Autonomous Secure Access Solution
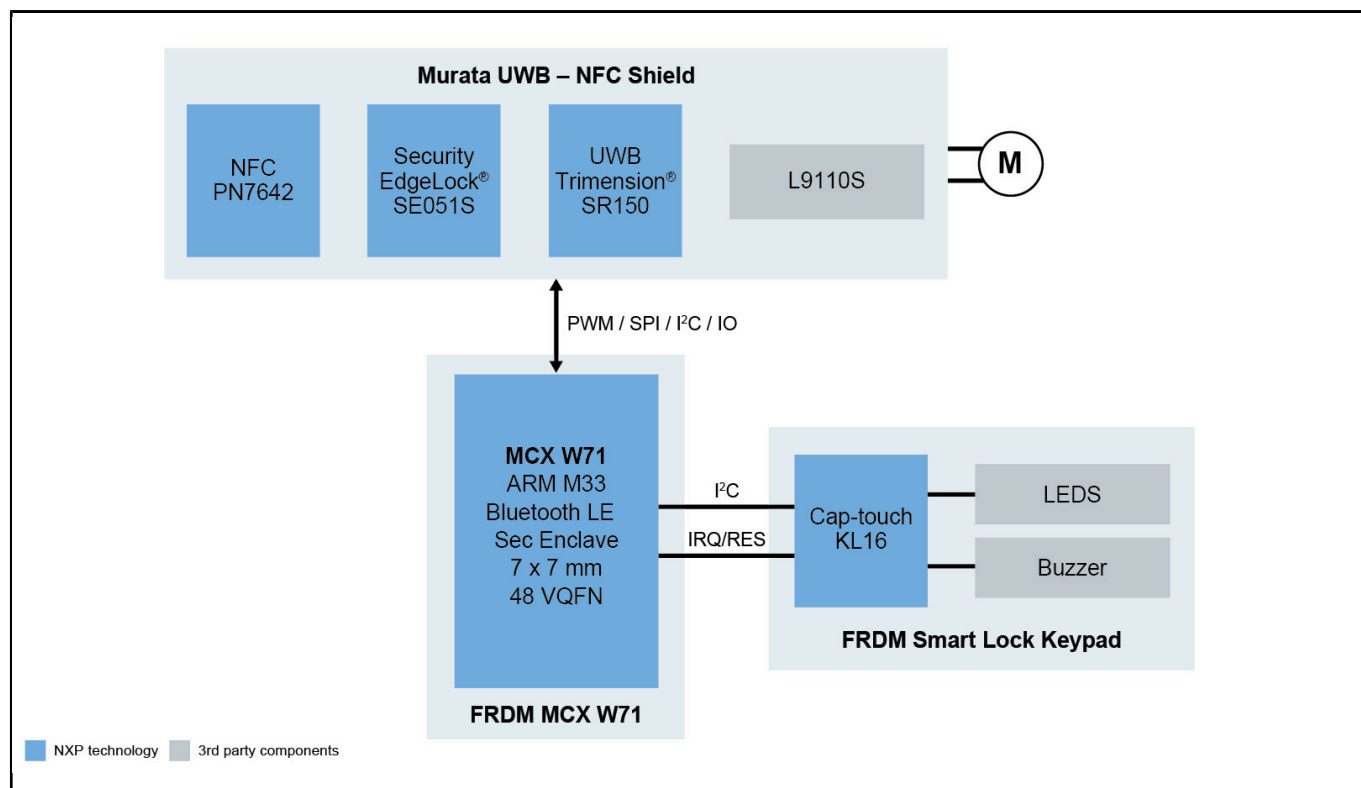
AUT-SECURE-ACCESS

Preproduction

Last Updated: Apr 15, 2025

This complete solution, designed for the physical access control market, enables developers to create and deploy secure smart access devices for the autonomous home with a differentiated user experience, reduced design complexity and faster time-to-market.
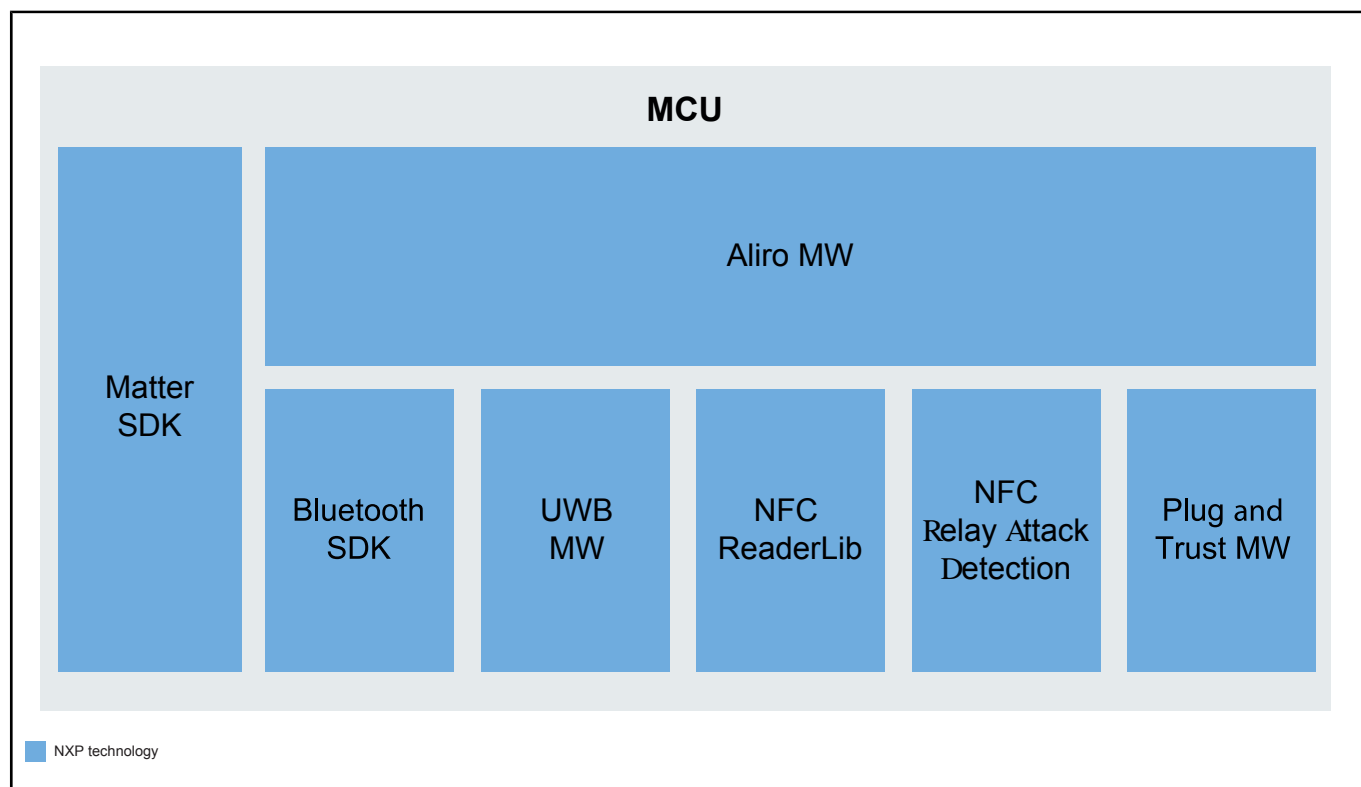
The key building blocks include MCX W for processing and Matter over Thread connectivity, NFC for tap-and-go access, UWB for hands-free access, and scalable security. This solution is also an Aliro Technology Preview, a new protocol being developed in the Connectivity Standards Alliance to standardize communication between access readers and user devices. As an active contributor, NXP has a deep understanding of the technology.

Sampling now, Available in 2H2025

Autonomous Secure Access Solution Hardware Block Diagram

Murata UWB – NFC Shield

| NFC PN7642 | Security EdgeLock® SE051S | UWB Trimension® SR150 | L9110S | M |

PWM / SPI / I²C / IO

MCX W71
ARM M33
Bluetooth LE
Sec Enclave
7 x 7 mm
48 VQFN

FRDM MCX W71

I²C

IRQ/RES

Cap-touch KL16

LEDS

Buzzer

FRDM Smart Lock Keypad

NXP technology   3rd party components

Autonomous Secure Access Solution Software Block Diagram

MCU

Matter SDK

Aliro MW

| Bluetooth SDK | UWB MW | NFC ReaderLib | NFC Relay Attack Detection | Plug and Trust MW |

NXP technology

View additional information for Autonomous Secure Access Solution.

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

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