

STM8S001 8-bit MCUs

Value-line expansion to 8-pin



Entry-level 8-bit microcontrollers with STM8 core available in a small 8-pin SO package!

Offering essential features set at the most affordable price, our most popular Value line of 8-bit STM8S microcontrollers is now expanding to 8-pin package. STM8S001 goes a step further in terms of price to performance ratio.

Housed in small industry-standard S08 package, the STM8S001 offers an outstanding set of features in terms of core processing speed, system control, memory size, communication peripherals, and analog functions.

CORE AND SYSTEM

- STM8 core at 16 MHz
- 2.95 to 5.5 V operating voltage
- Flexible clock control from 128 kHz to 16 MHz RC
- Up to 5 I/Os
- 8-bit and 16-bit timers (x2)

MEMORIES

- 8 Kbytes of Flash memory
- 1 Kbyte of RAM memory
- 128 bytes true data EEPROM

CONNECTIVITY AND DEBUGGING

- UART
- SPI
- I²C
- Single wire interface module

ANALOG

- 10-bit ADC with 3 channels

STM8S APPLICATIONS

- Appliances and power tools
- HVAC
- Power management
- Lighting
- Factory automation
- Devices with rechargeable batteries
- Motor control
- e-Vehicles
- Toys and games
- Sensors
- Power supplies
- User interfaces

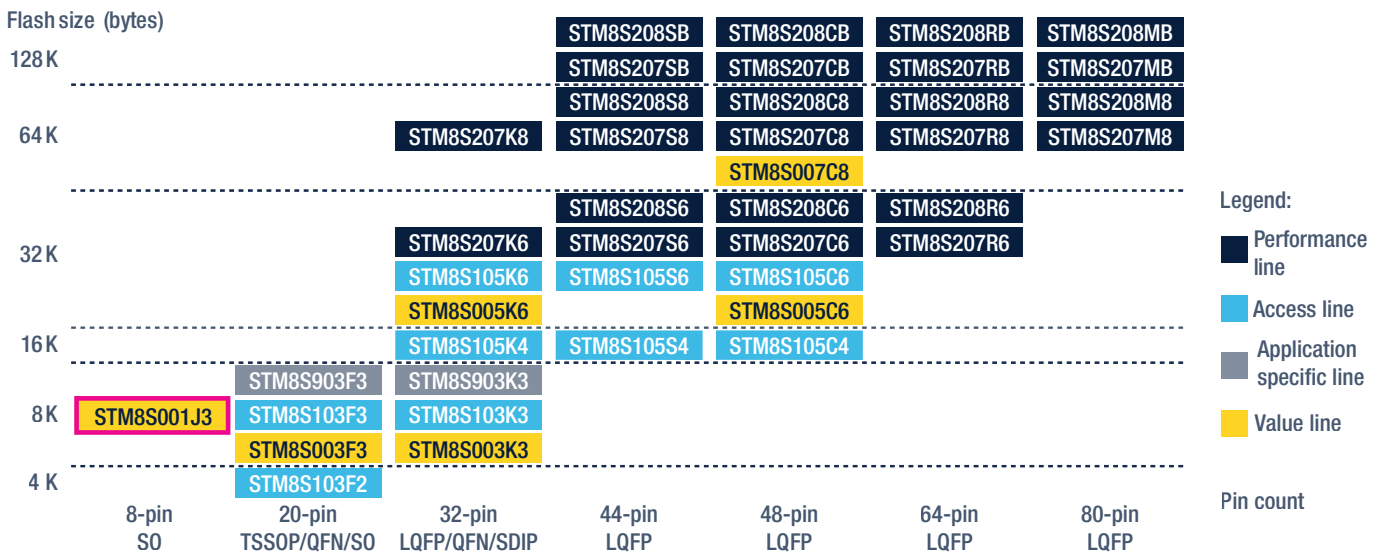
STM8 MCU Series

STM8 core - Up to 24 MHz

	Product lines	F _{cpu} (MHz)	Flash memory (Kbytes)	RAM (Kbytes)	Data EEPROM (bytes)	CAN 2.0B	2 nd UART	Additional analog channels	LNB firmware
<ul style="list-style-type: none"> • 10-bit ADC • USART, SPI, I²C • 8- and 16-bit timers • 16 MHz crystal oscillator and 128 kHz internal RC oscillators • SWIM debug module 	STM8S001/003/005/007 Value line	16	8 to 64	1 to 6	128				
	STM8S103/105	16	4 to 32	1 to 2	640 to 1024				
	STM8S207/208	24	32 to 128	6	1024 to 2048	•	•	•	
	STM8S Application-specific line	16	8	1	640			•	•



STM8S Product Portfolio



Software Tools

STM8Cube™ initiative is coming to the whole STM8 family! Our STM8CubeMX is a user-friendly software tool that significantly reduces development effort, time and cost. It includes an STM8 selector tool that finds the best MCU based on matching criteria or populating a given board. STM8CubeMX helps developers configure STM8 microcontrollers through a set of user-friendly graphical wizards:

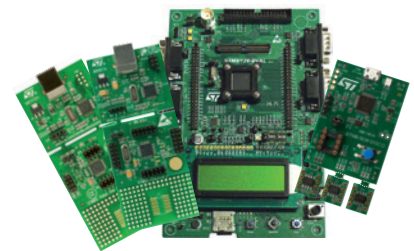
- Pinout wizard helps resolve any potential pin allocation conflicts
- Clock-tree wizard helps ensure the clocks are properly configured
- Power-consumption calculator helps forecast power consumption scenarios

In addition, it is able to generate and store reports on device configurations and performance.

STM8CubeMX is available for Windows®, Linux® and macOS® operating systems.



Hardware Tools



STM8/128-EVAL
 STM8SVL-DISCOVERY
 STM8S-DISCOVERY
 STM8-S08-DISCO



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