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STM32G4 SERIES

Mainstream MCUs



STM32G4 mixed-signal MCUs shaped for analog-rich applications

The STM32G4 series combines powerful Arm® Cortex®-M4 plus FPU and DSP capability with rich and advanced analog peripherals. It introduces two new mathematical accelerators (Cordic and Filtering), CAN-FD (Flexible Datarate), USB Type-C interface with Power Delivery including physical layer (PHY) and advanced security with safety features. Its new high-resolution timer V2.0 continues the Digital Power success story.

KEY FEATURES

- Performance
 - Arm® Cortex®-M4 with FPU
 - Up to 170 MHz CPU frequency
 - Up to 213 DMIPS and 550 CoreMark® results
- Rich and advanced analog peripherals
 - ADCs, op-amps, comparators, DACs
- Safety and security focus

- Full set of development and evaluation boards
- Code examples and software tools

KEY BENEFITS

- Reduced PCB size and BOM cost
- Mixed-signal SoC for a wide variety of control applications
- Dynamic energy efficiency

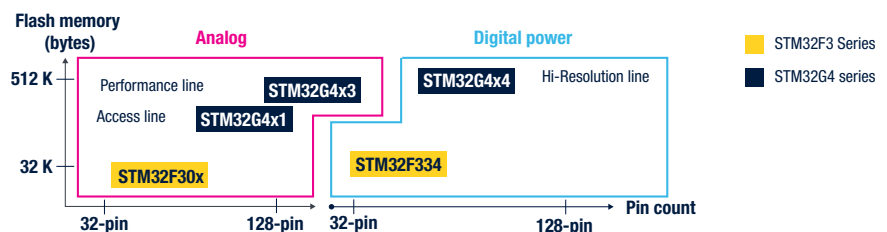
KEY APPLICATIONS

- Control applications
- Home appliances and E-bikes
- Air conditioning
- Industrial equipments
- Motor control applications (low end, high end)
- Servers, telecom equipment, and EV charging stations
- Instrumentation and measurement equipment

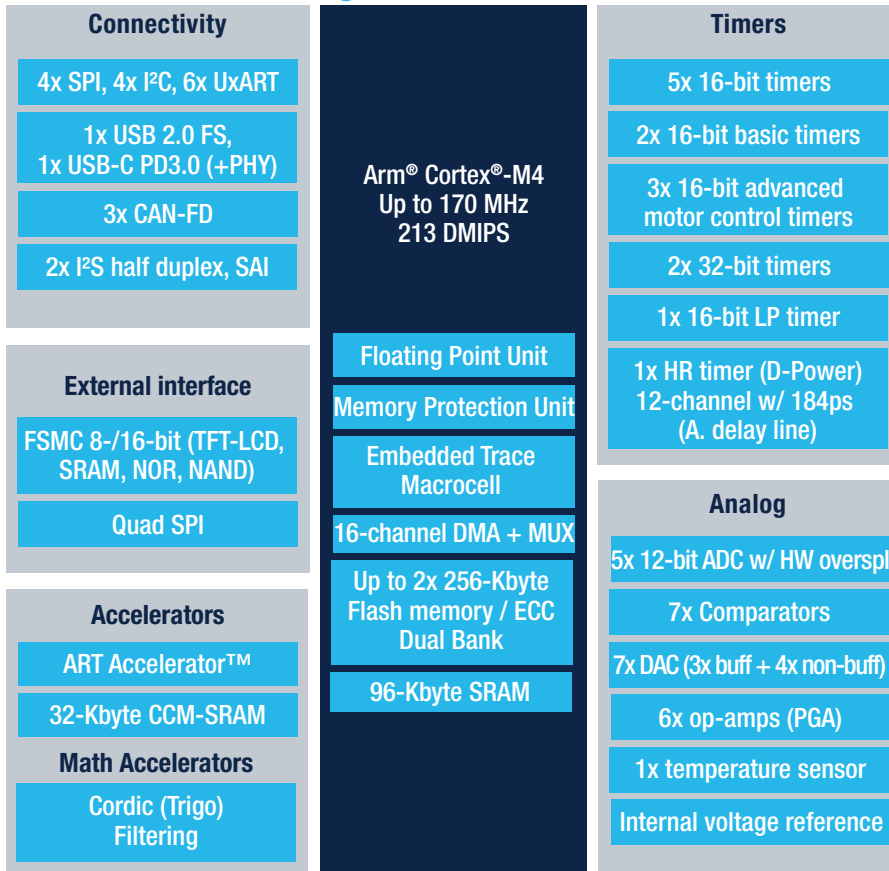


Designed for Motor Control applications

www.st.com/stm32-motor-control



STM32G474 block diagram

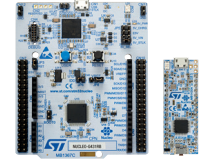


Hardware tools

A full set of evaluation boards enables flexible prototyping as well as full STM32G4 evaluation.



Evaluation boards
STM32G474E-EVAL
STM32G484E-EVAL



Nucleo boards
Nucleo-64 : NUCLEO-G431RB, NUCLEO-G474RE and NUCLEO-G491RE
Nucleo-32 : NUCLEO-G431KB



Discovery kits
B-G474E-DPOW1 (Digital Power)
B-G431B-ESC1 (Motor Control)

STM32G4 Solutions

- Motor Control applications www.st.com/stm32-motor-control
- Digital power applications www.st.com/stm32-digital-power

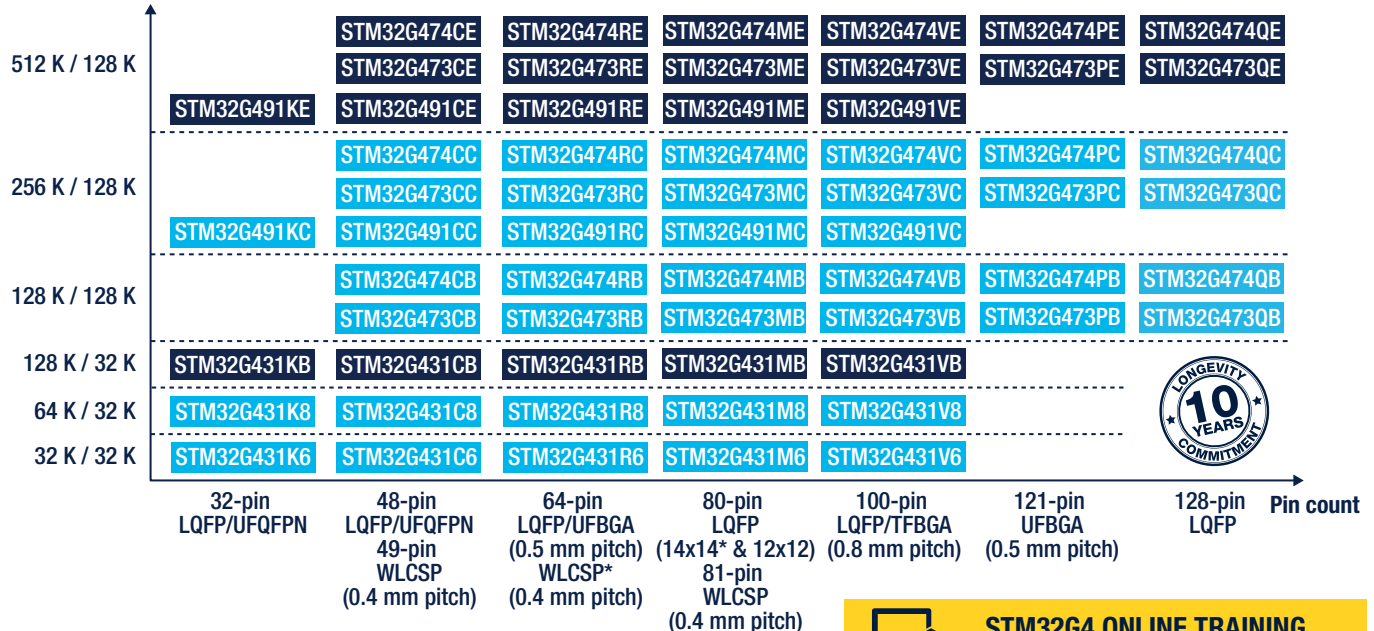
STM32Cube Ecosystem

The STM32Cube ecosystem is a complete software solution for STM32G4 MCUs. www.st.com/stm32cube



STM32G4 portfolio

Flash memory / RAM size (bytes)



Legend: ■ Crypto AES-256 version is available on this package *Available soon

STM32G4 ONLINE TRAINING
www.st.com/stm32g4-online-training



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