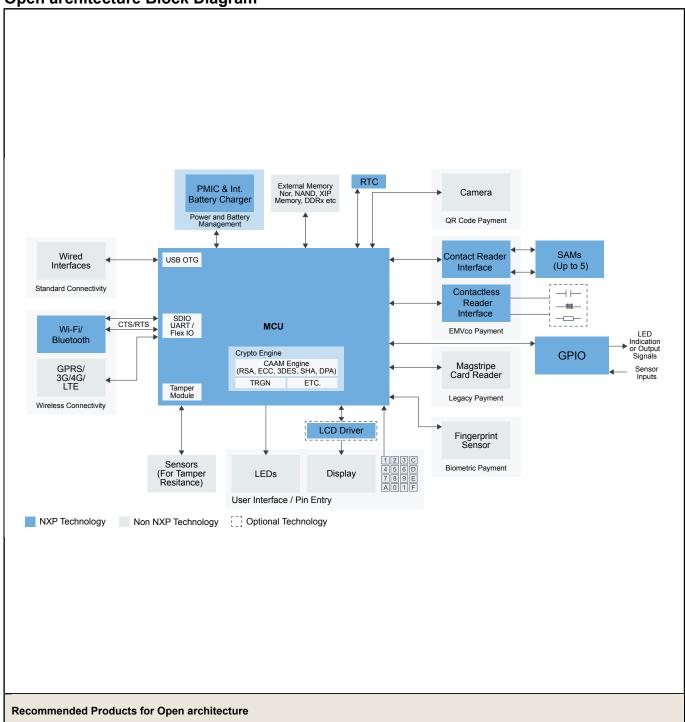


Open and Closed Loop Payments

Last Updated: Feb 4, 2025

Our highly secure and certified IC and software-based payment solutions enable seamless payment experiences, whether you are using a credit card, cell phone, smart card or wearable. Our solutions support the use of open loop payments that are directly linked to your credit or debit card as well as closed loop payments with preloaded value (micropayments).

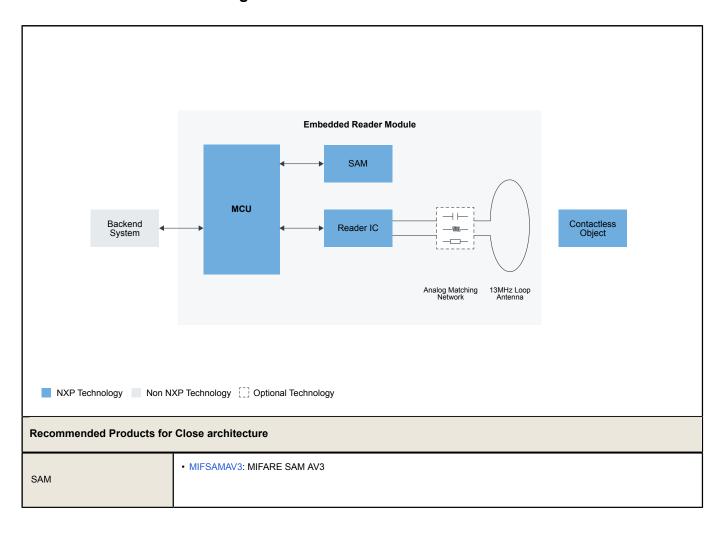
Open architecture Block Diagram



Contact Reader Interface	TDA8035HN: High-Integrated and Low-Power Smart Card Interface TDA8026ET: Multiple Smart Card Slot Interface
Contactless Reader Interface	PN5190: NFC Frontend supporting challenging RF environment for payment, physical access control
Secure Microcontroller	K81_150: Kinetis K81-150 MHz HW Cryptographic Co-Processor, Anti-Tamper and QuadSPI Microcontrollers (MCUs) Based on Arm [®] Cortex [®] -M4 Core LPC546XX: Power-Efficient Microcontrollers (MCUs) With Advanced Peripherals Based on Arm [®] Cortex [®] -M4 Core LPC1100: Scalable Entry Level 32-bit Microcontroller (MCU) based on Arm Cortex-M0 Cores
PMIC and Integrated Battery Charger	PF3000: 12-Channel Configurable PMIC for i.MX6 and i.MX7 Application Processors MMPF0100: 14-Channel Configurable PMIC PF1550: PMIC with 1A Li+ Linear Battery Charger for Low Power Processor Systems
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
SAM	* MIFARE SAM: MIFARE® SAM
LCD Driver	PCF8531U: 34 X 128 Pixel Matrix Driver
Air Conditioning GPIO	PCAL9714: 14-Bit SPI I/O Expander with Agile I/O Features PCAL9722: 22-Bit SPI I/O Expander with Agile I/O Features
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Air Conditioning GPIO	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 PCAL9714: 14-Bit SPI I/O Expander with Agile I/O Features PCAL9722: 22-Bit SPI I/O Expander with Agile I/O Features
RTC	PCF85053A: Bootable CPU RTC with Two I²C Buses, 128 Byte SRAM and Alarm Function

Close architecture Block Diagram



Reader IC	CLRC66303HN: CLRC663 plus Family: High-Performance NFC Frontends PN5190: NFC Frontend supporting challenging RF environment for payment, physical access control
Contactless Object	 MF3DHx3: MIFARE® DESFire® EV3: High-Security IC for Contactless Smart City Services MFPEV2: MIFARE Plus® EV2: Secure IC for Contactless Smart City Services NTAG424DNA: NTAG® 424 DNA / 424 DNA TagTamper – Advanced Security and Privacy for Trusted IoT Applications NTAG213_215_216: NTAG® 213/215/216: NFC Forum Type 2 Tag Compliant IC with 144/504/888 Bytes User Memory MIFARE 2GO: MIFARE® 2GO
MCU	K81_150: Kinetis K81-150 MHz HW Cryptographic Co-Processor, Anti-Tamper and QuadSPI Microcontrollers (MCUs) Based on Arm [®] Cortex [®] -M4 Core LPC1100: Scalable Entry Level 32-bit Microcontroller (MCU) based on Arm Cortex-M0 Cores

View our complete solution for Open and Closed Loop Payments.

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