



STM32F7 - Welcome

Revision 1.0



Hello, and welcome to the STM32F7 training session.



Training session organization

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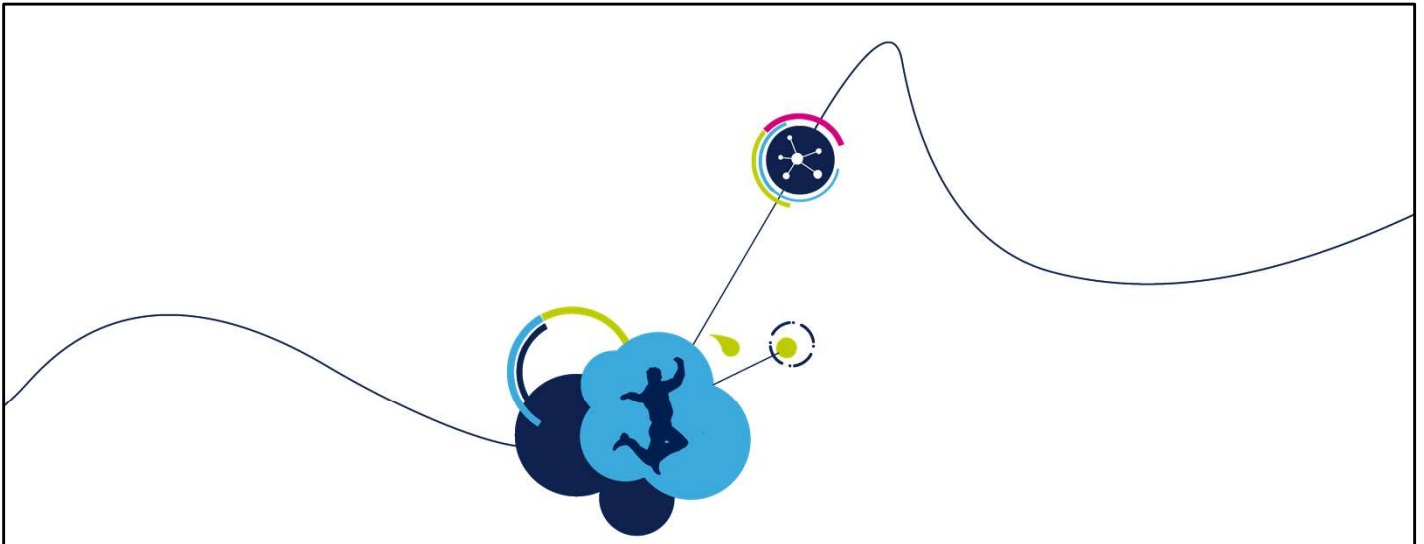
- Introduction
- System
- Memory
- Security & Safety
- Analog
- Communication & Peripherals
- Watchdogs & Timers
- Ecosystem
- Next steps




This session is organized to provide you with the most important information to ensure that you can develop your application as easily as possible. You will find a technical description of all the STM32F7 modules including peripherals and development tools organized into specific sections: system, memory, security, analog, peripherals, watchdog and timers and ecosystem.

You can browse each section separately and learn about each module in the order of your choice and at your convenience.

This session also allows you to search directly for a keyword and you will have a direct access to the sections covering this information.



STM32F7 MCU series
Excellence in **performance**



Now, let's take a closer look at the STM32F7 series of high-performance microcontrollers.



- 1 Great investment**
Benefit from pin-to-pin compatibility with the STM32F4 series and STM32 ecosystem
- 2 Smart architecture**
Interconnect powerful STM32 peripherals around Cortex-M7 core
- 3 Performance**
Deliver 462 DMIPS and 1082 CoreMark
- 4 Power-efficient**
Achieve 7 CoreMark/mW at 1.8 V
- 5 Innovation now**
Create smarter and more responsive applications



These are the 5 major points that characterize the STM32F7 series:

It is a **great investment** as this new series of STM32 microcontrollers benefits from the pin-to-pin compatibility with the STM32F4 and the STM32 Ecosystem.

STM32F7 is all about ST's art of combining and interconnecting powerful STM32 peripherals around a Cortex-M7 core, to deliver the **smartest architecture** ever.

STM32F7 delivers 462 DMIPS and 1082 CoreMark as **performance** with a floating-point unit twice faster than on STM32F4 series and an ST's adaptive real-time memory accelerator.

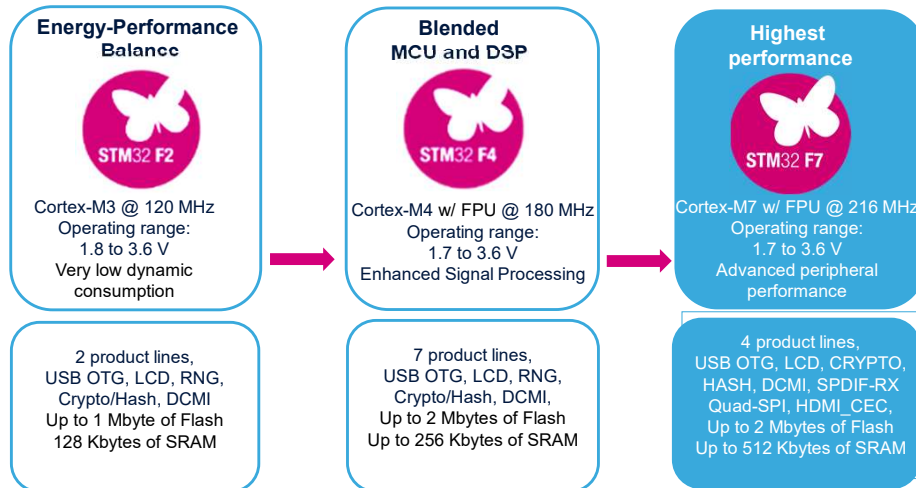
STM32F7 boosts performance, but does not compromise on **power efficiency**. It achieves 6.5 CoreMark/mW at 1.8 V and enables innovation inside power constrained applications.

Thanks to the STM32F7's powerful features, embedded developers can **innovate** and create smarter and more responsive applications.

STM32F Performance offer

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STM32F7 completes the Performance family

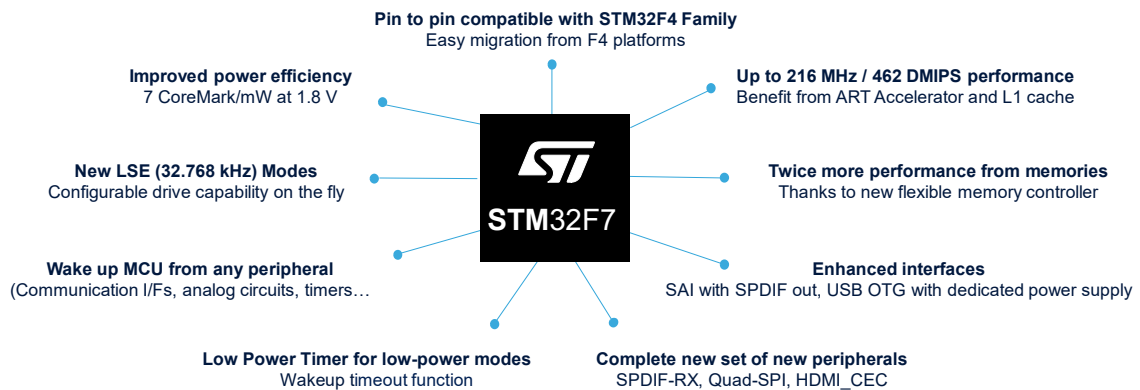


The STM32F7 series completes Performance family of microcontrollers developed by STMicroelectronics. It is the result of a major effort based on our previous work for STM32F2 and STM32F4 Performance microcontrollers.

High performance and flexibility

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STM32F7 is based on a new platform optimized to increase performance and flexibility



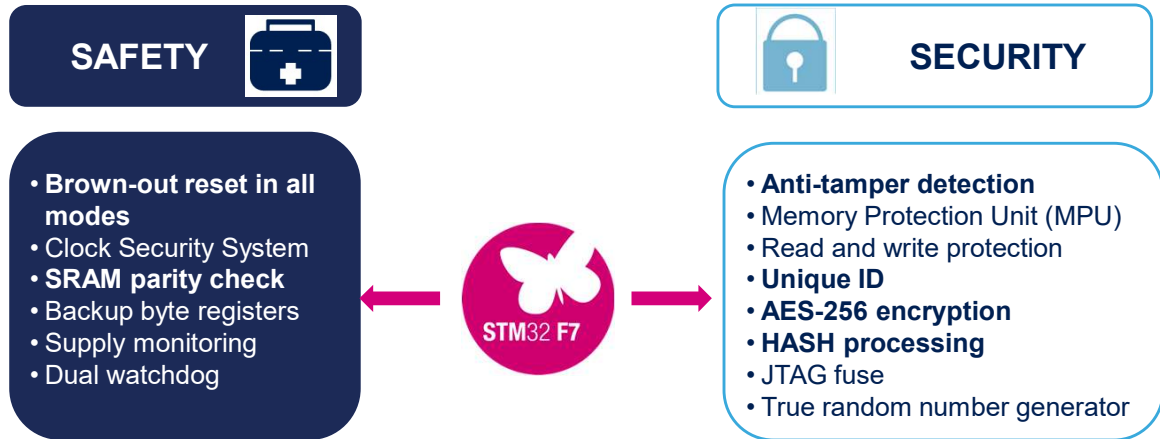
The STM32F7 is based on a new platform optimized to offer the best performance, extended with new peripherals to support the widest range of use cases and enriched with additional low-power functions to improve overall power efficiency.

The STM32F7 series is pin-to-pin compatible with the STM32F4 series enabling an easy migration from F4 platforms.

Safety and security

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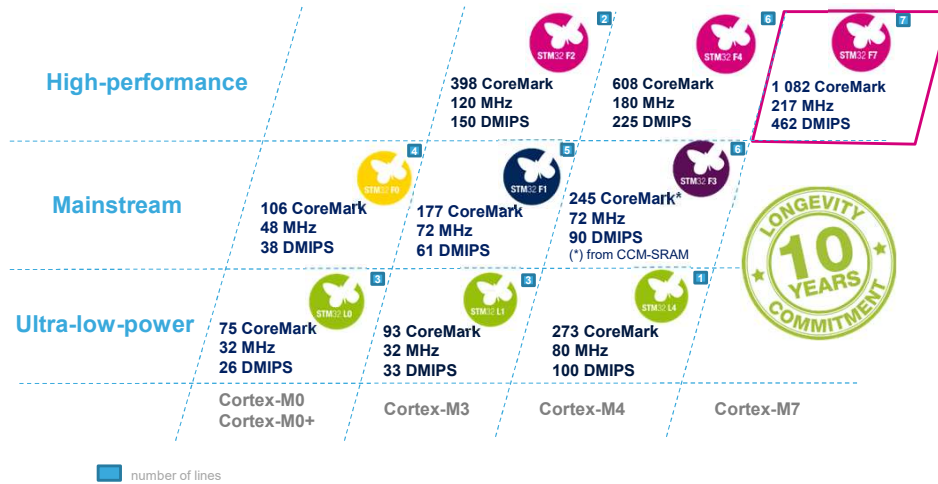
Integrated safety and security features



STM32F7 microcontrollers include many safety features and embed specialized hardware for developing secure applications.

STM32F7: continuity in STM32 portfolio

9 product series STM32F7 benefits from pin-to-pin compatibility across the STM32 family



The STM32F7 series benefits from ST's long experience in developing STM32 microcontrollers as well as its pin compatibility and rich ecosystem based on its hardware and software tools already used throughout the STM32 MCU family.

Enjoy!

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www.st.com/stm32f7



Now let's get started with the training. Do not hesitate to follow the events and news about this product on our website at www.st.com/stm32f7.

Enjoy!