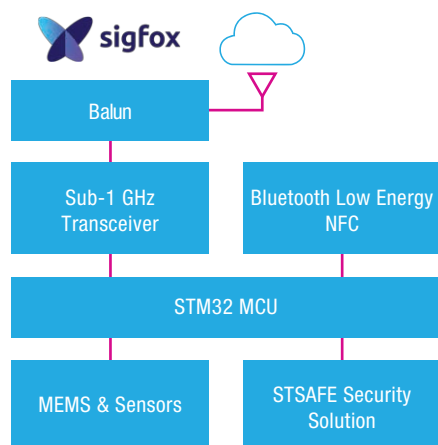


# Complete Ecosystem for Sigfox™ IoT devices



## All the solutions you need to develop efficient and secure IoT devices with Sigfox connectivity

ST is your ideal partner to quickly design and develop IoT devices that connect to the Sigfox network. Our broad portfolio of products and pre-integrated solutions addresses key IoT device design challenges - energy consumption, security, affordability, and time to market.



### S2-LP SUB-1 GHZ TRANSCEIVER

Ultra-low-power sub-1 GHz transceiver meeting Sigfox requirements and delivering top-notch RF performance and unparalleled energy efficiency.

### STM32 MICROCONTROLLERS

A broad portfolio of STM32 32-bit microcontrollers, from ultra-low-power to high performance, offering a rich set of analog & connectivity peripherals.

### BROAD RANGE OF SENSORS

A range of compact and low-power motion MEMS and environmental sensors, as well as ranging sensors to add sensing capabilities to any application.

### CONNECTIVITY SOLUTIONS

Complementary short-range communication technologies such as industry-leading NFC solutions, ST's BlueNRG BLE processor or STM32WB wireless MCU.

### STSAFE SECURE ELEMENT

Dedicated secure element with pre-configured Sigfox ID and keys, enhancing the integrity and confidentiality of transmissions over the Sigfox network.

### BALUNS

Baluns designed for the S2-LP Sub-1 GHz transceiver, for the BlueNRG BLE processor and for the STM32WB wireless MCU.



## A COMPREHENSIVE SET OF DEVELOPMENT AND PROTOTYPING BOARDS

Choose the appropriate STM32 Nucleo development board (MCU) and expansion (X-NUCLEO) boards covering the functionality you need.



### STM32 Nucleo development boards

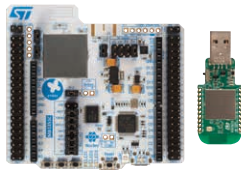


NUCLEO-64



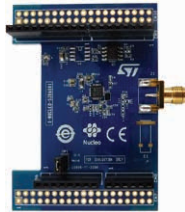
NUCLEO-144

Wireless  
MCU



P-NUCLEO-WB55\*  
\* Available in Q1 2019

S2-LP Sub-1 GHz  
868 and 915 MHz RF



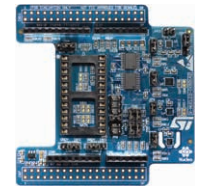
X-NUCLEO-S2868A1  
X-NUCLEO-S2915A1

STSAFE-A optimized  
secure element



X-NUCLEO-STSAFE-A1SX

Motion and  
environmental sensors



X-NUCLEO-IKS01A2

### STM32 Nucleo Expansion boards (X-NUCLEO)



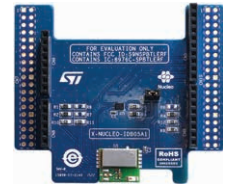
STM32 Open  
Development  
Environment

ST25 Dynamic NFC tag



X-NUCLEO-NFC05A1

BlueNRG Bluetooth  
Smart



X-NUCLEO-IDB05A1

## PRE-INTEGRATED SOFTWARE SOLUTIONS

Speed up your design using Sigfox-compliant SW libraries



### X-CUBE-SFXXS2LP1 SOFTWARE EXPANSION PACK

The X-CUBE-SFXXS2LP1 Expansion Package consists of a set of libraries, open routines and application examples for the STM32 Nucleo development board combined with the X-NUCLEO-S2868A1 or X-NUCLEO-S2915A1 Sub-1 GHz RF expansion board. STM32L0, L1 and L4 ultra-low-power cores are currently supported.

### STSAFE-A1SX SIGFOX SOFTWARE LIBRARIES

A comprehensive set of software libraries for the X-NUCLEO-STSAFE-A1SX STM32 Nucleo expansion board which integrates a secure element. The secure element is provisioned in ST's secure-personalization center with a device ID and keys that allow plug-and-secure connection to the Sigfox network, and ensure data exchange integrity and confidentiality.



## CERTIFIED SOLUTION, WORLDWIDE COVERAGE

Sigfox solutions from ST meet the regulatory requirements applicable in territories worldwide, including Europe, Japan, Korea, China and the USA. Our solutions are certified Sigfox Ready and Monarch capable.



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