

# STM8S001 new 8-bit MCUs

## Value-line expansion to 8-pin



### Entry-level 8-bit microcontrollers with STM8 core now 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 new 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 5.5V 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
- I<sup>2</sup>C
- 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

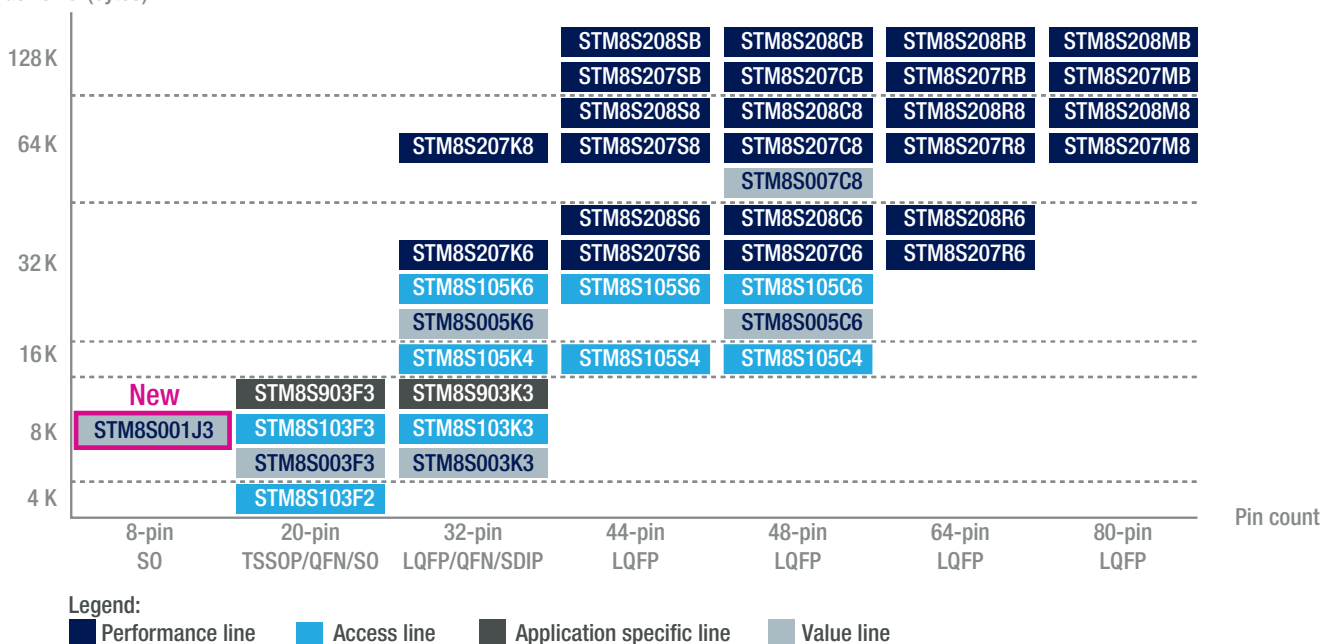


## STM8S PRODUCT LINES

STM8S core - Up to 24 MHz	<ul style="list-style-type: none"> <li>10-bit ADC</li> <li>USART, SPI, I<sup>2</sup>C</li> <li>8- and 16-bit timers</li> <li>16 MHz crystal oscillator and 128 kHz internal RC oscillators</li> <li>SWIM debug module</li> </ul>	 Product line	F <sub>cpu</sub> (MHz)	Flash memory (Kbytes)	RAM (Kbytes)	Data EEPROM (bytes)	CAN 2.0B	2 <sup>nd</sup> UART	Additional analog channels	LNB firmware	
		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

Flash size (bytes)



## SOFTWARE TOOLS

STMCube™ 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:

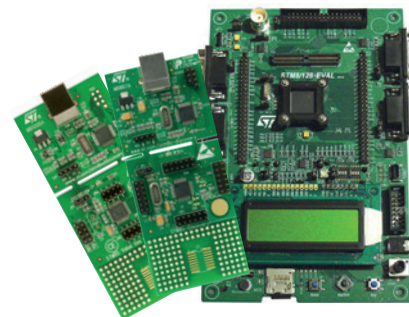
- Pinout wizard helps resolve any potential pin allocation conflicts
- Clock-tree wizard helps ensure the clocks are properly configured
- Power-consumption calculator helps forecast power consumption scenarios

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

