

STM32F101C6T6
Samples from:
€ 2.40

STM32F103CBT6
Samples from:
€ 2.80

STM32F103VBH6
Samples from:
€ 4.75

STM3210B-PFSTICK
Starter Kit
€ 49

STM32

ARM Cortex-M3 MCU



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The STM32 family of 32-bit Flash microcontrollers is based on the breakthrough ARM Cortex-M3 core – a core specifically developed for embedded applications requiring a combination of high-performance, real-time, low-power and low-cost operation. The STM32 family benefits from the Cortex-M3 architectural enhancements (including the Thumb-2® instruction set) that deliver improved performance combined with better code density and a tightly coupled nested vectored interrupt controller that significantly speeds response to interrupts, all combined with industry-leading power consumption.

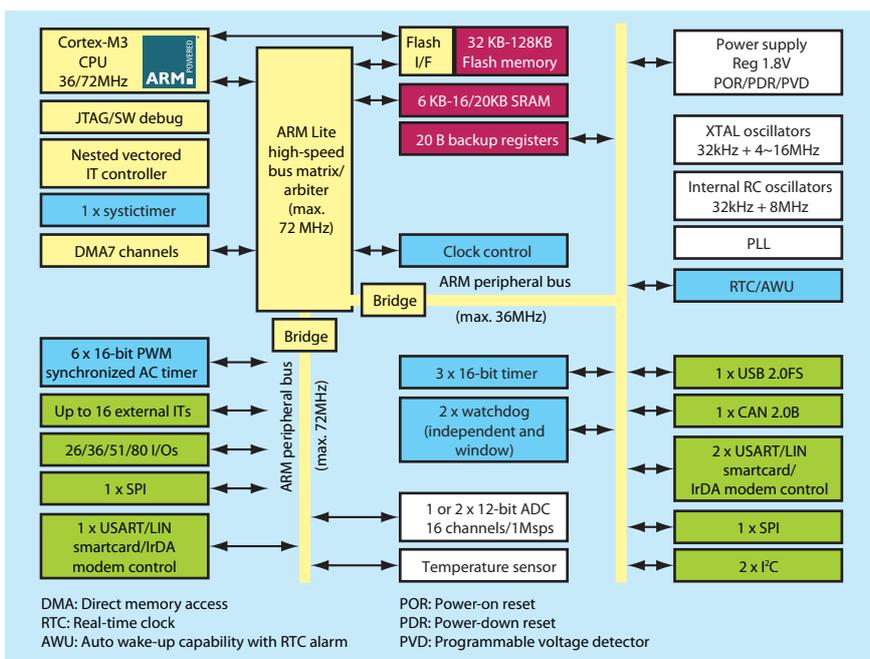
The STM32 comes with two lines. The Performance line, STM32F103, operates at 72MHz, with more on-chip RAM and peripherals. The Access line, STM32F101, operates at 36MHz. Both lines are pin-to-pin and software-compatible and offer the same embedded Flash options.

The Performance line takes the 32-bit MCU world to new levels of performance and energy efficiency. With its Cortex-M3 core at 72MHz, it is able to perform high-end computation. Its peripheral set brings superior control and connectivity.

The Access line is the entry point of the STM32 family. It has the power of the 32-bit MCU but at a 16-bit MCU cost. Its peripheral set offers excellent connectivity and control.

Key Features

- Cortex-M3 Core delivers 1.25DMips MHz, 30% more than ARM7TDMI
- Performance line operates at 72MHz and access line at 32MHz



- Low power, high performance: 36mA @ 72MHz, 2uA standby
- Up to 128k Flash (512k in Q2'08)
- Up to 20k Ram (64k in Q2'08)
- Lowest Interrupt Latency ARM (12 Cycles, 6 when Tail Chaining)
- State of the art peripherals
- 1 or 2 ADC, 12-bit/1Msps
- 18 MBit/s SPI
- GPIO with 18MHz Pin-toggling
- USB 2.0 Certified FS Device
- CAN2.0B
- DAC in Q2'08
- PWM with dead-time-generation and encoder interface for motorcontrol

Key Applications

- Industrial: Inverters, Printers, Scanners, Industrial Networking

- Building and Security: Alarm Systems, intelligent Sensors
- Low Power: Glucose Meters, Power Meters, Battery Operated Applications
- Appliances: Motor Drive, Application Control, PC Peripherals

Key Design Tips

- Check out STM Software Support. The STM Firmware Library provides drivers for all peripherals. And the USB developer Kit comes with many examples (Device Firmware Update, HID, RS-232, Control-, Interrupt-, Bulk and Isochronous Transfer Examples)
- A complete range of high-end and low-cost development tools is available, including complete development tool solutions

Service available or already delivered T&R from Manufacturer.
Tapes are available, but not stocked at Avnet Logistics due to low demand.
Device supported by or programming equipment, but the socket for this package must be provided by customer.

P/N	Package	Programming	Taping & Reeling	Marking
STM32F101C6T6	40-pin LQFP			
STM32F101VBH6	100-pin LQFP			
STM32F103CBT6	48-pin LQFP			
STM32F103VBH6	100-ball BGA			
STM3210B-PFSTICK		Tool		

AMPLIFIERS
CONNECTIVITY, COMMUNICATION & INTERFACE ICs
DATA CONVERTER ICs
DIGITAL SIGNAL PROCESSORS
DISCRETES
MEMORIES
MICRO-CONTROLLERS & PROCESSORS
OPERATING SYSTEMS
OPTOELECTRONICS & DISPLAYS
POWER MANAGEMENT ICs
PROGRAMMABLE LOGIC DEVICES
TOOLS & SERVICES