

ST powers access control with Aliro



For a seamless and secure way to unlock homes and buildings



ST provides an end-to-end solution for Aliro-compliant doors and openings, combining products with a comprehensive ecosystem

To support the growing market for access control solutions, ST offers solutions compliant with the CSA Aliro standard for smart door locks and openings. As homes and buildings become increasingly connected and interact with a growing number of user devices, Aliro simplifies how doors and openings can be unlocked using a smartphone or card, without compromising security or interoperability. Aliro supports multiple connectivity technologies, including NFC, Bluetooth® LE, and UWB. ST provides an Aliro-ready ecosystem with products, software development kit, and a reference design, along with expert resources and support to ease the device development journey up to certification. With ST's longevity program, the access control industry can rely on a long-term partner for access control with Aliro.



KEY FEATURES

- All Aliro topologies supported
- NFC, Bluetooth® LE, UWB, secure element offers
- Software development kit (SDK)
- Optimized reference design with full ST BOM
- Low power solution
- Interoperability
- Technology awareness and expertise
- 10-year longevity program

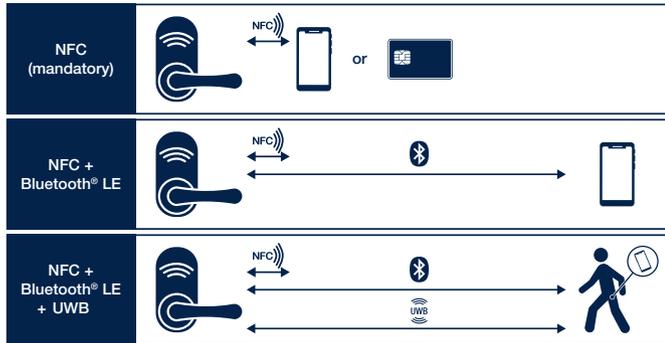
BENEFITS

Optimized time to market thanks to:

- Single sourcing
- Easy development journey
- Certification support
- 10-year product longevity

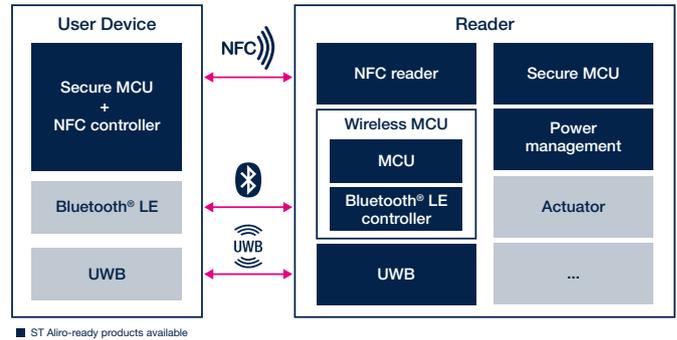
Connectivity options

Aliro defines three configurations with different connectivity technologies to enable a secure and contactless exchange of credentials between user devices (mobile, wearable device, or smartcard) and reader devices (access control readers and locks on doors and openings).



Aliro solution architecture with NFC, Bluetooth® LE, and UWB

A complete solution for secure, hands-free access control without the need to tap the user device.



■ ST Aliro-ready products available

ST portfolio supports all Aliro reader configurations

Solution architecture	MCUs	Wireless MCUs	NFC readers	UWB	Secure MCUs
NFC	STM32U5	-	ST25R200 ST25R210 ST25R300	-	STSAFE-A110 STSAFE-A120
NFC + Bluetooth® LE	-	STM32WBA5 STM32WBA6		-	
NFC + Bluetooth® LE + UWB	-			ST64UWB-C100	

Reference design



STEVAL-ALOCKCB

START DEVELOPING NOW WITH X-CUBE-ALIRO

Accelerate your Aliro-ready product development with our preintegrated software package for STM32 microcontrollers.

- **Aliro compatibility** : Implementation of the CSA Aliro protocol with ready-to-use examples for reader devices.
- **Flexible communication options**: NFC-only and Bluetooth® LE-RKE (remote keyless entry) flows supported with future integration of UWB technology.
- **Certified connectivity**: certified Bluetooth® LE protocol stack and NFC Forum Type A support.
- **Built-in security**: robust security component integrated to ensure secure transactions and data protection.
- **Ideal for battery-powered devices**: optimized low-power operation for energy-efficient applications.
- **Expert resources**: comprehensive documentation, application examples, and support to guide you at every stage of your Aliro development journey.

