



STM32H5 MCU SERIES

High performance MCU based on Arm[®] Cortex[®]-M33



The **STM32H5** series makes performance and security more accessible

Based on the Arm[®] Cortex[®]-M33, the STM32H5 MCU series runs at 250 MHz. It reaches 375 DMIPS and 1023 CoreMark scores executing from the embedded flash memory.

The STM32H5 series introduces state-of-the-art, scalable security. With STM32H5, you can choose between different security offers, from the secure hardware only, to a full security solution owned & maintained by ST over the product life cycle.

The STM32H5 series offers a large portfolio with 15 packages (from 25 to 176 pins) and supports up to 125°C ambient temperature.

This high performance series is the perfect fit for IoT and industrial applications.

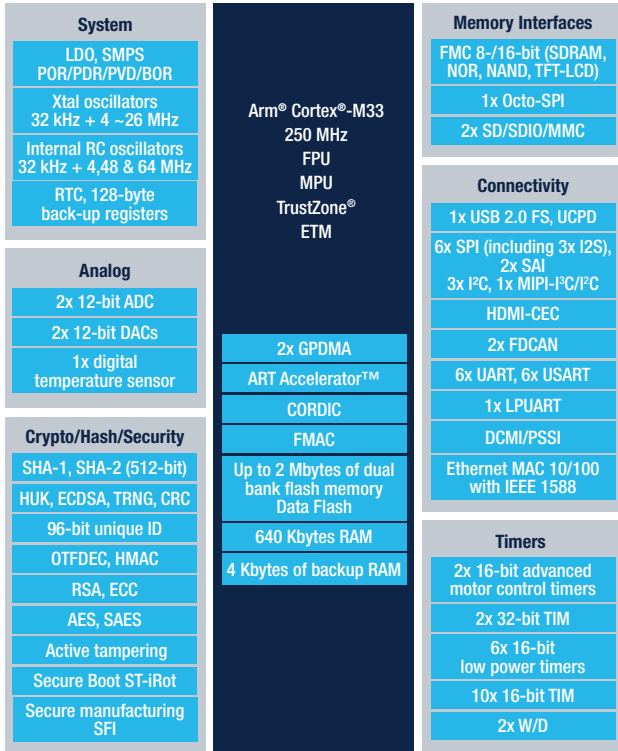
KEY BENEFITS

- Most powerful Arm[®] Cortex[®]-M33 MCU
 - Industry-first 32-bit MCU with Arm Cortex-M33 core running as high as 250 MHz.
- Scalable security to address every need
 - From the most essential security building blocks to fully certified services maintained by ST.
 - PSA Certified level 3 & SESIP3 target certifications.
- Optimized cost/performance trade-off
 - Based on ST's optimized 40 nm process technology. Large choice of memory, peripherals, and package options.

KEY APPLICATIONS

- Smart homes and smart cities
- Factory automation
- Consumer devices and peripherals
- Medical applications

STM32H573 BLOCK DIAGRAM

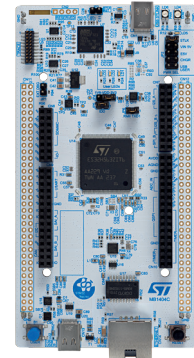


HARDWARE TOOLS

A full set of development boards enables flexible prototyping as well as full STM32H5 evaluation.



STM32H573I-DK
Multi connectivity kit
USB, Ethernet, MicroSD, Display, 512-Mbit, Octo-SPI
flash, Audio, Multi-extension IFS, 176-pin MCU



NUCLEO-H563ZI
Affordable prototyping
USB, Ethernet, Arduino uno IF,
144-pin MCU



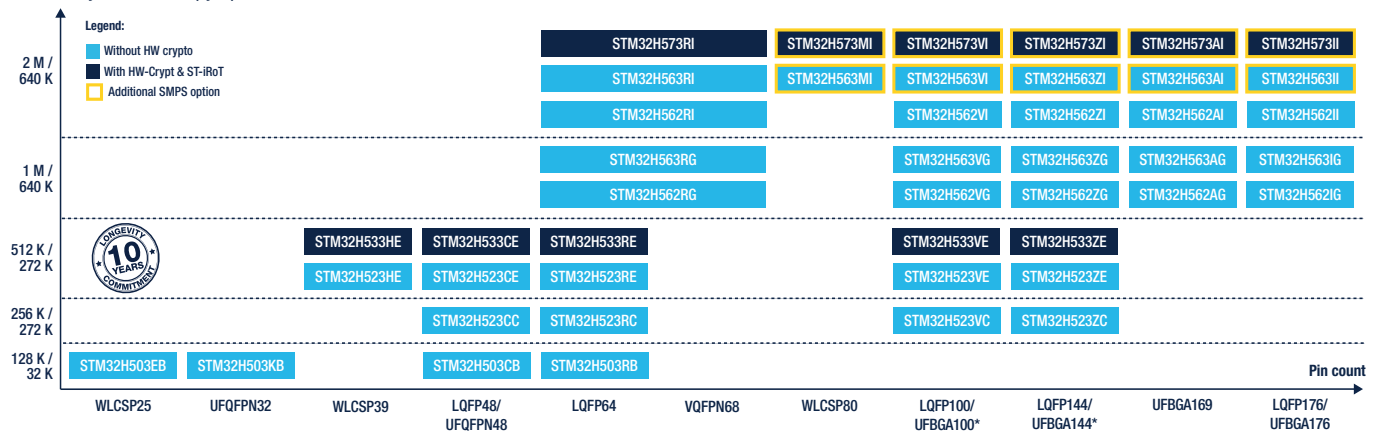
NUCLEO-H503RB
NUCLEO-H533RE
Affordable prototyping
USB, Arduino uno IF, 64-pin MCU

STM32TRUST FRAMEWORK

- Secure Manager: a Trusted Execution Environment (TEE) integrating core security services.
- ST-RoT: Protect your application and IPs with a turnkey Root of Trust solution.
- ST certified and maintained solutions to customers.

STM32H5 PORTFOLIO

Flash memory size / RAM size (bytes)



Note: UFBGA100/UFBGA144 are available on STM32H523xx/STM32H533xx only.

SOFTWARE TOOLS

STM32H5 connects smart things to the cloud in a secure way, with STM32Cube packages.

More information: www.st.com/stm32-cloud-solutions



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