# STM32WL5M WIRELESS LINE



# LoRaWAN<sup>®</sup>-certified module enabling (G)FSK, (G)MSK, BPSK



# Enable faster development for power-efficient, long-range wireless devices

The STM32WL5M line is a multi-protocol LPWAN dual core 32-bit Arm®Cortex®-M4/M0+ LoRa®, (G)FSK, (G)MSK, BPSK, up to 256KB Flash, 64KB RAM.

It can significantly speed up development and reduce associated costs. It is LoRaWAN certified<sup>(TM)</sup>, Sigfox verified<sup>(TM)</sup> and compliant with FCC, CE, IC regulations.

The STM32WL5MOC is the smaller module of the industry integrating LoRa modulation and capability to switch on the fly from a lowpower PA to a high-power PA for global roaming purpose.

Full integration in the STM32CubeMX ecosystem to speed up development with easy configuration and setup of the application.

#### **KEY FEATURES AND BENEFITS**

- High integration, small footprint:
  - Embedded dual-core STM32WL55JC MCU
  - RF already fine-tuned
  - Product fully integrated in CubeMX
- Ultra-low-power consumption:
  - Low power PA optimized for low power radio performance
  - Module leveraging from STM32WL ultra-low-power achitecture
- Long range radio performance:
  - High power PA optimized for long range
  - Already certified (LoRaWAN® and Sigfox protocols
  - Ultra flexible platform with multiple modulation support
  - Sensitivity down to -148 dBm for LoRa®

#### STM32WL5M BLOCK DIAGRAM

#### STM32WL5M



#### HARDWARE TOOLS

The STM32WL Connectivity Expansion Board lets you quickly start developing with the STM32WL5MOC module.



## MULTI-PROTOCOL



STM32WL5M PORTFOLIO

#### Flash memory size / RAM size (bytes)

Legend: Integrated component module

256 K / 64 K 92-pin LGA (1.608 mm pitch)



### **CERTIFIED LOGOS**



#### **START DEVELOPING NOW!**

STM32Cube ecosystem More than 1 million developers

have chosen STM32Cube, making it the reference in the industry. STM32CubeWL firmware package



STM32WL Online Training



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