Fi® 5 (802.11ac) + Bluetooth® 5.2 Solution
Level Translator	<ul style="list-style-type: none"> • PCA9306: Dual Bidirectional I²C-Bus and SMBus Voltage-Level Translator • P3A9606: Dual Bidirectional I3C/I²C-Bus and SPI Voltage-Level Translator
Security (EdgeLock Discrete)	<ul style="list-style-type: none"> • 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
Serial USB Load SW	<ul style="list-style-type: none"> • NX5P3290UK: USB PD and Type-C Current-Limited Power Switch
LED Driver	<ul style="list-style-type: none"> • PCA9632: 4-Bit Fm+ I²C-Bus Low-Power LED Driver

View our complete solution for [POS Terminal](#).

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