

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 12 packages (from 25 to 176 pins) and supports up to 125°C ambient temperature.

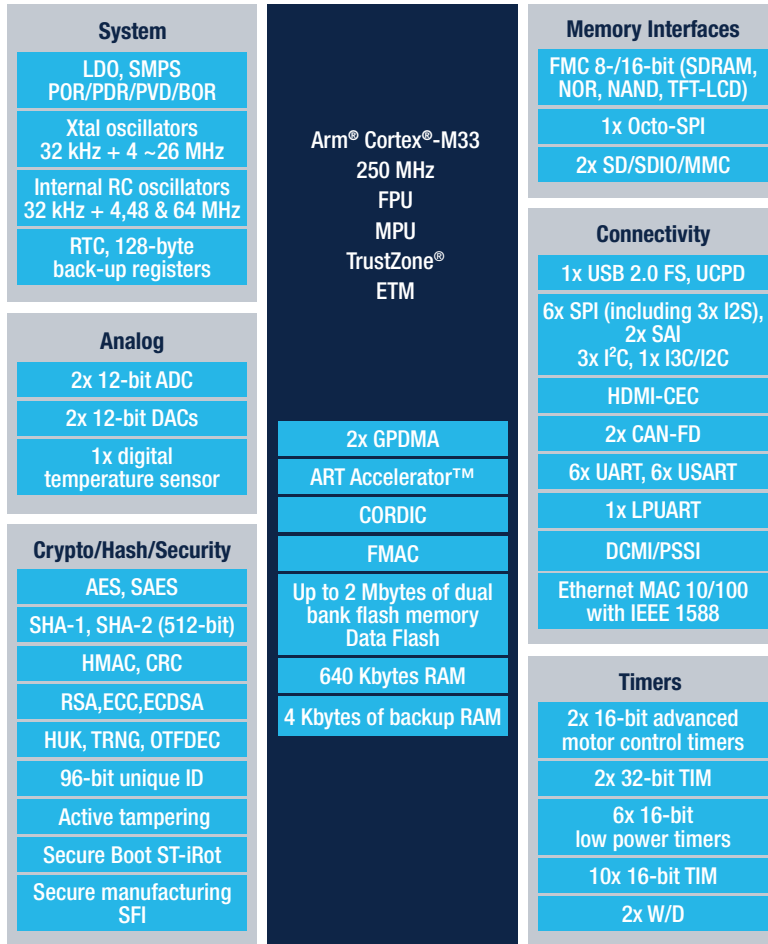
This high performance series is the perfect fit for IoT and industrial applications:

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

KEY BENEFITS

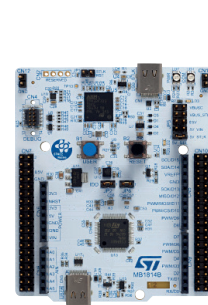
- Most powerful Arm[®] Cortex[®]-M33 MCU
- Industry-first 32-bit MCU with Arm Cortex-M33 core running as high as 250 MHz.
- Scalable security to address every need
- From the most essential security building blocks to fully certified services maintained by ST.
- Optimized cost/performance trade-off
-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

STM32H573 BLOCK DIAGRAM

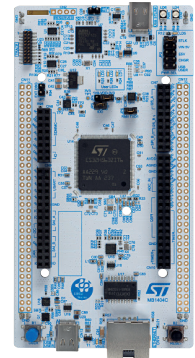


HARDWARE TOOLS

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



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



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



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

*Available in June 2023

STM32TRUST TEE SECURE MANAGER

- A trusted execution environment owned & maintained by ST
- Pre-provisioned for registration to cloud & OEM servers
- A multi-tenant IP protection solution
- Pre-integrated third-party PKI



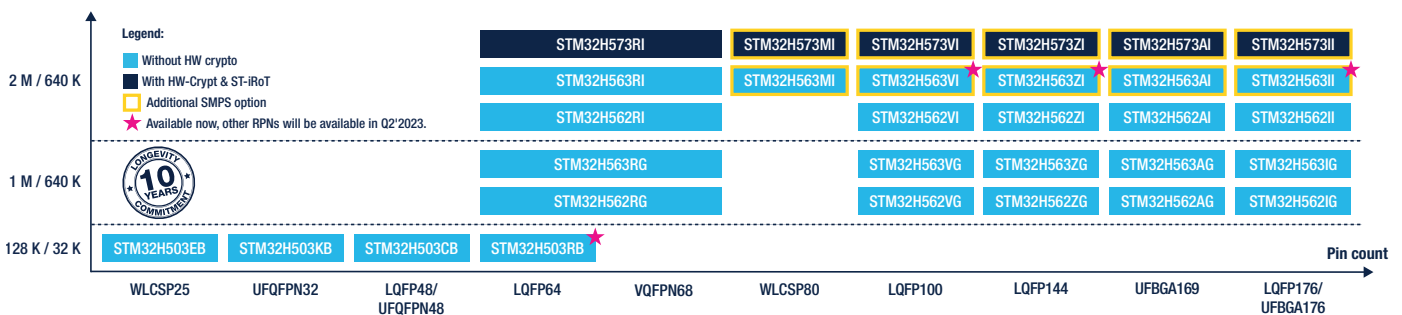
SOFTWARE TOOLS

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



STM32H5 PORTFOLIO

Flash memory size / RAM size (bytes)



© STMicroelectronics - March 2023 - Printed in the United Kingdom - All rights reserved
 ST and ST logo are trademarks or registered trademarks of STMicroelectronics International NV or its affiliates in the EU and/or other countries. For additional information about ST trademarks, please refer to www.st.com/trademarks. All other product or service names are the property of their respective owners.

