

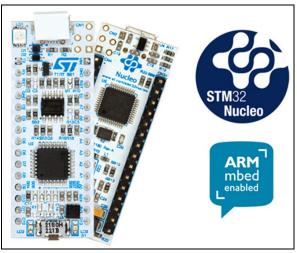
NUCLEO-XXXXKX

STM32 Nucleo-32 board

Data brief

Features

- STM32 microcontrollers in 32-pin packages
- Extension with Arduino[™] nano connectivity
- ARM[®] mbed[™]-enabled (see http://mbed.org)
- On-board ST-LINK/V2-1 debugger/programmer with SWD connector:
 - Selection-mode switch to use the kit as a standalone ST-LINK/V2-1
 - USB re-enumeration capability. Three different interfaces supported on USB: virtual COM port, mass storage, debug port
- Flexible board power supply:
 - USB VBUS
 - External source
- Three LEDs:
 - USB communication (LD1), power LED (LD2), user LED (LD3)
- Reset push-button
- Supported by wide choice of Integrated Development Environments (IDEs) including IAR[™], Keil[®], GCC-based IDEs (AC6 SW4STM32, ...)



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 the 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[™] on-line resources.

Table 1. Device summary

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

Ordering information NUCLEO-XXXXKX

1 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-TXXXKY 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.

NUCLEO-XXXXKX Revision history

2 Revision history

Table 3. Document revision history

Date	Revision	Changes
08-Sep-2015	1	Initial release.
15-Jan-2016	2	Updated <i>Table 1: Device summary</i> and <i>Table 2: Ordering information.</i>
09-Jun-2016	3	Updated Section: Description and Section 1: Ordering information to add NUCLEO-L432KC.

IMPORTANT NOTICE - PLEASE READ CAREFULLY

STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST's terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers' products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2016 STMicroelectronics – All rights reserved

57