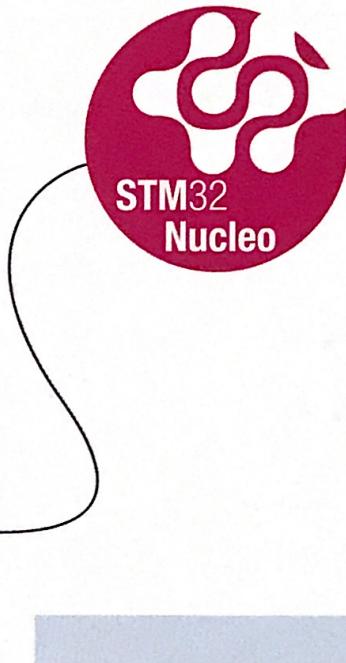
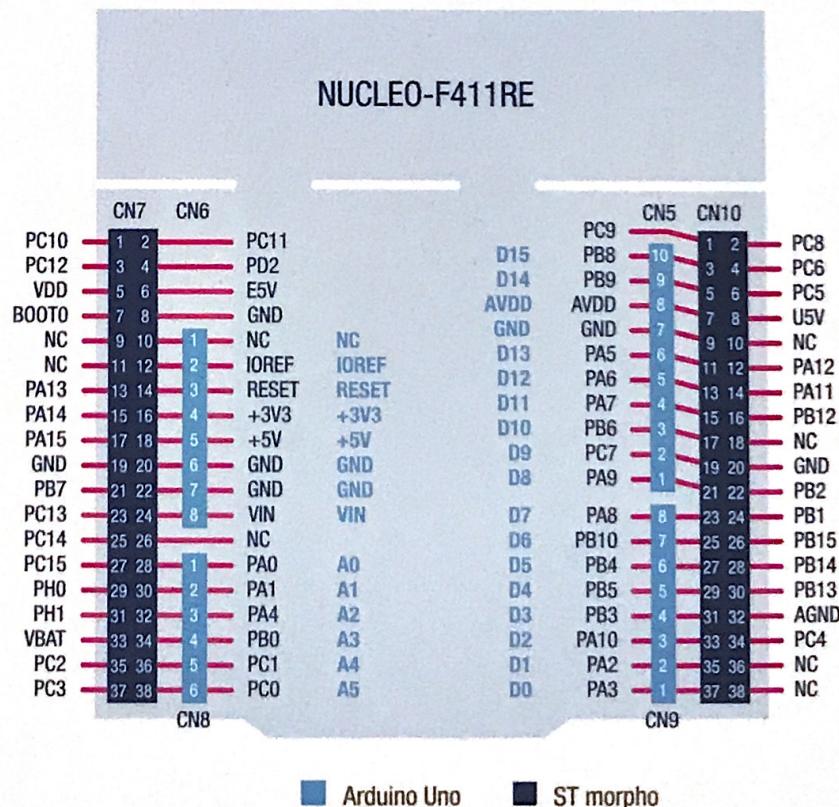


# STM32F411 Nucleo-64



## STM32F411RET6 64 PINS

- Arm® Cortex®-M4 core at 100 MHz
- 512 Kbytes of Flash memory, 128 Kbytes of SRAM
- 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
- Arm® Mbed Enabled™



# STM32 Nucleo-64 for STM32F411 high-performance Access lines MCUs

## GETTING STARTED

- 1/ Check jumper positions on board: JP1 off, JP5 (PWR) on U5V side, JP6 (IDD) on.
- 2/ Connect the STM32 Nucleo board to a PC with a USB cable Type-A to Mini-B through USB connector CN1 to power the board.  
Then red LEDs LD3 (PWR) and LD1 (COM) light up, green LED LD2 blinks.
- 3/ Press user button B1 (left button).
- 4/ Observe how the blinking of green LED LD2 changes according to clicks on button B1.
- 5/ The demo software and several software examples that allow you to use the STM32 Nucleo features are available at [www.st.com/stm32nucleo](http://www.st.com/stm32nucleo)
- 6/ Develop your own applications using available examples.

## SYSTEM REQUIREMENTS

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

## DEVELOPMENT TOOLCHAINS

- Keil® MDK-ARM<sup>1</sup>
  - IAR™ EWARM<sup>1</sup>
  - GCC-based IDEs
  - Arm® Mbed™ online
1. On Windows® only

### EMBEDDED SOFTWARE

STM32CubeF4 MCU Package featuring drivers, RTOS, file system, USB, TCP/IP, graphics and examples for this board.



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](http://www.st.com/epla)



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