STANDARD PROTOCOL

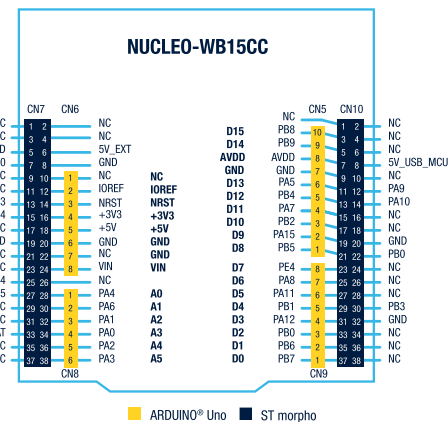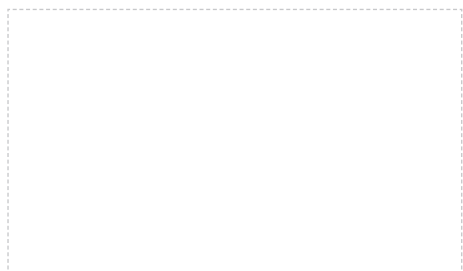**Bluetooth® 5**

STM32WB15 Bluetooth® 5.2

Nucleo-64

Wireless connectivity 32-bit MCU

STM32

STM32WB15CCU6 48 PINS

- Dual core Arm® Cortex®-M4 core at 64 MHz and dedicated Arm® Cortex®-M0+ radio co-processor at 32 MHz
- 320 Kbytes of Flash memory, 48 Kbytes of SRAM
- Bluetooth® Low Energy 5.2
- High RF performance: Rx -96 dBm Tx +6 dBm
- Two extension types:
  - ARDUINO® Uno V3 connectivity
  - ST morpho extension pin header footprints for full access to all STM32 I/Os
- Embedded ST-LINK/V2-1 debugger/programmer

NUCLEO-WB15CC

■ ARDUINO® Uno ■ ST morpho

By using or installing (as applicable) this evaluation kit you accept all the terms of the EVALUATION LICENCE AGREEMENT available at: **www.st.com/epla**

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Order code: NUCLEO-WB15CC   **ST part number: NUCLEO-WB15CC**   **www.st.com/stm32nucleo**

STM32 Nucleo-64 for STM32WB15 wireless and ultra-low-power Bluetooth® 5.2 MCUs

GETTING STARTED

1/ Check jumper positions on board, JP2, JP3, JP4 and JP6 ON, JP1 (Power source) ON USB_STL, all JP5 jumpers ON except GND.

2/ Install ST BLE Sensor Mobile Application on a Bluetooth® Low Energy compatible mobile device from App Store or Google Play.

3/ Connect the Nucleo board to a PC with a USB cable Type-A to Micro-B through USB connector CN15 (USB_STLNK). Once powered on, the green LD2 blinks for each advertising interval – timeout after 1 min.

4/ Use ST BLE Sensor Mobile Application to detect the STM32WB P2P Server (P2PSRV1) and connect to it. Once connected, the green LED (LD2) blinks for each connection interval. The smartphone application displays the device service & characteristics.

5/ Pushing B1 button on the boards toggles the Alarm on smart phone display. Pushing the B2 button changes the connection interval (50 ms, 1 s). The effect is visible directly on the green LED (LD2) of the Nucleo board. On the smartphone, push the lamp to switch ON/OFF the Nucleo board blue LED (LD1). For more details, please refer to UM2551 «STM32CubeWB Nucleo demonstration firmware»

6/ The demo software and several software examples showing how to use the STM32 Nucleo features are available at **www.st.com/en/evaluation-tools/nucleo-wb15cc.html**

SYSTEM REQUIREMENTS

- Windows® OS (7, 8 and 10), Linux® 64-bit or macOS®
- USB Type-A or USB Type-C® to Micro-B cable

DEVELOPMENT TOOLCHAINS

- IAR Systems® - IAR Embedded Workbench®[1]
- Keil® - MDK-ARM[1]
- STMicroelectronics - STM32CubeIDE
- Arm® Mbed™ online

1. On Windows® only

SOFTWARE TOOLS

- STM32CubeMX
- STM32CubeMonRF
- STM32CubeProg

APPLICATIONS STORE

ST BLE Profile   ST BLE StarNet   ST BLE Sensor   ST BLE Mesh

Download on the App Store

GET IT ON Google Play

EMBEDDED SOFTWARE
STM32CubeWB MCU Package featuring LL & HAL drivers, BLE, RTOS & Touch sensing and examples for this board.