POS Terminal

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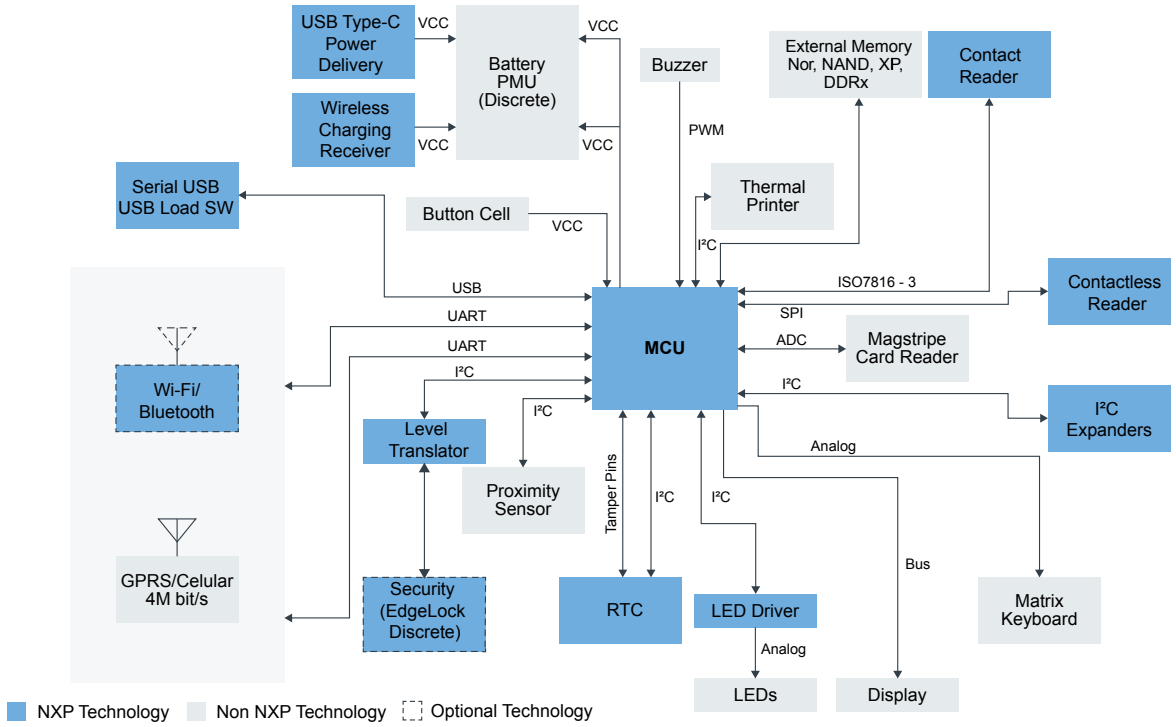
Point of Sale (PoS) terminals are key elements in payment systems for retailers or restaurants in Smart Cities. These battery-powered terminals have small form factors and can integrate functions such as a display, a card reader, a keypad and a printer. Terminals usually include wireless communication 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



Recommended Products for POS	
MCU	• MCX-A13X-A14X-A15X: MCX A13x, 14x, 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	• PTN5100: USB Type-C Power Delivery PHY and Protocol IC
RTC	• 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

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Contact Reader	• TDA8035HN: High-Integrated and Low-Power Smart Card Interface • TDA8026ET: Multiple Smart Card Slot Interface
Contactless Reader	• PN5190: NFC Frontend supporting challenging RF environment for payment, physical access control
I2C Expander	• 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	• MWPR1516: 15 Watt Wireless Charging Receiver ICs
Wi-Fi + Bluetooth	• 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 • 88W8987: 2.4/5 GHz Dual-Band 1x1 Wi-Fi® 5 (802.11ac) + Bluetooth® 5.2 Solution • RW610: Wireless MCU with Integrated Radio: 1x1 Wi-Fi® 6 + Bluetooth® Low Energy 5.4 Radios
Level Translator	• PCA9306: Dual Bidirectional I2C-Bus and SMBus Voltage-Level Translator • P3A9606: 2-Bit Dual Supply Bidirectional I3C/I²C-Bus and SPI Voltage-Level Translator
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
Serial USB Load SW	• NX5P3290UK: USB PD and Type-C Current-Limited Power Switch
LED Driver	• PCA9632: 4-Bit Fm+ I²C-Bus Low-Power LED Driver

View our complete solution for POS Terminal.

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