



# Smart Lock

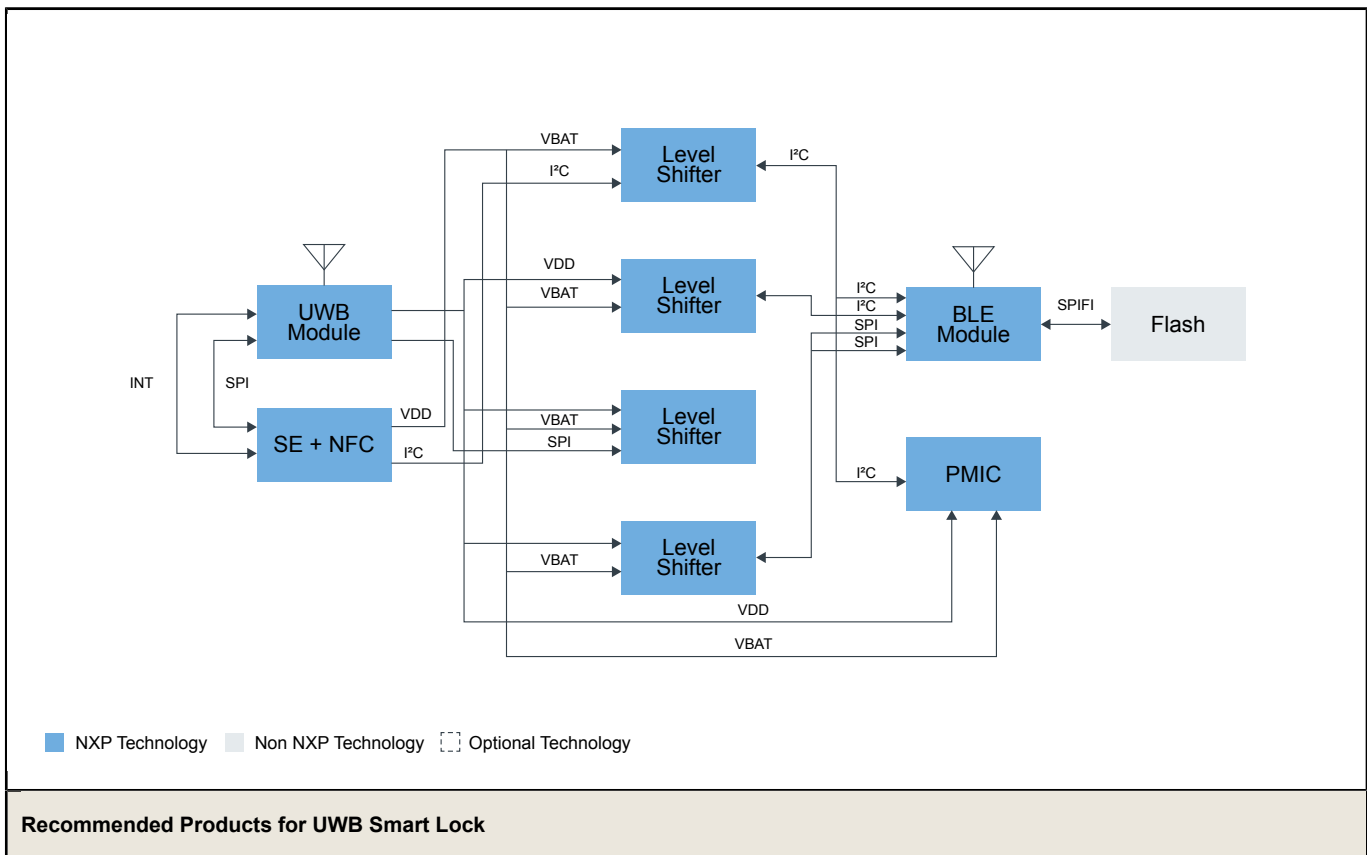
Last Updated: Dec 6, 2023

Physical and information security is a growing concern in the connected world. Smart locks are one piece of the puzzle in controlling access to both information and physical spaces.

A smart lock can be accessed via NFC contact or contactless technology and use Bluetooth® low energy or ultra-wide band(UWB) to communicate with a user's smartphone, adding an additional level of security. Interaction with smart locks can range from something as simple as status LEDs to LCD panels with touchscreen control.

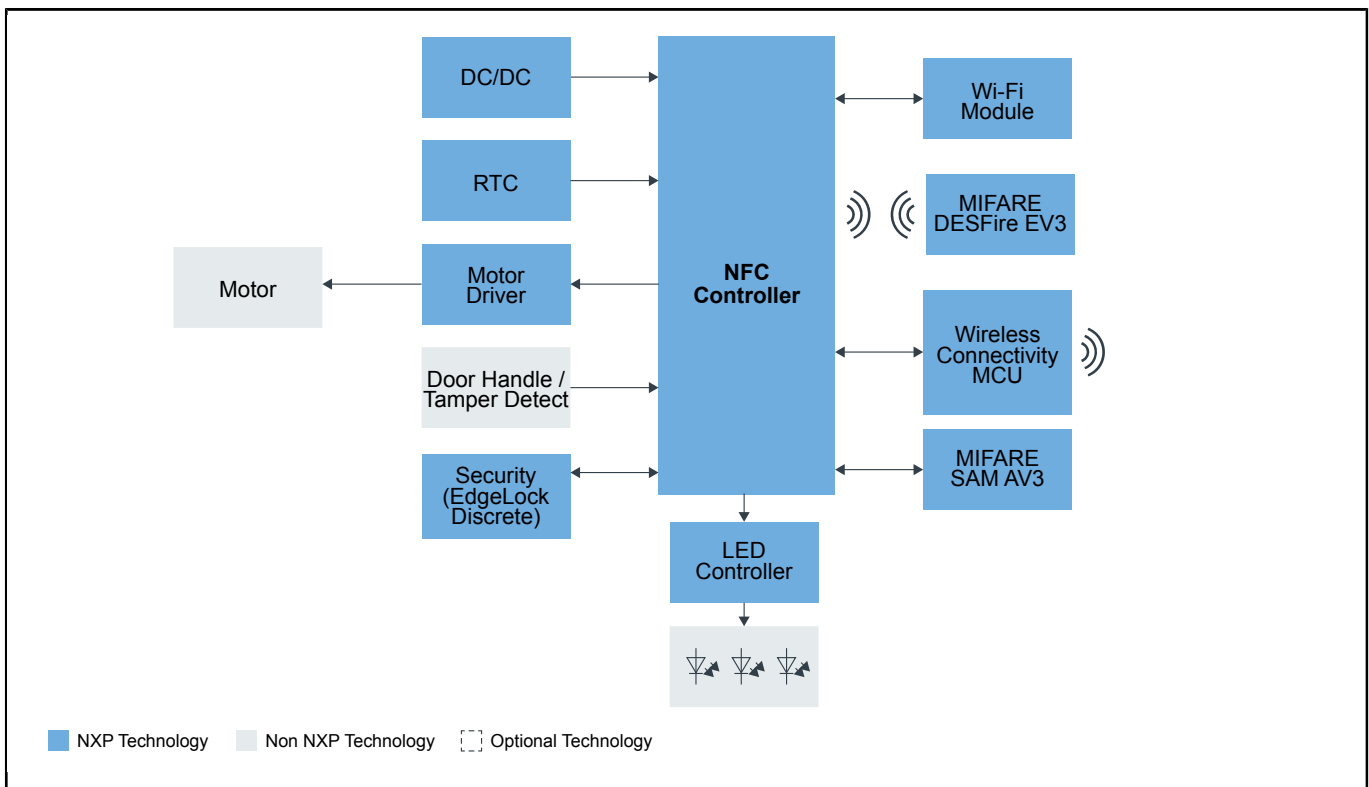
NXP provides a variety of connectivity options like low-power NFC, Bluetooth Low Energy or UWB. We also have analog components to complete the design of the smart lock.

## UWB Smart Lock Block Diagram



UWB Module	<ul style="list-style-type: none"> <li>• <a href="#">SR150</a>: Trimension™ SR150 : IoTデバイス向けのセキュアなUWBソリューション</li> </ul>
Level Shifter	<ul style="list-style-type: none"> <li>• <a href="#">NTS0102</a>: Dual-Supply Translating Transceiver (Open-Drain, Auto-Direction Sensing)</li> <li>• <a href="#">NTB0104</a>: Dual-Supply Translating Transceiver (Auto-Direction Sensing, Three-State)</li> </ul>
BLE Module	<ul style="list-style-type: none"> <li>• <a href="#">QN9090-30</a>: QN9090/30: Bluetooth Low-Energy MCU with Arm®Cortex®-M4 CPU, Energy Efficiency, Analog and Digital Peripherals and NFC Tag Option</li> </ul>
PMIC	<ul style="list-style-type: none"> <li>• <a href="#">PF1510</a>: Power Management Integrated Circuit (PMIC) for Low Power Application Processors</li> </ul>

## Smart Lock PN7362 Block Diagram

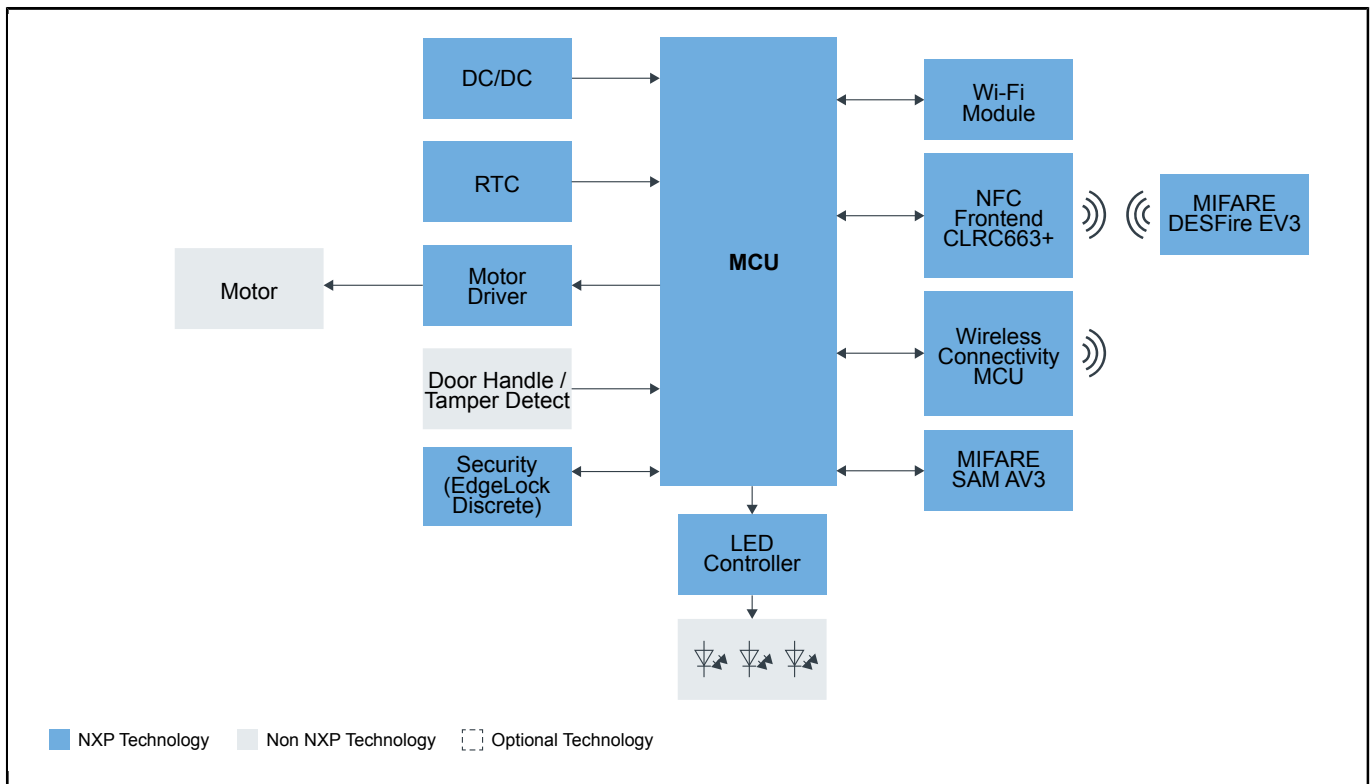


### Recommended Products for Smart Lock PN7362

NFC Controller	<ul style="list-style-type: none"> <li>• <a href="#">PN736X</a>: NFC Cortex-M0 Microcontroller</li> <li>• <a href="#">PN5190</a>: 困難なRF環境にも対応する、決済および物理的アクセス制御向けNFCフロントエンド</li> <li>• <a href="#">CLRC66303HN</a>: CLRC663 plus Family: High-Performance NFC Frontends</li> </ul>
Wireless Connectivity MCU	<ul style="list-style-type: none"> <li>• <a href="#">KW31Z</a>: Kinetis® KW31Z-2.4 GHz Bluetooth Low Energy Wireless Radio Microcontroller (MCU) based on Arm® Cortex®-M0+ Core</li> </ul>
DC-DC	<ul style="list-style-type: none"> <li>• <a href="#">PCA9410_9410A</a>: 3.0 MHz, 500 MA, DC-to-DC Boost Converter</li> </ul>
RTC	<ul style="list-style-type: none"> <li>• <a href="#">PCF8523</a>: 100 NA Real-Time Clock/Calendar with Battery Backup</li> </ul>

LED Controller	<ul style="list-style-type: none"> <li>• <a href="#">PCA9956BTW</a>: 24-Channel Fm+ I<sup>2</sup>C-Bus 57 MA/20 V Constant-Current LED Driver</li> </ul>
MIFARE DESFire EV3	<ul style="list-style-type: none"> <li>• <a href="#">MF3DHx3</a>: MIFARE<sup>®</sup> DESFire<sup>®</sup> EV3 : 非接触型スマートシティ・サービス向け高セキュリティIC</li> </ul>
Motor Driver	<ul style="list-style-type: none"> <li>• <a href="#">MC33926</a>: H-Bridge, Brushed DC Motor Driver, 5-28 V, 5 A, 20 kHz</li> </ul>
Secure Element	<ul style="list-style-type: none"> <li>• <a href="#">MIFSAMAV3</a>: MIFARE SAM AV3</li> <li>• <a href="#">SE050</a>: EdgeLock<sup>®</sup> SE050 : Plug &amp; Trustセキュア・エレメント・ファミリー-柔軟性に優れた、IoT向けの高度なセキュリティ</li> </ul>
Wi-Fi	<ul style="list-style-type: none"> <li>• <a href="#">IW416</a>: 2.4/5 GHzデュアルバンド1x1 Wi-Fi<sup>®</sup> 4 (802.11n) およびBluetooth<sup>®</sup> 5.2ソリューション</li> <li>• <a href="#">88MW32X 802.11n Wi-Fi<sup>®</sup> Microcontroller SoC</a></li> </ul>
Security (EdgeLock Discrete)	<ul style="list-style-type: none"> <li>• <a href="#">SE050</a>: EdgeLock<sup>®</sup> SE050 : Plug &amp; Trustセキュア・エレメント・ファミリー-柔軟性に優れた、IoT向けの高度なセキュリティ</li> <li>• <a href="#">SE051</a>: EdgeLock<sup>®</sup> SE051 : 更新機能とカスタム・アプレットのサポートを備えた実証済みで使いやすいIoTセキュリティ・ソリューション</li> <li>• <a href="#">EDGELOCK-A5000</a>: EdgeLock<sup>®</sup> A5000 Plug and Trust Secure Authenticator: Authentication Made Secure, Scalable and Easy</li> </ul>

## Smart Lock w/CLRC663 Block Diagram



### Recommended Products for Smart Lock w/CLRC663

MCU	<ul style="list-style-type: none"> <li>• <a href="#">PN736X</a>: NFC Cortex-M0 Microcontroller</li> </ul>
-----	---

	<ul style="list-style-type: none"> <li>• <a href="#">PN5190</a>: 困難なRF環境にも対応する、決済および物理的アクセス制御向けNFCフロントエンド</li> <li>• <a href="#">CLRC66303HN</a>: CLRC663 plus Family: High-Performance NFC Frontends</li> </ul>
NFC	<ul style="list-style-type: none"> <li>• <a href="#">CLRC66303HN</a>: CLRC663 plus Family: High-Performance NFC Frontends</li> <li>• <a href="#">PN736X</a>: NFC Cortex-M0 Microcontroller</li> <li>• <a href="#">PN5190</a>: 困難なRF環境にも対応する、決済および物理的アクセス制御向けNFCフロントエンド</li> </ul>
Wireless Connectivity MCU	<ul style="list-style-type: none"> <li>• <a href="#">KW31Z</a>: Kinetis<sup>®</sup> KW31Z-2.4 GHz Bluetooth Low Energy Wireless Radio Microcontroller (MCU) based on Arm<sup>®</sup> Cortex<sup>®</sup>-M0+ Core</li> </ul>
DC-DC	<ul style="list-style-type: none"> <li>• <a href="#">PCA9410_9410A</a>: 3.0 MHz, 500 MA, DC-to-DC Boost Converter</li> </ul>
RTC	<ul style="list-style-type: none"> <li>• <a href="#">PCF8523</a>: 100 NA Real-Time Clock/Calendar with Battery Backup</li> </ul>
LED Controller	<ul style="list-style-type: none"> <li>• <a href="#">PCA9956BTW</a>: 24-Channel Fm+ I<sup>2</sup>C-Bus 57 MA/20 V Constant-Current LED Driver</li> </ul>
MIFARE DESFire EV3	<ul style="list-style-type: none"> <li>• <a href="#">MF3DHx3</a>: MIFARE<sup>®</sup> DESFire<sup>®</sup> EV3 : 非接触型スマートシティ・サービス向け高セキュリティIC</li> </ul>
Motor Driver	<ul style="list-style-type: none"> <li>• <a href="#">MC33926</a>: H-Bridge, Brushed DC Motor Driver, 5-28 V, 5 A, 20 kHz</li> </ul>
Secure Element	<ul style="list-style-type: none"> <li>• <a href="#">MIFSAMAV3</a>: MIFARE SAM AV3</li> <li>• <a href="#">SE050</a>: EdgeLock<sup>®</sup> SE050 : Plug &amp; Trustセキュア・エレメント・ファミリー - 柔軟性に優れた、IoT向けの高度なセキュリティ</li> </ul>
Wi-Fi	<ul style="list-style-type: none"> <li>• <a href="#">IW416</a>: 2.4/5 GHzデュアルバンド1x1 Wi-Fi<sup>®</sup> 4 (802.11n) およびBluetooth<sup>®</sup> 5.2ソリューション</li> <li>• <a href="#">88MW32X 802.11n Wi-Fi<sup>®</sup> Microcontroller SoC</a></li> </ul>
Security (EdgeLock Discrete)	<ul style="list-style-type: none"> <li>• <a href="#">SE050</a>: EdgeLock<sup>®</sup> SE050 : Plug &amp; Trustセキュア・エレメント・ファミリー - 柔軟性に優れた、IoT向けの高度なセキュリティ</li> <li>• <a href="#">SE051</a>: EdgeLock<sup>®</sup> SE051 : 更新機能とカスタム・アプレットのサポートを備えた実証済みで使いやすいIoTセキュリティ・ソリューション</li> <li>• <a href="#">EDGELOCK-A5000</a>: EdgeLock<sup>®</sup> A5000 Plug and Trust Secure Authenticator: Authentication Made Secure, Scalable and Easy</li> </ul>

View our complete solution for [Smart Lock](#).

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

## www.nxp.com

NXP and the NXP logo are trademarks of NXP B.V. All other product or service names are the property of their respective owners. The related technology may be protected by any or all of patents, copyrights, designs and trade secrets. All rights reserved. © 2024 NXP B.V.