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## Magic Information Launches Turnkey Solution for Smart Locks Using Technology from STMicroelectronics

**China, May 27, 2021 – Magic Information**, China's leading Artificial Intelligence of Things (AIoT) fingerprint-recognition technology provider, has launched a smart-lock reference design, based on AIoT fingerprint recognition running on an **STMicroelectronics** STM32WB55\* Bluetooth® LE (BLE) microcontroller (MCU) that manufacturers can integrate into their designs to make Smart Locks.

This reference design leverages the dual-core (Arm® Cortex® M0+ and M4) advantages of the STM32WB55, designed with high interoperability between the hosting MCU, fingerprint recognition, as well as Bluetooth LE 5.2. The Magic Information fingerprint-recognition algorithm runs on the high-performance STM32WB55 MCU that also enables recognition and unlocks the device in as fast as 0.3 seconds, while ensuring ultra-low power consumption.

*“There is increasing demand for locks that offer completely keyless operation. Restrictions such as power consumption, size, and user experience make these locks extremely challenging to deliver,”* said Weiwen Yang, CTO of Magic Information, *“The combination of Magic Information’s industry-leading technology in embedded fingerprint recognition running on an STM32WB MCU with BLE meets the challenge. Magic Information will offer a turnkey solution for the whole smart-lock industry. Meanwhile, a platform with APIs for various applications is also available to help our clients develop product/business innovations, with outstanding quality and performance assured.”*

*“With the BLE 5.2 and outstanding processor performance and power efficiency of the STM32WB running Magic Information’s fingerprint recognition, their turnkey reference-design solution integrates compactness in system robustness and performance efficiency. Building on the high-level security of the STM32WB, fingerprint recognition enhances the system-level security for markets where it really matters such as access control and medical devices,”* said Arnaud Julienne, Vice President, Head of Marketing and Applications of MDG, IoT/AI Competence Center and Digital Marketing, Asia Pacific Region, STMicroelectronics.

For the best user experience and cost competitiveness, a variety of fingerprint sensors, sizes (including 80x64, 112x88, 176x64, and 160x160), and packaging methods are currently available. The turnkey solution has been qualified with mass productions. At the same time, a very much improved efficiency in product building/development can be expected, which can shorten the time-to-market within 20 weekdays.

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\*STM32 is a registered and/or unregistered trademark of STMicroelectronics International NV or its affiliates in the EU and/or elsewhere. In particular, STM32 is registered in the US Patent and Trademark Office.

## **About Magic Information**

As a Chinese national high-tech enterprise focused in original and proprietary identification technologies for AIoT, Magic Information is currently leading the industry in IoT identification. Setting its goal to change the way of opening the door, Magic Information has successfully constructed a one-stop AIoT identification service platform, to offer enterprises from all over the world fingerprint algorithms, fingerprint ICs, as well as solutions to identify anything. Further information can be found at [www.mlkey.com](http://www.mlkey.com).

## **About STMicroelectronics**

At ST, we are 46,000 creators and makers of semiconductor technologies mastering the semiconductor supply chain with state-of-the-art manufacturing facilities. An independent device manufacturer, we work with more than 100,000 customers and thousands of partners to design and build products, solutions, and ecosystems that address their challenges and opportunities, and the need to support a more sustainable world. Our technologies enable smarter mobility, more efficient power and energy management, and the wide-scale deployment of the Internet of Things and 5G technology. Further information can be found at [www.st.com](http://www.st.com).

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