



## Data brief

## STM8 Nucleo-32 board



Picture is not contractual.

#### Product status link

NUCLEO-8S207K8

### **Features**

- STM8 microcontroller in LQFP32 32-pin package
- 4 LEDs:
  - USB communication (LD1)
  - Power (LD2)
  - User (LD3)
  - Default (LD4)
- 1 reset push-button
- Board connectors:
  - ARDUINO<sup>®</sup> Nano V3 expansion connector
  - Micro-B USB connector for the ST-LINK
  - SWIM interface
- Flexible power-supply options: ST-LINK USB V<sub>BUS</sub> or external sources (3.3 V, 5 V, 7 V – 12 V)
- On-board ST-LINK/V2-1 debugger/programmer with SWIM connector and USB re-enumeration capability: mass storage, Virtual COM port and debug port
- Comprehensive free software STM8 libraries including a variety of software examples
- Support of a wide choice of Integrated Development Environments (IDEs) including STMicroelectronics free STVD-STM8 (using Cosmic toolchain), IAR<sup>™</sup>, Cosmic free IDEA

## **Description**

The NUCLEO-8S207K8 STM8 Nucleo-32 board featuring the STM8S207K8T6C STM8 8-bit MCU provides an affordable and flexible way for users to try out new concepts and build prototypes with STM8S Series microcontrollers in LQFP32 package, choosing from the various combinations of performance, power consumption and features. The ARDUINO<sup>®</sup> Nano connectivity support makes it easy to expand the functionality of the Nucleo-32 open development platform with a wide choice of specialized shields. The STM8 Nucleo-32 board does not require any separate probe as it integrates the ST-LINK/V2-1 debugger/programmer and comes with the STM8 standard peripheral library, together with various packaged software examples.

# **1** Ordering information

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To order an STM8 Nucleo-32 board, refer to Table 1. For a detailed description, refer to its user manual on the product web page. Additional information is available from the datasheet and reference manual of the target STM8.

#### Table 1. List of available products

| Order code     | Board reference | User manual | Target STM8   |
|----------------|-----------------|-------------|---------------|
| NUCLEO-8S207K8 | MB1442          | UM2391      | STM8S207K8T6C |

## **1.1 Product marking**

Evaluation tools marked as "ES" or "E" are not yet qualified and therefore not ready to be used as reference design or in production. Any consequences deriving from such usage will not be at ST charge. In no event, ST will be liable for any customer usage of these engineering sample tools as reference designs or in production. "E" or "ES" marking examples of location:

- On the targeted STM8 that is soldered on the board (for illustration of STM8 marking, refer to the STM8 datasheet "Package information" paragraph at the *www.st.com* website).
- Next to the evaluation tool ordering part number that is stuck or silk-screen printed on the board.

## 1.2 Codification

The meaning of the codification is explained in Table 2.

#### Table 2. Codification explanation

| NUCLEO-XXYYYKT | Description   | Example: NUCLEO-8S207K8 |
|----------------|---|-------------------------|
| XX             | MCU series in STM8 8-bit MCUs   | STM8S Series            |
| YYY            | MCU product line in the series  | STM8S207                |
| К              | STM8 package pin count  | 32 pins                 |
| Т              | <ul> <li>STM8 Flash memory size:</li> <li>3 for 256 bytes</li> <li>4 for 16 Kbytes</li> <li>6 for 32 Kbytes</li> <li>8 for 64 Kbytes</li> <li>B for 128 Kbytes</li> </ul> | 64 Kbytes               |

The order code is mentioned on a sticker placed on the top side of the board.

## 2 Development environment

## 2.1 System requirements

- Windows<sup>®</sup> OS (7, 8 and 10)
- USB Type-A to Micro-B cable

## 2.2 Development toolchains

- STMicroelectronics: free STVD-STM8 (using Cosmic toolchain)
- IAR<sup>™</sup>: IAR-EWSTM8
- Cosmic: free IDEA

## 2.3 Demonstration software

The demonstration software is preloaded in the STM8 Flash memory for easy demonstration of the device peripherals in standalone mode. The latest versions of the demonstration source code and associated documentation can be downloaded from the demonstration resource section of the STM8 Nucleo board webpage at *www.st.com*.

## **Revision history**

### Table 3. Document revision history

| Date        | Version | Changes          |
|-------------|---------|------------------|
| 18-Oct-2019 | 1       | Initial release. |



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