Get ready for the largest
IoT development ecosystem

4000 possible combinations of STM32/STM8 MCUs and SX127x radios

THE BRAIN

Choose from basic, ultra-low-power or high-performance with STM8 (8-bit) or STM32 (32-bit) MCUs. Pick from a portfolio that offers from 2 Kbytes up to 2 Mbytes of Flash memory with 14 up to 216 pins with tiny form factor packages, and a rich set of analog and connectivity peripherals.
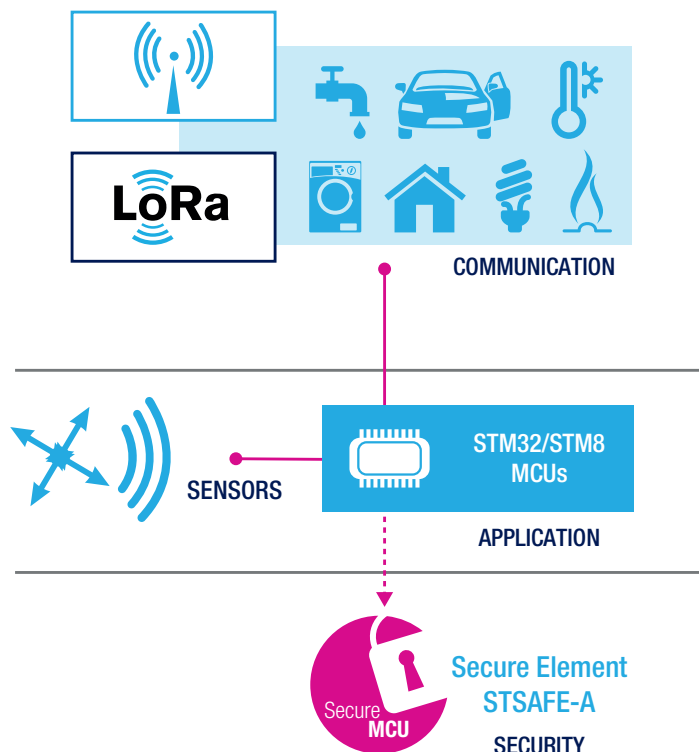
COMMUNICATION

Choose the appropriate LoRa radio which best matches your application needs. Add short range connectivity with NFC and Bluetooth.
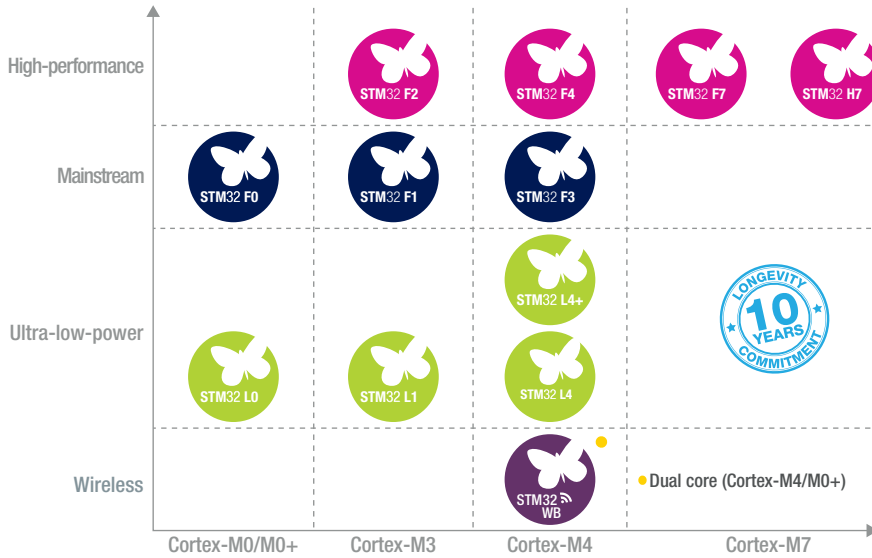
SECURITY

STSAFE-A is a turnkey solution for the IoT. Optimized for small platforms and providing state-of-the-art security relying on CC EAL5+ hardware, the STSAFE-A allows easy integration using libraries compatible with standard MCUs.

SENSING

Add sensing capabilities to your application with environmental, motion and proximity sensors.

COMMUNICATION

SENSORS

STM32/STM8 MCUs

APPLICATION

Secure MCU

Secure Element STSAFE-A

SECURITY

STM32 RELEASING YOUR CREATIVITY

High-performance
- STM32 F2
- STM32 F4
- STM32 F7
- STM32 H7

Mainstream
- STM32 F0
- STM32 F1
- STM32 F3

Ultra-low-power
- STM32 L4+
- STM32 L0
- STM32 L1
- STM32 L4

LONGEVITY 10 YEARS COMMITMENT

Wireless
- STM32 WB

● Dual core (Cortex-M4/M0+)

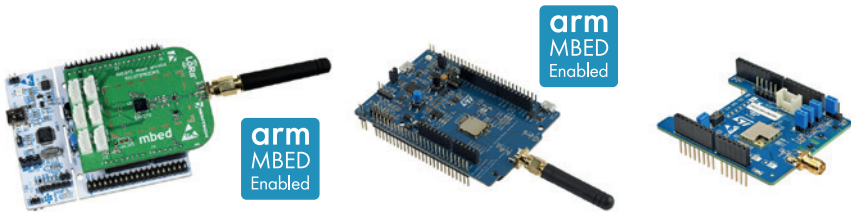Cortex-M0/M0+   Cortex-M3   Cortex-M4   Cortex-M7

MORE THAN 50 PRODUCT LINES

With 12 product series, the STM32 portfolio offers an extraordinary variety of options including Arm® Cortex®-M cores (M0, M0+, M3, M4, and M7), giving developers flexibility to find the perfect match for their application. Particular attention is paid to make it easy to migrate from one device to another. The compatibility of binaries combined with the similar pinout assignment, proliferation of hardware IPs and higher-level programming languages greatly facilitates the work of developers.

community.st.com

HARDWARE TOOLS AND EMBEDDED SOFTWARE

Up to three dedicated HW tools to play and develop with STM32™ around LoRa® technology

arm MBED Enabled

arm MBED Enabled

STM32 NUCLEO PACK
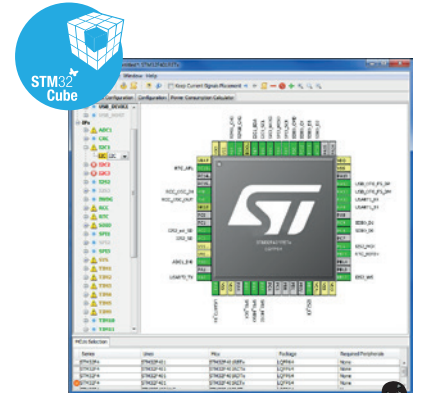P/N: P-NUCLEO-LRWAN1
(ST and Semtech)

DISCOVERY KIT
P/N: B-L072Z-LRWAN1
(ST and Murata®)

EXPANSION BOARD
P/N: I-NUCLEO-LRWAN1
(ST and USI®)

A LoRaWAN stack (I-CUBE-LRWAN) is now available from www.st.com/i-cube-lrwan

SOFTWARE TOOL

STM32 Cube

Windows **macOS®**

STM32CubeMX enables fast development thanks to its MCU clock configurator, power consumption calculator and code generation tools.

STM32 OPEN DEVELOPMENT ENVIRONMENT (STM32 ODE)

Additional ST expansion boards available

X-NUCLEO-IKS01A1
Motion and environmental sensors

X-NUCLEO-NCF01A1
M24SR-based NFC tag expansion board

X-NUCLEO-IDB04A1
BlueNRG-based Bluetooth Smart expansion board

STM32 Open **D**evelopment **E**nvironment

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