

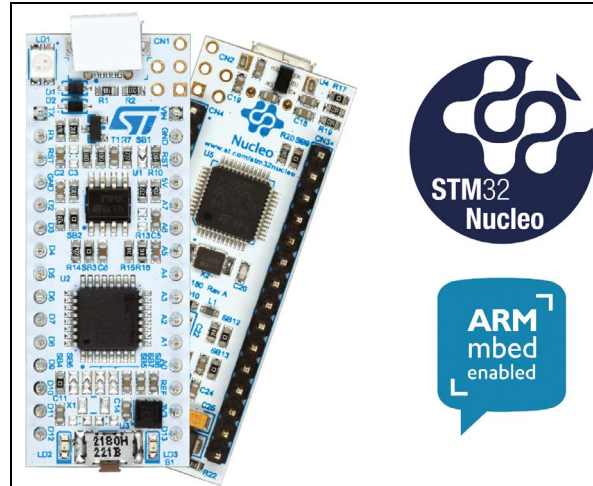


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Features

- STM32 microcontrollers in 32-pin packages
- Three LEDs:
 - USB communication (LD1), power LED (LD2), user LED (LD3)
- Reset push-button
- Board expansion connectors
 - Arduino™ Nano
- Flexible power-supply options: ST-LINK USB V_{BUS} or external sources
- On-board ST-LINK/V2-1 debugger/programmer with USB re-enumeration capability: mass storage, virtual COM port, debug port
- Support of a wide choice of Integrated Development Environments (IDEs) including IAR™, Keil®, GCC-based IDEs, ARM® mbed
- ARM® mbed Enabled™ (see <http://mbed.org>)



1. Picture not contractual.

Description

The STM32 Nucleo-32 board provides an affordable and flexible way for users to try out new concepts and build prototypes with the STM32 microcontroller, choosing from various combinations of performance, power consumption and features. The Arduino™ Nano connectivity makes it easy to expand the functionality of the STM32 Nucleo open development platform with a choice of specialized shields. The STM32 Nucleo-32 board does not require any separate probe as it integrates the ST-LINK/V2-1 debugger/programmer and it comes with the STM32 comprehensive software HAL library, together with various packaged software examples, as well as direct access to the ARM® mbed Enabled™ on-line resources.

Table 1. Device summary

Reference	Part number
NUCLEO-XXXXKX	NUCLEO-F031K6, NUCLEO-F042K6, NUCLEO-F303K8, NUCLEO-L011K4, NUCLEO-L031K6, NUCLEO-L432KC.

System requirements

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

Development toolchains

- Keil® MDK-ARM^(a)
- IAR™ EWARM^(a)
- GCC-based IDEs including free SW4STM32 from AC6
- ARM® mbed Enabled™ online

Ordering information

[Table 2](#) lists the order codes and the respective targeted STM32.

Table 2. Ordering information

Order code	Targeted STM32
NUCLEO-F031K6	STM32F031K6T6
NUCLEO-F042K6	STM32F042K6T6
NUCLEO-F303K8	STM32F303K8T6
NUCLEO-L011K4	STM32L011K4T6
NUCLEO-L031K6	STM32L031K6T6
NUCLEO-L432KC	STM32L432KCU6

The meaning of NUCLEO-TXXXXY codification is as follows:

- TXXX describes the STM32 product line (T for F or L)
- K describes the pin count (K for 32 pins)
- Y describes the memory size (4 for 16 Kbytes, 6 for 32 Kbytes, 8 for 64 Kbytes, C for 256 Kbytes)

The order code is printed on a sticker, placed at the top or bottom side of the board.

a. On Windows® only.

Revision history

Table 3. Document revision history

Date	Revision	Changes
08-Sep-2015	1	Initial release.
15-Jan-2016	2	Updated Table 1: Device summary and Table 2: Ordering information .
09-Jun-2016	3	Updated Section : Description and Section : System requirements to add NUCLEO-L432KC.
07-Jul-2017	4	Updated Features .

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