STM32 NUCLEO BOARDS

Unified scalable offering

Open STM32 development platform for flexible prototyping

The highly affordable STM32 Nucleo boards allow anyone to try out new ideas and quickly create prototypes with any STM32 MCU.

The STM32 Nucleo boards, which include a STM32 microcontroller typically in a 32-pin, 64-pin, or 144-pin package, can easily be extended with many specialized application hardware add-ons.

The STM32 Nucleo expansion boards open the door to any type of application by offering an optimal mix of performance, peripherals, and power within the STM32 family.

A comprehensive STM32 software HAL library, along with various software examples, is provided with the STM32 Nucleo boards. These resources integrate seamlessly with numerous development environments, allowing developers to build a complete application in only a few minutes.

KEY FEATURES

- On-board ST-LINK debugger/programmer:
  - Virtual COM port
  - Mass storage
- Wide extension capabilities with specialized shields:
  - Arduino Uno rev3 connectors on Nucleo-64 and Nucleo-144
  - Access to a wider range of peripherals through ST MOPHOS and optional Zio connectors on Nucleo-144
  - Access to most MCU pins through ST morpho connectors on Nucleo-64 and Nucleo-144
  - Arduino Nano connectors on Nucleo-32
  - Direct access to Mbed online resources for most boards
- Supported by STM32CubeIDE, IAR, Arm Keil, Arm® Mbed™ online, and more IDEs

www.st.com/stm32nucleo
## STM32 Nucleo board portfolio

<table>
<thead>
<tr>
<th>Flash size (bytes)</th>
<th>Nucleo-32</th>
<th>Nucleo-64</th>
<th>Nucleo-144</th>
</tr>
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<tbody>
<tr>
<td>4 M</td>
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<td></td>
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<td>NUCLEO-H553RE</td>
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<td>NUCLEO-L031RB</td>
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</table>

**Legend:**
- Mainstream
- Ultra-low-power
- High-performance
- Wireless
  - P Corresponding to External SMPS version
  - Q Corresponding to Internal SMPS version
  - HW crypto/Hash version available

### STM32 Nucleo-144 board
- NUCLEO-H753ZI
- NUCLEO-G474RE

### STM32 Nucleo-64 board
- NUCLEO-G474RE

### STM32 Nucleo-32 board
- NUCLEO-L432

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