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8- and 32-bit microcontrollers

Product selection guide

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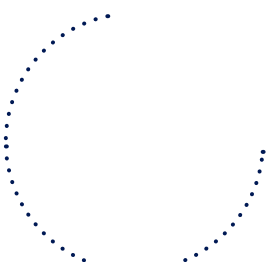

STM32 – 32-bit microcontroller families

STM32 F0 SERIES - ARM CORTEX™-M0 ENTRY-LEVEL MCUS

Part number	Flash size (Kbytes)	Internal RAM size (Kbytes)	Package	Timer functions		ADC	DAC	I/Os	Serial interface							Supply voltage (V)	Supply current (Icc)		Maximum operating temperature range (°C)
				16-/32-bit timers	Others				SPI	I²S	I²C	USART	CEC	USB FS	CAN 2.0B		Lowest power mode (µA)	Run mode (per MHz) (µA)	
STM32F030 Value line - 48 MHz CPU																			
STM32F030F4	16	4	TSSOP20	4x16-bit/-	2 x WDG, RTC, 24-bit downcounter	1x12-bit		15	1		1	1				2.4 to 3.6	3.4	250	-40 to +85
STM32F030C6	32	4	LQFP48	4x16-bit/-		1x12-bit		39	1		1	1				2.4 to 3.6	3.4	250	-40 to +85
STM32F030K6	32	4	LQFP32	4x16-bit/-		1x12-bit		26	1		1	1				2.4 to 3.6	3.4	250	-40 to +85
STM32F030C8	64	8	LQFP48	6x16-bit/-		1x12-bit		39	2		2	2				2.4 to 3.6	3.4	250	-40 to +85
STM32F030R8	64	8	LQFP64	6x16-bit/-		1x12-bit		55	2		2	2				2.4 to 3.6	3.4	250	-40 to +85
STM32F0x1 line - 48 MHz CPU																			
STM32F051C4	16	4	LQFP48	7x16-bit / 1x32-bit	2 x WDG, RTC, 24-bit downcounter	13x12-bit	1x12-bit	39	1	1	1	1	1			2.0 to 3.6	1.7	250	-40 to +85
STM32F051K4	16	4	UFQFPN32	7x16-bit / 1x32-bit		13x12-bit	1x12-bit	27	1	1	1	1	1			2.0 to 3.6	1.7	250	-40 to +85
STM32F051R4	16	4	LQFP64	7x16-bit / 1x32-bit		19x12-bit	1x12-bit	55	1	1	1	1	1			2.0 to 3.6	1.7	250	-40 to +85
STM32F051C6	32	4	LQFP48	7x16-bit / 1x32-bit		13x12-bit	1x12-bit	39	1	1	1	2	1			2.0 to 3.6	1.7	250	-40 to +85
STM32F051K6	32	4	UFQFPN32	7x16-bit / 1x32-bit		13x12-bit	1x12-bit	27	1	1	1	2	1			2.0 to 3.6	1.7	250	-40 to +85
STM32F051R6	32	4	LQFP64	7x16-bit / 1x32-bit		19x12-bit	1x12-bit	55	1	1	1	2	1			2.0 to 3.6	1.7	250	-40 to +85
STM32F051C8	64	8	LQFP48	7x16-bit / 1x32-bit		13x12-bit	1x12-bit	39	2	1	2	2	1			2.0 to 3.6	1.7	250	-40 to +85
STM32F051K8	64	8	UFQFPN32	7x16-bit / 1x32-bit		13x12-bit	1x12-bit	27	1	1	1	2	1			2.0 to 3.6	1.7	250	-40 to +85

STM32 F0 SERIES - ARM CORTEX™-M0 ENTRY-LEVEL MCUS

Part number	Flash size (Kbytes)	Internal RAM size (Kbytes)	Package	Timer functions		ADC	DAC	I/Os	Serial interface							Supply voltage (V)	Supply current (Icc)		Maximum operating temperature range (°C)
				16-/32-bit timers	Others				SPI	I²S	I²C	USART	CEC	USB FS	CAN 2.0B		Lowest power mode (µA)	Run mode (per MHz) (µA)	
STM32F051R8	64	8	LQFP64	7x16-bit / 1x32-bit	2 x WDG, RTC, 24-bit downcounter	19x12-bit	1x12-bit	55	2	1	2	2	1			2.0 to 3.6	1.7	250	-40 to +105
STM32F071CB*	128	12	LQFP48	7x16-bit / 1x32-bit		13x12-bit	1x12-bit	37	2	1	2	4	1			2.0 to 3.6	1.7	250	-40 to +85
STM32F071RB*	128	12	LQFP64	7x16-bit / 1x32-bit		19x12-bit	1x12-bit	51	2	1	2	4	1			2.0 to 3.6	1.7	250	-40 to +85
STM32F071VB*	128	12	LQFP100	9x16-bit / 1x32-bit		19x12-bit	1x12-bit	87	2	1	2	4	1			2.0 to 3.6	1.7	250	-40 to +85
STM32F0x2 line - 48 MHz CPU with USB																			
STM32F072C8*	64	16	LQFP48	8x16-bit / 1x32-bit	2 x WDG, RTC, 24-bit downcounter	13x12-bit	2x12-bit	37	2	2	2	4	1	1	1	2.0 to 3.6	1.7	250	-40 to +85
STM32F072R8*	64	16	LQFP64	8x16-bit / 1x32-bit		19x12-bit	2x12-bit	51	2	2	2	4	1	1	1	2.0 to 3.6	1.7	250	-40 to +85
STM32F072V8*	64	16	LQFP100	8x16-bit / 1x32-bit		19x12-bit	2x12-bit	87	2	2	2	4	1	1	1	2.0 to 3.6	1.7	250	-40 to +85
STM32F072CB*	128	16	LQFP48	8x16-bit / 1x32-bit		13x12-bit	2x12-bit	37	2	2	2	4	1	1	1	2.0 to 3.6	1.7	250	-40 to +85
STM32F072RB*	128	16	LQFP64	8x16-bit / 1x32-bit		19x12-bit	2x12-bit	51	2	2	2	4	1	1	1	2.0 to 3.6	1.7	250	-40 to +85
STM32F072VB*	128	16	LQFP100	8x16-bit / 1x32-bit		19x12-bit	2x12-bit	87	2	2	2	4	1	1	1	2.0 to 3.6	1.7	250	-40 to +85

Note:
* Available in mass market Week03/2014

STM32 F3 SERIES - ARM CORTEX™-M4 MIXED-SIGNAL MCUS WITH DSP AND FPU

Part number	Flash size (Kbytes)	Internal RAM size (Kbytes)	Package	Timer functions		ADC 16-bit / 12-bit	DAC	I/Os	Serial interface						Supply voltage (V)	Supply current (Icc)		Maximum operating temperature range (°C)
				16-/32-bit timers	Others				SPI	I²S	I²C	USART	USB FS	CAN 2.0B		Lowest power mode (µA)	Run mode (per MHz) (µA)	
STM32F302/303/313 line – 72 MHz with 8-Kbyte CCM-SRAM and 12-bit ADC (5 MSPS)																		
STM32F302CB	128	24	LQFP48	8x16-bit / 1x32-bit	SysTick, 2 x WDG, RTC	9x12-bit	1x12-bit	37	3		2	3	1	1	2.0 to 3.6	0.5	390	-40 to +105
STM32F302RB	128	24	LQFP64	8x16-bit / 1x32-bit		16x12-bit	1x12-bit	52	3		2	5	1	1	2.0 to 3.6	0.5	390	-40 to +105
STM32F302VB	128	24	LQFP100	8x16-bit / 1x32-bit		17x12-bit	1x12-bit	87	3		2	5	1	1	2.0 to 3.6	0.5	390	-40 to +105
STM32F303CB	128	40	LQFP48	9x16-bit / 1x32-bit		15x12-bit	2x12-bit	37	3	up to 2x full duplex I²S	2	3	1	1	2.0 to 3.6	0.5	390	-40 to +105
STM32F303RB	128	40	LQFP64	9x16-bit / 1x32-bit		22x12-bit	2x12-bit	52	3		2	5	1	1	2.0 to 3.6	0.5	390	-40 to +105
STM32F303VB	128	40	LQFP100	9x16-bit / 1x32-bit		39x12-bit	2x12-bit	87	3		2	5	1	1	2.0 to 3.6	0.5	390	-40 to +105
STM32F302CC	256	32	LQFP48	8x16-bit / 1x32-bit		9x12-bit	1x12-bit	37	3		2	3	1	1	2.0 to 3.6	0.5	390	-40 to +105
STM32F302RC	256	32	LQFP64	8x16-bit / 1x32-bit		16x12-bit	1x12-bit	52	3		2	5	1	1	2.0 to 3.6	0.5	390	-40 to +105
STM32F302VC	256	32	LQFP100	8x16-bit / 1x32-bit		17x12-bit	1x12-bit	87	3		2	5	1	1	2.0 to 3.6	0.5	390	-40 to +105
STM32F303CC	256	48	LQFP48	9x16-bit / 1x32-bit		15x12-bit	2x12-bit	37	3		2	3	1	1	2.0 to 3.6	0.5	390	-40 to +105
STM32F303RC	256	48	LQFP64	9x16-bit / 1x32-bit		22x12-bit	2x12-bit	53	3		2	5	1	1	2.0 to 3.6	0.5	390	-40 to +105
STM32F303VC	256	48	LQFP100	9x16-bit / 1x32-bit		39x12-bit	2x12-bit	87	3		2	5	1	1	2.0 to 3.6	0.5	390	-40 to +105
STM32F313CC	256	48	LQFP48	9x16-bit / 1x32-bit		14x12-bit	2x12-bit	36	3	up to 2x full duplex I²S	2	3		1	1.65 to 1.95	5.1	399	-40 to +105
STM32F313RC	256	48	LQFP64	9x16-bit / 1x32-bit		21x12-bit	2x12-bit	51	3		2	5		1	1.65 to 1.95	5.1	399	-40 to +105
STM32F313VC	256	48	LQFP100	9x16-bit / 1x32-bit		38x12-bit	2x12-bit	86	3		2	5		1	1.65 to 1.95	5.1	399	-40 to +105

STM32 F3 SERIES - ARM CORTEX™-M4 MIXED-SIGNAL MCUS WITH DSP AND FPU

Part number	Flash size (Kbytes)	Internal RAM size (Kbytes)	Package	Timer functions		ADC 16-bit / 12-bit	DAC	I/Os	Serial interface						Supply voltage (V)	Supply current (Icc)		Maximum operating temperature range (°C)
				16-/32-bit timers	Others				SPI	I²S	I²C	USART	USB FS	CAN 2.0B		Lowest power mode (µA)	Run mode (per MHz) (µA)	
STM32F373/383 line – 72 MHz with 16-bit ΣΔ ADC																		
STM32F373C8	64	16	LQFP48	9x16-bit / 2x32-bit	SysTick, 2 x WDG, RTC	8x16-bit / 9x12-bit	3x12-bit	36	3	up to 3x half duplex I²S	2	3	1	1	2.0 to 3.6	0.5	420	-40 to +105
STM32F373R8	64	16	LQFP64	9x16-bit / 2x32-bit		8x16-bit / 16x12-bit	3x12-bit	52	3		2	3	1	1	2.0 to 3.6	0.5	420	-40 to +105
STM32F373V8	64	16	LQFP100	9x16-bit / 2x32-bit		21x16-bit / 16x12-bit	3x12-bit	84	3		2	3	1	1	2.0 to 3.6	0.5	420	-40 to +105
STM32F373CB	128	24	LQFP48	9x16-bit / 2x32-bit		8x16-bit / 9x12-bit	3x12-bit	36	3		2	3	1	1	2.0 to 3.6	0.5	420	-40 to +105
STM32F373RB	128	24	LQFP64	9x16-bit / 2x32-bit		8x16-bit / 16x12-bit	3x12-bit	52	3		2	3	1	1	2.0 to 3.6	0.5	420	-40 to +105
STM32F373VB	128	24	LQFP100	9x16-bit / 2x32-bit		21x16-bit / 16x12-bit	3x12-bit	84	3		2	3	1	1	2.0 to 3.6	0.5	420	-40 to +105
STM32F373CC	256	32	LQFP48	9x16-bit / 2x32-bit		8x16-bit / 9x12-bit	3x12-bit	36	3		2	3	1	1	2.0 to 3.6	0.5	420	-40 to +105
STM32F373RC	256	32	LQFP64	9x16-bit / 2x32-bit		8x16-bit / 16x12-bit	3x12-bit	52	3		2	3	1	1	2.0 to 3.6	0.5	420	-40 to +105
STM32F373VC	256	32	LQFP100	9x16-bit / 2x32-bit		21x16-bit / 16x12-bit	3x12-bit	84	3		2	3	1	1	2.0 to 3.6	0.5	420	-40 to +105
STM32F383CC	256	32	LQFP48	9x16-bit / 2x32-bit		7x16-bit / 9x12-bit	3x12-bit	35	3		2	3		1	1.65 to 1.95	5.3	434	-40 to +105
STM32F383RC	256	32	LQFP64 WLCSP66	9x16-bit / 2x32-bit		7x16-bit / 16x12-bit	3x12-bit	51	3		2	3		1	1.65 to 1.95	5.3	434	-40 to +105
STM32F383VC	256	32	LQFP100 UFBGA100	9x16-bit / 2x32-bit		20x16-bit / 16x12-bit	3x12-bit	83	3		2	3		1	1.65 to 1.95	5.3	434	-40 to +105

Notes:
- Supply voltage 2.0 to 3.6 V for all devices or 1.8 V +/-8% dedicated sales type
- WLCSP66 package available in 1.8 V +/-8% dedicated sales type only

STM32 F4 SERIES - ARM CORTEX™-M4 HIGH-PERFORMANCE MCUS WITH DSP AND FPU

Part number	Flash size (Kbytes)	Internal RAM size (Kbytes)	Package	Timer functions		ADC	DAC	I/Os	Serial interface									Supply voltage (V)	Supply current (Icc)		Maximum operating temperature range (°C)
				16-/32-bit timers	Others				SPI	SAI	I²S	I²C	USART + UART[3]	USB OTG	CAN 2.0B	SDIO	Ethernet MAC10 /100		Lowest power mode (µA)	Run mode (per MHz) (µA)	
STM32F401 line: USB OTG (FS), low power (11 µA typ. in Stop mode) - 84 MHz CPU																					
STM32F401CB	128	64	WLCSP49 UFQFPN48	6x16-bit / 2x32-bit	2x WDG, RTC, 24-bit downcounter	10x12-bit		36	3		2	3	3	1				1.7[4] to 3.6	1.7	140	-40 to +105
STM32F401RB	128	64	LQFP64	6x16-bit / 2x32-bit		16x12-bit		48	3		2	3	3	1		1		1.8 to 3.6	1.7	140	-40 to +105
STM32F401VB	128	64	LQFP100 UFBGA100	6x16-bit / 2x32-bit		16x12-bit		79	4		2	3	3	1		1		1.7[4] to 3.6	1.7	140	-40 to +105
STM32F401CC	256	64	WLCSP49 UFQFPN48	6x16-bit / 2x32-bit		10x12-bit		36	3		2	3	3	1				1.8 to 3.6	1.7	140	-40 to +105
STM32F401RC	256	64	LQFP64	6x16-bit / 2x32-bit		16x12-bit		48	3		2	3	3	1		1		1.8 to 3.6	1.7	140	-40 to +105
STM32F401VC	256	64	LQFP100 UFBGA100	6x16-bit / 2x32-bit		16x12-bit		79	4		2	3	3	1		1		1.8 to 3.6	1.7	140	-40 to +105
STM32F405/415 line: USB OTG (FS/HS[1]), crypto/hash processor[2] - 168 MHz CPU																					
STM32F405OE	512	192	WLCSP90	12x16-bit / 2x32-bit	2x WDG, RTC, 24-bit downcounter	13x12-bit	2x12-bit	72	3		2	3	4+2	2	2	1		1.7[4] to 3.6	2.5	238	-40 to +85
STM32F405OG	1024	192	WLCSP90	12x16-bit / 2x32-bit		13x12-bit	2x12-bit	72	3		2	3	4+2	2	2	1		1.7[4] to 3.6	2.5	238	-40 to +85
STM32F415OG[2]	1024	192	WLCSP90	12x16-bit / 2x32-bit		13x12-bit	2x12-bit	72	3		2	3	4+2	2	2	1		1.7[4] to 3.6	2.5	238	-40 to +85
STM32F405RG	1024	192	LQFP64	12x16-bit / 2x32-bit		16x12-bit	2x12-bit	51	3		2	3	4+2	2	2	1		1.8 to 3.6	2.5	238	-40 to +105
STM32F415RG[2]	1024	192	LQFP64	12x16-bit / 2x32-bit		16x12-bit	2x12-bit	51	3		2	3	4+2	2	2	1		1.8 to 3.6	2.5	238	-40 to +105
STM32F405VG	1024	192	LQFP100	12x16-bit / 2x32-bit		16x12-bit	2x12-bit	82	3		2	3	4+2	2	2	1		1.8 to 3.6	2.5	238	-40 to +105
STM32F415VG[2]	1024	192	LQFP100	12x16-bit / 2x32-bit		16x12-bit	2x12-bit	82	3		2	3	4+2	2	2	1		1.8 to 3.6	2.5	238	-40 to +105
STM32F405ZG	1024	192	LQFP144	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	114	3		2	3	4+2	2	2	1		1.7[4] to 3.6	2.5	238	-40 to +105
STM32F415ZG[2]	1024	192	LQFP144	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	114	3		2	3	4+2	2	2	1		1.7[4] to 3.6	2.5	238	-40 to +105

STM32 F4 SERIES - ARM CORTEX™-M4 HIGH-PERFORMANCE MCUS WITH DSP AND FPU

Part number	Flash size (Kbytes)	Internal RAM size (Kbytes)	Package	Timer functions		ADC	DAC	I/Os	Serial interface									Supply voltage (V)	Supply current (Icc)		Maximum operating temperature range (°C)
				16-/32-bit timers	Others				SPI	SAI	I²S	I²C	USART + UART[3]	USB OTG	CAN 2.0B	SDIO	Ethernet MAC10 /100		Lowest power mode (µA)	Run mode (per MHz) (µA)	
STM32F407/417 line: 2x USB OTG (FS/HS[1]), camera IF, crypto/hash processor[2] - 168 MHz CPU																					
STM32F407IE	512	192	UFBGA176 LQFP176	12x16-bit / 2x32-bit	2x WDG, RTC, 24-bit downcounter	24x12-bit	2x12-bit	140	3		2	3	4+2	2	3	1	Yes	1.7[4] to 3.6	2.5	238	-40 to +105
STM32F417IE[2]	512	192	UFBGA176 LQFP176	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	140	3		2	3	4+2	2	2	1	Yes	1.7[4] to 3.6	2.5	238	-40 to +105
STM32F407VE	512	192	LQFP100	12x16-bit / 2x32-bit		16x12-bit	2x12-bit	82	3		2	3	4+2	2	2	1	Yes	1.8 to 3.6	2.5	238	-40 to +105
STM32F417VE[2]	512	192	LQFP100	12x16-bit / 2x32-bit		16x12-bit	2x12-bit	82	3		2	3	4+2	2	2	1	Yes	1.8 to 3.6	2.5	238	-40 to +105
STM32F407ZE	512	192	LQFP144	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	114	3		2	3	4+2	2	2	1	Yes	1.7[4] to 3.6	2.5	238	-40 to +105
STM32F417ZE[2]	512	192	LQFP144	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	114	3		2	3	4+2	2	2	1	Yes	1.7[4] to 3.6	2.5	238	-40 to +105
STM32F407IG	1024	192	UFBGA176 LQFP176	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	140	3		2	3	4+2	2	2	1	Yes	1.7[4] to 3.6	2.5	238	-40 to +105
STM32F417IG[2]	1024	192	UFBGA176 LQFP176	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	140	3		2	3	4+2	2	2	1	Yes	1.7[4] to 3.6	2.5	238	-40 to +105
STM32F407VG	1024	192	LQFP100	12x16-bit / 2x32-bit		16x12-bit	2x12-bit	82	3		2	3	4+2	2	2	1	Yes	1.8 to 3.6	2.5	238	-40 to +105
STM32F417VG[2]	1024	192	LQFP100	12x16-bit / 2x32-bit		16x12-bit	2x12-bit	82	3		2	3	4+2	2	2	1	Yes	1.8 to 3.6	2.5	238	-40 to +105
STM32F407ZG	1024	192	LQFP144	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	114	3		2	3	4+2	2	3	1	Yes	1.7[4] to 3.6	2.5	238	-40 to +105
STM32F417ZG[2]	1024	192	LQFP144	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	114	3		2	3	4+2	2	3	1	Yes	1.7[4] to 3.6	2.5	238	-40 to +105

STM32 F4 SERIES - ARM CORTEX™-M4 HIGH-PERFORMANCE MCUS WITH DSP AND FPU

Part number	Flash size (Kbytes)	Internal RAM size (Kbytes)	Package	Timer functions		ADC	DAC	I/Os	Serial interface									Supply voltage (V)	Supply current (Icc)		Maximum operating temperature range (°C)
				16-/32-bit timers	Others				SPI	SAI	I²S	I²C	USART + UART[3]	USB OTG	CAN 2.0B	SDIO	Ethernet MAC10 /100		Lowest power mode (µA)	Run mode (per MHz) (µA)	
STM32F427/437 line: 2x USB OTG (FS/HS[1]), camera IF, crypto/hash processor[2] - 168 MHz CPU																					
STM32F427IG	1024	256	UFBGA176 LQFP176	12x16-bit / 2x32-bit	2x WDG, RTC, 24-bit downcounter	24x12-bit	2x12-bit	140	6		2	3	4+4	2	2	1	Yes	1.7[4] to 3.6	2.5	238	-40 to +105
STM32F427VG	1024	256	LQFP100	12x16-bit / 2x32-bit		16x12-bit	2x12-bit	82	6		2	3	4+4	2	2	1	Yes	1.8 to 3.6	2.5	238	-40 to +105
STM32F427ZG	1024	256	LQFP144	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	114	6		2	3	4+4	2	2	1	Yes	1.7[4] to 3.6	2.5	238	-40 to +105
STM32F437IG[2]	1024	256	UFBGA176 LQFP176	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	140	6		2	3	4+4	2	2	1	Yes	1.7[4] to 3.6	2.5	238	-40 to +105
STM32F437VG[2]	1024	256	LQFP100	12x16-bit / 2x32-bit		16x12-bit	2x12-bit	82	6		2	3	4+4	2	2	1	Yes	1.8 to 3.6	2.5	238	-40 to +105
STM32F437ZG[2]	1024	256	LQFP144	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	114	6		2	3	4+4	2	2	1	Yes	1.7[4] to 3.6	2.5	238	-40 to +105
STM32F427II	2048	256	UFBGA176 LQFP176	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	140	6		2	3	4+4	2	2	1	Yes	1.7[4] to 3.6	2.5	238	-40 to +105
STM32F427VI	2048	256	LQFP100	12x16-bit / 2x32-bit		16x12-bit	2x12-bit	82	6		2	3	4+4	2	2	1	Yes	1.8 to 3.6	2.5	238	-40 to +105
STM32F427ZI	2048	256	LQFP144	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	114	6		2	3	4+4	2	2	1	Yes	1.7[4] to 3.6	2.5	238	-40 to +105
STM32F437II[2]	2048	256	UFBGA176 LQFP176	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	140	6		2	3	4+4	2	2	1	Yes	1.7[4] to 3.6	2.5	238	-40 to +105
STM32F437VI[2]	2048	256	LQFP100	12x16-bit / 2x32-bit		16x12-bit	2x12-bit	82	6		2	3	4+4	2	2	1	Yes	1.8 to 3.6	2.5	238	-40 to +105
STM32F437ZI[2]	2048	256	LQFP144	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	114	6		2	3	4+4	2	2	1	Yes	1.7[4] to 3.6	2.5	238	-40 to +105

STM32 F4 SERIES - ARM CORTEX™-M4 HIGH-PERFORMANCE MCUS WITH DSP AND FPU

Part number	Flash size (Kbytes)	Internal RAM size (Kbytes)	Package	Timer functions		ADC	DAC	I/Os	Serial interface									Supply voltage (V)	Supply current (Icc)		Maximum operating temperature range (°C)
				16-/32-bit timers	Others				SPI	SAI	I²S	I²C	USART + UART[3]	USB OTG	CAN 2.0B	SDIO	Ethernet MAC10 /100		Lowest power mode (µA)	Run mode (per MHz) (µA)	
STM32F429/439 line: Same as STM32F427/437 line + TFT LCD controller, SDRAM interface, dual-bank Flash - 180 MHz CPU																					
STM32F429BG	1024	256	LQFP208	12x16-bit / 2x32-bit	2x WDG, RTC, 24-bit downcounter	24x12-bit	2x12-bit	168	6	1	2	3	4+4	2	2	1	Yes	1.7[4] to 3.6	2.5	260	-40 to +105
STM32F429IG	1024	256	UFBGA176 LQFP176	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	140	6	1	2	3	4+4	2	2	1	Yes	1.7[4] to 3.6	2.5	260	-40 to +105
STM32F429NG	1024	256	TFBGA216	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	168	6	1	2	3	4+4	2	2	1	Yes	1.7[4] to 3.6	2.5	260	-40 to +105
STM32F429VG	1024	256	LQFP100	12x16-bit / 2x32-bit		16x12-bit	2x12-bit	82	6	1	2	3	4+4	2	2	1	Yes	1.8 to 3.6	2.5	260	-40 to +105
STM32F429ZG	1024	256	LQFP144 WLCSP143	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	114	6	1	2	3	4+4	2	2	1	Yes	1.7[4] to 3.6	2.5	260	-40 to +105
STM32F439BG[2]	1024	256	LQFP208	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	168	6	1	2	3	4+4	2	2	1	Yes	1.7[4] to 3.6	2.5	260	-40 to +105
STM32F439IG[2]	1024	256	UFBGA176 LQFP176	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	140	6	1	2	3	4+4	2	2	1	Yes	1.7[4] to 3.6	2.5	260	-40 to +105
STM32F439NG[2]	1024	256	TFBGA216	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	168	6	1	2	3	4+4	2	2	1	Yes	1.7[4] to 3.6	2.5	260	-40 to +105
STM32F439VG[2]	1024	256	LQFP100	12x16-bit / 2x32-bit		16x12-bit	2x12-bit	82	6	1	2	3	4+4	2	2	1	Yes	1.8 to 3.6	2.5	260	-40 to +105
STM32F439ZG[2]	1024	256	LQFP144 WLCSP143	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	114	6	1	2	3	4+4	2	2	1	Yes	1.7[4] to 3.6	2.5	260	-40 to +105
STM32F429BI	2048	256	LQFP208	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	168	6	1	2	3	4+4	2	2	1	Yes	1.7[4] to 3.6	2.5	260	-40 to +105
STM32F429II[2]	2048	256	UFBGA176 LQFP176	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	140	6	1	2	3	4+4	2	2	1	Yes	1.7[4] to 3.6	2.5	260	-40 to +105
STM32F429NI	2048	256	TFBGA216	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	168	6	1	2	3	4+4	2	2	1	Yes	1.7[4] to 3.6	2.5	260	-40 to +105
STM32F429VI	2048	256	LQFP100	12x16-bit / 2x32-bit		16x12-bit	2x12-bit	82	6	1	2	3	4+4	2	2	1	Yes	1.8 to 3.6	2.5	260	-40 to +105
STM32F429ZI	2048	256	LQFP144 WLCSP143	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	114	6	1	2	3	4+4	2	2	1	Yes	1.7[4] to 3.6	2.5	260	-40 to +105
STM32F439BI[2]	2048	256	LQFP208	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	168	6	1	2	3	4+4	2	2	1	Yes	1.7[4] to 3.6	2.5	260	-40 to +105

STM32 F4 SERIES - ARM CORTEX™-M4 HIGH-PERFORMANCE MCUS WITH DSP AND FPU

Part number	Flash size (Kbytes)	Internal RAM size (Kbytes)	Package	Timer functions		ADC	DAC	I/Os	Serial interface									Supply voltage (V)	Supply current (Icc)		Maximum operating temperature range (°C)
				16-/32-bit timers	Others				SPI	SAI	I²S	I²C	USART + UART[3]	USB OTG	CAN 2.0B	SDIO	Ethernet MAC10 /100		Lowest power mode (µA)	Run mode (per MHz) (µA)	
STM32F439II²	2048	256	UFBGA176 LQFP176	12x16-bit / 2x32-bit	2x WDG, RTC, 24-bit downcounter	24x12-bit	2x12-bit	140	6	1	3	2	4+4	2	2	1	Yes	1.7[4] to 3.6	2.5	260	-40 to +105
STM32F439NI²	2048	256	TFBGA216	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	168	6	1	3	2	4+4	2	2	1	Yes	1.7[4] to 3.6	2.5	260	-40 to +105
STM32F439VI²	2048	256	LQFP100	12x16-bit / 2x32-bit		16x12-bit	2x12-bit	82	6	1	3	2	4+4	2	2	1	Yes	1.8 to 3.6	2.5	260	-40 to +105
STM32F439ZI²	2048	256	LQFP144 WLCSP143	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	114	6	1	3	2	4+4	2	2	1	Yes	1.7[4] to 3.6	2.5	260	-40 to +105

Notes:
1. HS requires an external PHY connected to ULPI interface
2. Crypto/hash processor on STM32F417, STM32F415, STM32F437, STM32F439
3. Marked in the table (3+2) means 3 USART and 2 UART. All UARTs have LIN master/slave function. All USARTs have IrDA, ISO 7816, modem control and LIN master/slave functions.
4. 1.7 V requires external reset circuitry and the device operates in the 0 to 70 °C temperature range

STM32 F1 SERIES - ARM CORTEX™-M3 MAINSTREAM MCUS

Part nmber	Flash size (Kbytes)	Internal RAM size (Kbytes)	Package	Timer functions		ADC	DAC	I/Os	Serial interface									Supply voltage (V)	Supply current (Icc)		Maximum operating temperature range (°C)
				16-bit timers	Others				SPI	I²S	I²C	USART + UART[1]	CEC	USB FS	CAN 2.0B	SDIO	Ethernet MAC10 /100		Lowest power mode (µA)	Run mode (per MHz) (µA)	
STM32F100 Value line - 24 MHz CPU																					
STM32F100C4	16	4	LQFP48	6x16-bit	2 x WDG, RTC, 24-bit downcounter	10x12-bit	2x12-bit	37	1		1	2	1					2.0 to 3.6	1.7	358	-40 to +105
STM32F100R4	16	4	LQFP64, TFBGA64	6x16-bit		16x12-bit	2x12-bit	51	1		1	2	1					2.0 to 3.6	1.7	358	-40 to +105
STM32F100C6	32	4	LQFP48	6x16-bit		10x12-bit	2x12-bit	37	1		1	2	1					2.0 to 3.6	1.7	358	-40 to +105
STM32F100R6	32	4	LQFP64, TFBGA64	6x16-bit		16x12-bit	2x12-bit	51	1		1	2	1					2.0 to 3.6	1.7	358	-40 to +105
STM32F100C8	64	8	LQFP48	7x16-bit		10x12-bit	2x12-bit	37	2		2	3	1					2.0 to 3.6	1.7	358	-40 to +105
STM32F100R8	64	8	LQFP64, TFBGA64	7x16-bit		16x12-bit	2x12-bit	51	2		2	3	1					2.0 to 3.6	1.7	358	-40 to +105
STM32F100V8	64	8	LQFP100	7x16-bit		16x12-bit	2x12-bit	80	2		2	3	1					2.0 to 3.6	1.7	358	-40 to +105
STM32F100CB	128	8	LQFP48	7x16-bit		10x12-bit	2x12-bit	37	2		2	3	1					2.0 to 3.6	1.7	358	-40 to +105
STM32F100RB	128	8	LQFP64, TFBGA64	7x16-bit		16x12-bit	2x12-bit	51	2		2	3	1					2.0 to 3.6	1.7	358	-40 to +105
STM32F100VB	128	8	LQFP100	7x16-bit		16x12-bit	2x12-bit	80	2		2	3	1					2.0 to 3.6	1.7	358	-40 to +105
STM32F100RC	256	24	LQFP64	11x16-bit		16x12-bit	2x12-bit	51	3		2	5	1					2.0 to 3.6	2.2	396	-40 to +105
STM32F100VC	256	24	LQFP100	11x16-bit		16x12-bit	2x12-bit	80	3		2	5	1					2.0 to 3.6	2.2	396	-40 to +105
STM32F100ZC	256	24	LQFP144	11x16-bit		16x12-bit	2x12-bit	112	3		2	5	1					2.0 to 3.6	2.2	396	-40 to +105
STM32F100RD	384	32	LQFP64	11x16-bit		16x12-bit	2x12-bit	51	3		2	5	1					2.0 to 3.6	2.2	396	-40 to +105
STM32F100VD	384	32	LQFP100	11x16-bit		16x12-bit	2x12-bit	80	3		2	5	1					2.0 to 3.6	2.2	396	-40 to +105
STM32F100ZD	384	32	LQFP144	11x16-bit		16x12-bit	2x12-bit	112	3		2	5	1					2.0 to 3.6	2.2	396	-40 to +105
STM32F100RE	512	32	LQFP64	11x16-bit		16x12-bit	2x12-bit	51	3		2	5	1					2.0 to 3.6	2.2	396	-40 to +105
STM32F100VE	512	32	LQFP100	11x16-bit		16x12-bit	2x12-bit	80	3		2	5	1					2.0 to 3.6	2.2	396	-40 to +105
STM32F100ZE	512	32	LQFP144	11x16-bit		16x12-bit	2x12-bit	112	3		2	5	1					2.0 to 3.6	2.2	396	-40 to +105

STM32 F1 SERIES - ARM CORTEX™-M3 MAINSTREAM MCUS

Part nmber	Flash size (Kbytes)	Internal RAM size (Kbytes)	Package	Timer functions		ADC	DAC	I/Os	Serial interface									Supply voltage (V)	Supply current (Icc)		Maximum operating temperature range (°C)
				16-bit timers	Others				SPI	I²S	I²C	USART + UART[1]	CEC	USB FS	CAN 2.0B	SDIO	Ethernet MAC10 /100		Lowest power mode (µA)	Run mode (per MHz) (µA)	
STM32F101 Access line - 36 MHz CPU																					
STM32F101C4	16	4	LQFP48	2x16-bit	2 x WDG, RTC, 24-bit downcounter	10x12-bit		36	1		1	2						2.0 to 3.6	1.7	363	-40 to +85
STM32F101R4	16	4	LQFP64	2x16-bit		16x12-bit		51	1		1	2						2.0 to 3.6	1.7	363	-40 to +85
STM32F101T4	16	4	VFQFPN36	2x16-bit		10x12-bit		26	1		1	2						2.0 to 3.6	1.7	363	-40 to +85
STM32F101C6	32	6	LQFP48	2x16-bit		10x12-bit		36	1		1	2						2.0 to 3.6	1.7	363	-40 to +85
STM32F101R6	32	6	LQFP64	2x16-bit		16x12-bit		51	1		1	2						2.0 to 3.6	1.7	363	-40 to +85
STM32F101T6	32	6	VFQFPN36	2x16-bit		10x12-bit		26	1		1	2						2.0 to 3.6	1.7	363	-40 to +85
STM32F101C8	64	10	LQFP48, VFQFPN48	3x16-bit		10x12-bit		36	2		2	3						2.0 to 3.6	1.7	363	-40 to +85
STM32F101R8	64	10	LQFP64	3x16-bit		16x12-bit		51	2		2	3						2.0 to 3.6	1.7	391	-40 to +85
STM32F101T8	64	10	VFQFPN36	3x16-bit		10x12-bit		26	1		1	2						2.0 to 3.6	1.7	391	-40 to +85
STM32F101V8	64	10	LQFP100	3x16-bit		16x12-bit		80	2		2	3						2.0 to 3.6	1.7	391	-40 to +85
STM32F101CB	128	16	LQFP48	3x16-bit		10x12-bit		36	2		2	3						2.0 to 3.6	1.7	363	-40 to +85
STM32F101RB	128	16	LQFP64, TFBGA64	3x16-bit		16x12-bit		51	2		2	3						2.0 to 3.6	1.7	391	-40 to +85
STM32F101TB	128	16	VFQFPN36	3x16-bit		10x12-bit		26	1		1	2						2.0 to 3.6	1.7	391	-40 to +85
STM32F101VB	128	16	LQFP100	3x16-bit		16x12-bit		80	2		2	3						2.0 to 3.6	1.7	391	-40 to +85
STM32F101RC	256	32	LQFP64	6x16-bit		16x12-bit	2x12-bit	51	3		2	3+2						2.0 to 3.6	1.9	433	-40 to +85
STM32F101VC	256	32	LQFP100	6x16-bit		16x12-bit	2x12-bit	80	3		2	3+2						2.0 to 3.6	1.9	433	-40 to +85
STM32F101ZC	256	32	LQFP144	6x16-bit		16x12-bit	2x12-bit	112	3		2	3+2						2.0 to 3.6	1.9	433	-40 to +85
STM32F101RD	384	48	LQFP64	6x16-bit		16x12-bit	2x12-bit	51	3		2	3+2						2.0 to 3.6	1.9	433	-40 to +85
STM32F101VD	384	48	LQFP100	6x16-bit		16x12-bit	2x12-bit	80	3		2	3+2						2.0 to 3.6	1.9	433	-40 to +85
STM32F101ZD	384	48	LQFP144	6x16-bit		16x12-bit	2x12-bit	112	3		2	3+2						2.0 to 3.6	1.9	433	-40 to +85
STM32F101RE	512	48	LQFP64	6x16-bit		16x12-bit	2x12-bit	51	3		2	3+2						2.0 to 3.6	1.9	433	-40 to +85
STM32F101VE	512	48	LQFP100	6x16-bit		16x12-bit	2x12-bit	80	3		2	3+2						2.0 to 3.6	1.9	433	-40 to +85
STM32F101ZE	512	48	LQFP144	6x16-bit		16x12-bit	2x12-bit	112	3		2	3+2						2.0 to 3.6	1.9	433	-40 to +85
STM32F101RF	768	80	LQFP64	12x16-bit		16x12-bit	2x12-bit	51	3		2	3+2						2.0 to 3.6	1.9	433	-40 to +85
STM32F101VF	768	80	LQFP100	12x16-bit		16x12-bit	2x12-bit	80	3		2	3+2						2.0 to 3.6	1.9	433	-40 to +85
STM32F101ZF	768	80	LQFP64	12x16-bit		16x12-bit	2x12-bit	112	3		2	3+2						2.0 to 3.6	1.9	433	-40 to +85
STM32F101RG	1024	80	LQFP64	12x16-bit		16x12-bit	2x12-bit	51	3		2	3+2						2.0 to 3.6	1.9	433	-40 to +85
STM32F101VG	1024	80	LQFP100	12x16-bit		16x12-bit	2x12-bit	80	3		2	3+2						2.0 to 3.6	1.9	433	-40 to +85
STM32F101ZG	1024	80	LQFP144	12x16-bit		16x12-bit	2x12-bit	112	3		2	3+2						2.0 to 3.6	1.9	433	-40 to +85

STM32 F1 SERIES - ARM CORTEX™-M3 MAINSTREAM MCUS

Part nmber	Flash size (Kbytes)	Internal RAM size (Kbytes)	Package	Timer functions		ADC	DAC	I/Os	Serial interface									Supply voltage (V)	Supply current (Icc)		Maximum operating temperature range (°C)
				16-bit timers	Others				SPI	I²S	I²C	USART + UART[1]	CEC	USB FS	CAN 2.0B	SDIO	Ethernet MAC10 /100		Lowest power mode (µA)	Run mode (per MHz) (µA)	
STM32F102 USB Access line - 48 MHz																					
STM32F102C4	16	4	LQFP48	2x16-bit	2 x WDG, RTC, 24-bit downcounter	10x12-bit		36	1		1	2		1				2.0 to 3.6	1.55	348	-40 to +85
STM32F102R4	16	4	LQFP64	2x16-bit		16x12-bit		51	1		1	2		1				2.0 to 3.6	1.55	348	-40 to +85
STM32F102C6	32	6	LQFP48	2x16-bit		10x12-bit		36	1		1	2		1				2.0 to 3.6	1.55	348	-40 to +85
STM32F102R6	32	6	LQFP64	2x16-bit		16x12-bit		51	1		1	2		1				2.0 to 3.6	1.55	348	-40 to +85
STM32F102C8	64	10	LQFP48	3x16-bit		10x12-bit		36	2		2	3		1				2.0 to 3.6	1.7	373	-40 to +85
STM32F102R8	64	10	LQFP64	3x16-bit		16x12-bit		51	2		2	3		1				2.0 to 3.6	1.7	373	-40 to +85
STM32F102CB	128	16	LQFP48	3x16-bit		10x12-bit		36	2		2	3		1				2.0 to 3.6	1.7	373	-40 to +85
STM32F102RB	128	16	LQFP64	3x16-bit		16x12-bit		51	2		2	3		1				2.0 to 3.6	1.7	373	-40 to +85
STM32F103 Performance line - 72 MHz CPU																					
STM32F103C4	16	6	LQFP48	3x16-bit	2 x WDG, RTC, 24-bit downcounter	10x12-bit		36	1		1	2		1	1			2.0 to 3.6	1.55	337	-40 to +105
STM32F103R4	16	6	LQFP64, TFBGA64	3x16-bit		16x12-bit		51	1		1	2		1	1			2.0 to 3.6	1.55	337	-40 to +105
STM32F103T4	16	6	VFQFPN36	3x16-bit		10x12-bit		26	1		1	2		1	1			2.0 to 3.6	1.55	337	-40 to +105
STM32F103C6	32	10	LQFP48	3x16-bit		10x12-bit		36	1		1	2		1	1			2.0 to 3.6	1.55	337	-40 to +105
STM32F103R6	32	10	LQFP64, TFBGA64	3x16-bit		16x12-bit		51	1		1	2		1	1			2.0 to 3.6	1.55	337	-40 to +105
STM32F103T6	32	10	VFQFPN36	3x16-bit		10x12-bit		26	1		1	2		1	1			2.0 to 3.6	1.55	373	-40 to +105
STM32F103C8	64	20	LQFP48	4x16-bit		10x12-bit		36	2		2	3		1	1			2.0 to 3.6	1.7	373	-40 to +105
STM32F103R8	64	20	LQFP64, TFBGA64	4x16-bit		16x12-bit		51	2		2	3		1	1			2.0 to 3.6	1.7	373	-40 to +105
STM32F103T8	64	20	VFQFPN36	4x16-bit		10x12-bit		26	1		1	2		1	1			2.0 to 3.6	1.7	373	-40 to +105
STM32F103V8	64	20	LFBGA100, LQFP100	4x16-bit		16x12-bit		80	2		2	3		1	1			2.0 to 3.6	1.7	373	-40 to +105
STM32F103CB	128	20	LQFP48, VFQFPN48	4x16-bit		10x12-bit		36	2		2	3		1	1			2.0 to 3.6	1.7	373	-40 to +105
STM32F103RB	128	20	LQFP64 , TFBGA64	4x16-bit		16x12-bit		51	2		2	3		1	1			2.0 to 3.6	1.7	373	-40 to +105
STM32F103TB	128	20	VFQFPN36	4x16-bit		10x12-bit		26	1		1	2		1	1			2.0 to 3.6	1.7	373	-40 to +105
STM32F103VB	128	20	LFBGA100, LQFP100	4x16-bit		16x12-bit		80	2		2	3		1	1			2.0 to 3.6	1.7	373	-40 to +105

STM32 F1 SERIES - ARM CORTEX™-M3 MAINSTREAM MCUS

Part nmber	Flash size (Kbytes)	Internal RAM size (Kbytes)	Package	Timer functions		ADC	DAC	I/Os	Serial interface									Supply voltage (V)	Supply current (Icc)		Maximum operating temperature range (°C)
				16-bit timers	Others				SPI	I²S	I²C	USART + UART[1]	CEC	USB FS	CAN 2.0B	SDIO	Ethernet MAC10 /100		Lowest power mode (µA)	Run mode (per MHz) (µA)	
STM32F103RC	256	48	LQFP64, WLCSP64	8x16-bit	2 x WDG, RTC, 24-bit downcounter	16x12-bit	2x12-bit	51	3	2	2	3+2		1	1	1		2.0 to 3.6	1.9	421	-40 to +105
STM32F103VC	256	48	LFBGA100, LQFP100	8x16-bit		16x12-bit	2x12-bit	80	3	2	2	3+2		1	1	1		2.0 to 3.6	1.9	421	-40 to +105
STM32F103ZC	256	48	LFBGA144, LQFP144	8x16-bit		21x12-bit	2x12-bit	112	3	2	2	3+2		1	1	1		2.0 to 3.6	1.9	421	-40 to +105
STM32F103RD	384	64	LQFP64, WLCSP64	8x16-bit		16x12-bit	2x12-bit	51	3	2	2	3+2		1	1	1		2.0 to 3.6	1.9	421	-40 to +105
STM32F103VD	384	64	LFBGA100, LQFP100	8x16-bit		16x12-bit	2x12-bit	80	3	2	2	3+2		1	1	1		2.0 to 3.6	1.9	421	-40 to +105
STM32F103ZD	384	64	LFBGA144, LQFP144	8x16-bit		21x12-bit	2x12-bit	112	3	2	2	3+2		1	1	1		2.0 to 3.6	1.9	421	-40 to +105
STM32F103RE	512	64	LQFP64, WLCSP64	8x16-bit		16x12-bit	2x12-bit	51	3	2	2	3+2		1	1	1		2.0 to 3.6	1.9	421	-40 to +105
STM32F103VE	512	64	LFBGA100, LQFP100	8x16-bit		16x12-bit	2x12-bit	80	3	2	2	3+2		1	1	1		2.0 to 3.6	1.9	421	-40 to +105
STM32F103ZE	512	64	LFBGA144, LQFP144	8x16-bit		21x12-bit	2x12-bit	112	3	2	2	3+2		1	1	1		2.0 to 3.6	1.9	421	-40 to +105
STM32F103RF	768	96	LQFP64	12x16-bit		16x12-bit	2x12-bit	51	3	2	2	3+2		1	1	1		2.0 to 3.6	1.9	421	-40 to +105
STM32F103VF	768	96	LQFP100	14x16-bit		16x12-bit	2x12-bit	80	3	2	2	3+2		1	1	1		2.0 to 3.6	1.9	421	-40 to +105
STM32F103ZF	768	96	LFBGA144, LQFP144	14x16-bit		21x12-bit	2x12-bit	112	3	2	2	3+2		1	1	1		2.0 to 3.6	1.9	421	-40 to +105
STM32F103RG	1024	96	LQFP64	12x16-bit		16x12-bit	2x12-bit	51	3	2	2	3+2		1	1	1		2.0 to 3.6	1.9	421	-40 to +105
STM32F103VG	1024	96	LQFP100	14x16-bit		16x12-bit	2x12-bit	80	3	2	2	3+2		1	1	1		2.0 to 3.6	1.9	421	-40 to +105
STM32F103ZG	1024	96	LFBGA144, LQFP144	14x16-bit		21x12-bit	2x12-bit	112	3	2	2	3+2		1	1	1		2.0 to 3.6	1.9	421	-40 to +105

STM32 F1 SERIES - ARM CORTEX™-M3 MAINSTREAM MCUS

Part nmber	Flash size (Kbytes)	Internal RAM size (Kbytes)	Package	Timer functions		ADC	DAC	I/Os	Serial interface									Supply voltage (V)	Supply current (Icc)		Maximum operating temperature range (°C)
				16-bit timers	Others				SPI	I²S	I²C	USART + UART[1]	CEC	USB FS	CAN 2.0B	SDIO	Ethernet MAC10 /100		Lowest power mode (µA)	Run mode (per MHz) (µA)	
STM32F105/107 Connectivity line - 72 MHz CPU																					
STM32F105R8	64	64	LQFP64	7x16-bit	2 x WDG, RTC, 24-bit downcounter	16x12-bit	2x12-bit	51	3	2	2	3+2		OTG	2			2.0 to 3.6	1.9	393	-40 to +105
STM32F105V8	64	64	LQFP100	7x16-bit		16x12-bit	2x12-bit	80	3	2	2	3+2		OTG	2			2.0 to 3.6	1.9	393	-40 to +105
STM32F105RB	128	64	LQFP64	7x16-bit		16x12-bit	2x12-bit	51	3	2	2	3+2		OTG	2			2.0 to 3.6	1.9	393	-40 to +105
STM32F105VB	128	64	LFBGA100, LQFP100	7x16-bit		16x12-bit	2x12-bit	80	3	2	2	3+2		OTG	2			2.0 to 3.6	1.9	393	-40 to +105
STM32F107RB	128	64	LQFP64	7x16-bit		16x12-bit	2x12-bit	51	3	2	2	3+2		OTG	2		Yes	2.0 to 3.6	1.9	393	-40 to +105
STM32F107VB	128	64	LQFP100	7x16-bit		16x12-bit	2x12-bit	80	3	2	2	3+2		OTG	2		Yes	2.0 to 3.6	1.9	393	-40 to +105
STM32F105RC	256	64	LQFP64	7x16-bit		16x12-bit	2x12-bit	51	3	2	2	3+2		OTG	2			2.0 to 3.6	1.9	393	-40 to +105
STM32F105VC	256	64	LQFP100	7x16-bit		16x12-bit	2x12-bit	80	3	2	2	3+2		OTG	2			2.0 to 3.6	1.9	393	-40 to +105
STM32F107RC	256	64	LQFP64	7x16-bit		16x12-bit	2x12-bit	51	3	2	2	3+2		OTG	2		Yes	2.0 to 3.6	1.9	393	-40 to +105
STM32F107VC	256	64	LFBGA100, LQFP100	7x16-bit		16x12-bit	2x12-bit	80	3	2	2	3+2		OTG	2		Yes	2.0 to 3.6	1.9	393	-40 to +105

Note:
1. Marked in the table (3+2) means 3 USART and 2 UART. All UARTs have LIN master/slave function. All USARTs have IrDA, ISO 7816, modem control and LIN master/slave functions.

STM32 F2 SERIES - ARM CORTEX™-M3 HIGH-PERFORMANCE MCUS

Part number	Flash size (Kbytes)	Internal RAM size (Kbytes)	Package	Timer functions		ADC	DAC	I/Os	Serial interface								Supply voltage (V)	Supply current (Icc)		Maximum operating temperature range (°C)
				16-/32-bit timers	Others				SPI	I²S	I²C	USART + UART[3]	USB OTG FS +FS/ HS	CAN 2.0B	SDIO	Ethernet MAC10 /100		Lowest power mode (µA)	Run mode (per MHz) (µA)	
STM32F205/215 line: USB OTG (FS/HS[1]), crypto/hash processor[2] - 120 MHz CPU																				
STM32F205RB	128	64	LQFP64	12x16-bit / 2x32-bit	2 x WDG, RTC, 24-bit downcounter	16x12-bit	2x12-bit	51	3	2	3	4+2	2	2	1		1.8 to 3.6	2.5	188	-40 to +105
STM32F205VB	128	64	LQFP100	12x16-bit / 2x32-bit		16x12-bit	2x12-bit	82	3	2	3	4+2	2	2	1		1.8 to 3.6	2.5	188	-40 to +105
STM32F205RC	256	96	LQFP64	12x16-bit / 2x32-bit		16x12-bit	2x12-bit	51	3	2	3	4+2	2	2	1		1.8 to 3.6	2.5	188	-40 to +105
STM32F205VC	256	96	LQFP100	12x16-bit / 2x32-bit		16x12-bit	2x12-bit	82	3	2	3	4+2	2	2	1		1.8 to 3.6	2.5	188	-40 to +105
STM32F205ZC	256	96	LQFP144	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	114	3	2	3	4+2	2	2	1		1.8 to 3.6	2.5	188	-40 to +105
STM32F205RE	512	128	LQFP64, WLCSP64	12x16-bit / 2x32-bit		16x12-bit	2x12-bit	51	3	2	3	4+2	2	2	1		1.7/1.8 to 3.6	2.5	188	-40 to +105
STM32F215RE[2]	512	128	LQFP64	12x16-bit / 2x32-bit		16x12-bit	2x12-bit	51	3	2	3	4+2	2	2	1		1.8 to 3.6	2.5	188	-40 to +105
STM32F215VE[2]	512	128	LQFP100	12x16-bit / 2x32-bit		16x12-bit	2x12-bit	82	3	2	3	4+2	2	2	1		1.8 to 3.6	2.5	188	-40 to +105
STM32F205VE	512	128	LQFP100	12x16-bit / 2x32-bit		16x12-bit	2x12-bit	82	3	2	3	4+2	2	2	1		1.8 to 3.6	2.5	188	-40 to +105
STM32F205ZE	512	128	LQFP144	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	114	3	2	3	4+2	2	2	1		1.8 to 3.6	2.5	188	-40 to +105
STM32F215ZE[2]	512	128	LQFP144	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	114	3	2	3	4+2	2	2	1		1.8 to 3.6	2.5	188	-40 to +105
STM32F205RF	768	128	LQFP64	12x16-bit / 2x32-bit		16x12-bit	2x12-bit	51	3	2	3	4+2	2	2	1		1.8 to 3.6	2.5	188	-40 to +105
STM32F205VF	768	128	LQFP100	12x16-bit / 2x32-bit		16x12-bit	2x12-bit	82	3	2	3	4+2	2	2	1		1.8 to 3.6	2.5	188	-40 to +105
STM32F205ZF	768	128	LQFP144	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	114	3	2	3	4+2	2	2	1		1.8 to 3.6	2.5	188	-40 to +105
STM32F205RG	1024	128	LQFP64, WLCSP64	12x16-bit / 2x32-bit		16x12-bit	2x12-bit	51	3	2	3	4+2	2	2	1		1.7/1.8 to 3.6	2.5	188	-40 to +105
STM32F215RG[2]	1024	128	LQFP64	12x16-bit / 2x32-bit		16x12-bit	2x12-bit	51	3	2	3	4+2	2	2	1		1.8 to 3.6	2.5	188	-40 to +105

STM32 F2 SERIES - ARM CORTEX™-M3 HIGH-PERFORMANCE MCUS

Part number	Flash size (Kbytes)	Internal RAM size (Kbytes)	Package	Timer functions		ADC	DAC	I/Os	Serial interface								Supply voltage (V)	Supply current (Icc)		Maximum operating temperature range (°C)
				16-/32-bit timers	Others				SPI	I²S	I²C	USART + UART[3]	USB OTG FS +FS/ HS	CAN 2.0B	SDIO	Ethernet MAC10 /100		Lowest power mode (µA)	Run mode (per MHz) (µA)	
STM32F205VG	1024	128	LQFP100	12x16-bit / 2x32-bit	2 x WDG, RTC, 24-bit downcounter	16x12-bit	2x12-bit	82	3	2	3	4+2	2	2	1		1.8 to 3.6	2.5	188	-40 to +105
STM32F215VG[2]	1024	128	LQFP100	12x16-bit / 2x32-bit		16x12-bit	2x12-bit	82	3	2	3	4+2	2	2	1		1.8 to 3.6	2.5	188	-40 to +105
STM32F205ZG	1024	128	LQFP144	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	114	3	2	3	4+2	2	2	1		1.8 to 3.6	2.5	188	-40 to +105
STM32F215ZG[2]	1024	128	LQFP144	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	114	3	2	3	4+2	2	2	1		1.8 to 3.6	2.5	188	-40 to +105
STM32F207/217 line: 2x USB OTG (FS/HS[1]), camera IF, crypto/hash processor[2] - 120 MHz CPU																				
STM32F207VC	256	128	LQFP100	12x16-bit / 2x32-bit	2 x WDG, RTC, 24-bit downcounter	16x12-bit	2x12-bit	82	3	2	2	4+2	2	2	1	Yes	1.8 to 3.6	2.5	188	-40 to +105
STM32F207ZC	256	128	LQFP144	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	114	3	2	2	4+2	2	2	1	Yes	1.8 to 3.6	2.5	188	-40 to +105
STM32F207IC	256	128	UFBGA176	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	140	3	2	2	4+2	2	2	1	Yes	1.8 to 3.6	2.5	188	-40 to +105
STM32F207VE	512	128	LQFP100	12x16-bit / 2x32-bit		16x12-bit	2x12-bit	82	3	2	2	4+2	2	2	1	Yes	1.8 to 3.6	2.5	188	-40 to +105
STM32F217VE[2]	512	128	LQFP100	12x16-bit / 2x32-bit		16x12-bit	2x12-bit	82	3	2	2	4+2	2	2	1	Yes	1.8 to 3.6	2.5	188	-40 to +105
STM32F207ZE	512	128	LQFP144	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	114	3	2	2	4+2	2	2	1	Yes	1.8 to 3.6	2.5	188	-40 to +105
STM32F217ZE[2]	512	128	LQFP144	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	114	3	2	2	4+2	2	2	1	Yes	1.8 to 3.6	2.5	188	-40 to +105
STM32F207IE	512	128	UFBGA176	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	140	3	2	2	4+2	2	2	1	Yes	1.8 to 3.6	2.5	188	-40 to +105
STM32F217IE[2]	512	128	UFBGA176	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	140	3	2	2	4+2	2	2	1	Yes	1.8 to 3.6	2.5	188	-40 to +105
STM32F207VF	768	128	LQFP100	12x16-bit / 2x32-bit		16x12-bit	2x12-bit	82	3	2	2	4+2	2	2	1	Yes	1.8 to 3.6	2.5	188	-40 to +105
STM32F207ZF	768	128	LQFP144	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	114	3	2	2	4+2	2	2	1	Yes	1.8 to 3.6	2.5	188	-40 to +105
STM32F207IF	768	128	UFBGA176	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	140	3	2	2	4+2	2	2	1	Yes	1.8 to 3.6	2.5	188	-40 to +105

STM32 F2 SERIES - ARM CORTEX™-M3 HIGH-PERFORMANCE MCUS

Part number	Flash size (Kbytes)	Internal RAM size (Kbytes)	Package	Timer functions		ADC	DAC	I/Os	Serial interface								Supply voltage (V)	Supply current (Icc)		Maximum operating temperature range (°C)
				16-/32-bit timers	Others				SPI	I²S	I²C	USART + UART[3]	USB OTG FS +FS/ HS	CAN 2.0B	SDIO	Ethernet MAC10 /100		Lowest power mode (µA)	Run mode (per MHz) (µA)	
STM32F207VG	1024	128	LQFP100	12x16-bit / 2x32-bit	2 x WDG, RTC, 24-bit downcounter	16x12-bit	2x12-bit	82	3	2	2	4+2	2	2	1	Yes	1.8 to 3.6	2.5	188	-40 to +105
STM32F217VG[2]	1024	128	LQFP100	12x16-bit / 2x32-bit		16x12-bit	2x12-bit	82	3	2	2	4+2	2	2	1	Yes	1.8 to 3.6	2.5	188	-40 to +105
STM32F207ZG	1024	128	LQFP144	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	114	3	2	2	4+2	2	2	1	Yes	1.8 to 3.6	2.5	188	-40 to +105
STM32F217ZG[2]	1024	128	LQFP144	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	114	3	2	2	4+2	2	2	1	Yes	1.8 to 3.6	2.5	188	-40 to +105
STM32F207IG	1024	128	LQFP176, UFBGA176	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	140	3	2	2	4+2	2	2	1	Yes	1.8 to 3.6	2.5	188	-40 to +105
STM32F217IG[2]	1024	128	LQFP176, UFBGA176	12x16-bit / 2x32-bit		24x12-bit	2x12-bit	140	3	2	2	4+2	2	2	1	Yes	1.8 to 3.6	2.5	188	-40 to +105

Notes:
1. HS requires an external PHY connected to ULPI interface
2. Crypto/hash processor on STM32F217 and STM32F215
3. Marked in the table (3+2) means 3 USART and 2 UART. All UARTs have LIN master/slave function. All USARTs have IrDA, ISO 7816, modem control and LIN master/slave functions.

STM32 L1 SERIES - ARM CORTEX™-M3 ULTRA-LOW-POWER MCUS

Part number	Flash size (Kbytes)	Internal RAM size (Kbytes)	Data EEPROM (Kbytes)	Package	Timer functions		ADC	DAC	I/Os	Serial interface							Supply voltage (V)	Supply current (Icc)		Display controller (LCD)
					16-/32-bit timers	Others				SPI	I²S	I²C	USART	USB FS	SDIO	FSMC		Lowest power mode (µA)	Run mode (per MHz) (µA)	
STM32L100 Value line - 32 MHz CPU																				
STM32L100C6	32	4	2048	UFQFPN48	6x16-bit	SysTick, 2 x WDG, RTC	16x12-bit	2x12-bit	37	2	N/A	2	3	1	N/A	N/A	1.8 to 3.6	0.3	230	4x16
STM32L100R8	64	8	2048	LQFP64	6x16-bit		20x12-bit	2x12-bit	50	2	N/A	2	3	1	N/A	N/A	1.8 to 3.6	0.3	230	4x32/8x28
STM32L100RB	128	10	2048	LQFP64	6x16-bit		20x12-bit	2x12-bit	50	2	N/A	2	3	1	N/A	N/A	1.8 to 3.6	0.3	230	4x32/8x28
STM32L151/152 - 32 MHz CPU																				
STM32L151C6	32	10	4096	LQFP48, UFQFPN48	6x16-bit	SysTick, 2 x WDG, RTC	16x12-bit	2x12-bit	36	2	N/A	2	3	1	N/A	N/A	1.65 to 3.6	0.3	230	
STM32L151R6	32	10	4096	LQFP64, TFBGA64	6x16-bit		20x12-bit	2x12-bit	50	2	N/A	2	3	1	N/A	N/A	1.65 to 3.6	0.3	230	
STM32L152C6	32	10	4096	LQFP48, UFQFPN48	6x16-bit		16x12-bit	2x12-bit	36	2		2	3	1			1.65 to 3.6	0.3	230	4x16
STM32L152R6	32	10	4096	LQFP64, TFBGA64	6x16-bit		20x12-bit	2x12-bit	50	2		2	3	1			1.65 to 3.6	0.3	230	4x32/8x28
STM32L151C8	64	10	4096	LQFP48, UFQFPN48	6x16-bit		16x12-bit	2x12-bit	36	2	N/A	2	3	1	N/A	N/A	1.65 to 3.6	0.3	230	
STM32L151R8	64	10	4096	LQFP64, TFBGA64	6x16-bit		20x12-bit	2x12-bit	50	2	N/A	2	3	1	N/A	N/A	1.65 to 3.6	0.3	230	
STM32L151V8	64	10	4096	LQFP100, UFBGA100	6x16-bit		24x12-bit	2x12-bit	82	2	N/A	2	3	1	N/A	N/A	1.65 to 3.6	0.3	230	
STM32L152C8	64	10	4096	LQFP48, UFQFPN48	6x16-bit		16x12-bit	2x12-bit	36	2		2	3	1			1.65 to 3.6	0.3	230	4x16
STM32L152R8	64	10	4096	LQFP64, TFBGA64	6x16-bit		20x12-bit	2x12-bit	50	2		2	3	1			1.65 to 3.6	0.3	230	4x32/8x28
STM32L152V8	64	10	4096	LQFP100, UFBGA100	6x16-bit		24x12-bit	2x12-bit	82	2		2	3	1			1.65 to 3.6	0.3	230	4x44/8x40
STM32L151CB	128	16	4096	LQFP48, UFQFPN48	6x16-bit		16x12-bit	2x12-bit	36	2	N/A	2	3	1	N/A	N/A	1.65 to 3.6	0.3	230	
STM32L151RB	128	16	4096	LQFP64, TFBGA64	6x16-bit		20x12-bit	2x12-bit	50	2	N/A	2	3	1	N/A	N/A	1.65 to 3.6	0.3	230	
STM32L151VB	128	16	4096	LQFP100, UFBGA100	6x16-bit		24x12-bit	2x12-bit	82	2	N/A	2	3	1	N/A	N/A	1.65 to 3.6	0.3	230	

STM32 L1 SERIES - ARM CORTEX™-M3 ULTRA-LOW-POWER MCUS

Part number	Flash size (Kbytes)	Internal RAM size (Kbytes)	Data EEPROM (Kbytes)	Package	Timer functions		ADC	DAC	I/Os	Serial interface							Supply voltage (V)	Supply current (Icc)		Display controller (LCD)
					16-/32-bit timers	Others				SPI	I²S	I²C	USART	USB FS	SDIO	FSMC		Lowest power mode (µA)	Run mode (per MHz) (µA)	
STM32L152CB	128	16	4096	LQFP48, UFQFPN48	6x16-bit	SysTick, 2 x WDG, RTC	16x12-bit	2x12-bit	36	2		2	3	1			1.65 to 3.6	0.3	230	4x16
STM32L152RB	128	16	4096	LQFP64, TFBGA64	6x16-bit		20x12-bit	2x12-bit	50	2		2	3	1			1.65 to 3.6	0.3	230	4x32/8x28
STM32L152VB	128	16	4096	LQFP100, UFBGA100	6x16-bit		24x12-bit	2x12-bit	82	2		2	3	1			1.65 to 3.6	0.3	230	4x44/8x40
STM32L151QC	256	32	8192	UFBGA132	8x16-bit / 1x32-bit		39x12-bit	2x12-bit	108	3	2	2	3	1	N/A	N/A	1.65 to 3.6	0.3	230	
STM32L151RC	256	32	8192	LQFP64, WLCSP64	8x16-bit / 1x32-bit		21x12-bit	2x12-bit	50	3	2	2	3	1	N/A	N/A	1.65 to 3.6	0.3	230	
STM32L151VC	256	32	8192	LQFP100	8x16-bit / 1x32-bit		25x12-bit	2x12-bit	82	3	2	2	3	1	N/A	N/A	1.65 to 3.6	0.3	230	
STM32L151ZC	256	32	8192	LQFP144	8x16-bit / 1x32-bit		40x12-bit	2x12-bit	114	3	2	2	3	1	N/A	N/A	1.65 to 3.6	0.3	230	
STM32L152QC	256	32	8192	UFBGA132	8x16-bit / 1x32-bit		39x12-bit	2x12-bit	108	3	2	2	3	1			1.65 to 3.6	0.3	230	4x44/8x40
STM32L152RC	256	32	8192	LQFP64, WLCSP64	8x16-bit / 1x32-bit		21x12-bit	2x12-bit	50	3	2	2	3	1			1.65 to 3.6	0.3	230	4x32/8x28
STM32L152VC	256	32	8192	LQFP100	8x16-bit / 1x32-bit		25x12-bit	2x12-bit	82	3	2	2	3	1			1.65 to 3.6	0.3	230	4x44/8x40
STM32L152ZC	256	32	8192	LQFP144	8x16-bit / 1x32-bit		40x12-bit	2x12-bit	114	3	2	2	3	1			1.65 to 3.6	0.3	230	4x44/8x40
STM32L151QD	384	48	16384	UFBGA132	8x16-bit / 1x32-bit		39x12-bit	2x12-bit	108	3	2	2	5	1	1	1	1.65 to 3.6	0.3	230	
STM32L151RD	384	48	16384	LQFP64	8x16-bit / 1x32-bit		21x12-bit	2x12-bit	50	3	2	2	5	1	1	1	1.65 to 3.6	0.3	230	
STM32L151VD	384	48	16384	LQFP100	8x16-bit / 1x32-bit		25x12-bit	2x12-bit	82	3	2	2	5	1	1	1	1.65 to 3.6	0.3	230	
STM32L151ZD	384	48	16384	LQFP144	8x16-bit / 1x32-bit		40x12-bit	2x12-bit	114	3	2	2	5	1	1	1	1.65 to 3.6	0.3	230	
STM32L152QD	384	48	16384	UFBGA132	8x16-bit / 1x32-bit		39x12-bit	2x12-bit	108	3	2	2	5	1	1	1	1.65 to 3.6	0.3	230	4x44/8x40

STM32 L1 SERIES - ARM CORTEX™-M3 ULTRA-LOW-POWER MCUS

Part number	Flash size (Kbytes)	Internal RAM size (Kbytes)	Data EEPROM (Kbytes)	Package	Timer functions		ADC	DAC	I/Os	Serial interface							Supply voltage (V)	Supply current (Icc)		Display controller (LCD)
					16-/32-bit timers	Others				SPI	I²S	I²C	USART	USB FS	SDIO	FSMC		Lowest power mode (µA)	Run mode (per MHz) (µA)	
STM32L152RD	384	48	16384	LQFP64	8x16-bit / 1x32-bit	SysTick, 2 x WDG, RTC	21x12-bit	2x12-bit	50	3	2	2	5	1	1	1	1.65 to 3.6	0.3	230	4x32/8x28
STM32L152VD	384	48	16384	LQFP100	8x16-bit / 1x32-bit		25x12-bit	2x12-bit	82	3	2	2	5	1	1	1	1.65 to 3.6	0.3	230	4x44/8x40
STM32L152ZD	384	48	16384	LQFP144	8x16-bit / 1x32-bit		40x12-bit	2x12-bit	114	3	2	2	5	1	1	1	1.65 to 3.6	0.3	230	4x44/8x40
STM32L162 line with LCD and AES - 32 MHz CPU																				
STM32L162QD	384	48	16384	UFBGA132	8x16-bit / 1x32-bit	SysTick, 2 x WDG, RTC	39x12-bit	2x12-bit	108	3	2	2	5	1	1	1	1.65 to 3.6	0.3	230	4x44/8x40
STM32L162RD	384	48	16384	LQFP64	8x16-bit / 1x32-bit		21x12-bit	2x12-bit	50	3	2	2	5	1	1	1	1.65 to 3.6	0.3	230	4x32/8x28
STM32L162VD	384	48	16384	LQFP100	8x16-bit / 1x32-bit		25x12-bit	2x12-bit	82	3	2	2	5	1	1	1	1.65 to 3.6	0.3	230	4x44/8x40
STM32L162ZD	384	48	16384	LQFP144	8x16-bit / 1x32-bit		40x12-bit	2x12-bit	114	3	2	2	5	1	1	1	1.65 to 3.6	0.3	230	4x44/8x40

Notes:
- Touch-sensing FW library available for all STM32L15x and STM32L16x devices
- Operating temperature is - 40 to +85 °C for all STM32L1 devices

STM32W SERIES - ARM CORTEX™-M3 WIRELESS MCUS

Part number	Flash size (Kbytes)	Internal RAM size (Kbytes)	Package	Timer functions		ADC	I/Os	Serial interface			Supply voltage (V)	Supply current (Icc)		Maximum operating temperature range (°C)	RF FW library
				16-bit timers	Others			SPI	I²C	UART		Lowest power mode (µA)	Run mode (per MHz) (µA)		
STM32W108 line - IEEE 802.15.4 - 24 MHz CPU															
STM32W108C8	64	8	VFQFPN48	2x16-bit	WDG, RTC, IEEE 802.15.4 radio	6x12-bit	24	2	2	1	2.1 to 3.6	0.4	250	-40 to +85	Simple MAC, RF4CE
STM32W108CB	128	8	VFQFPN48	2x16-bit		6x12-bit	24	2	2	1	2.1 to 3.6	0.4	250	-40 to +85	
STM32W108HB	128	8	VFQFPN40	2x16-bit		6x12-bit	18	2	2	1	2.1 to 3.6	0.4	250	-40 to +85	
STM32W108CZ	192	12	UFQFPN48	2x16-bit		6x12-bit	24	2	2	1	2.1 to 3.6	0.4	250	-40 to +105	Simple MAC, RF4CE, ZigBee IP and SEP 2.0
STM32W108CC	256	16	UFQFPN48	2x16-bit		6x12-bit	24	2	2	1	2.1 to 3.6	0.4	250	-40 to +105	

STM8 – 8-bit microcontroller families

STM8S SERIES – MAINSTREAM MCUS

Part number	Flash size (Kbytes)	Internal RAM size (Kbytes)	Data EEPROM (bytes)	Package	Timer functions		ADC	DAC	I/Os	Serial interface					Supply voltage (V)	Supply current (Icc)		Maximum operating temperature range (°C)
					8-/16-bit timers	Others				CAN	SPI	I²C	UART (IrDA, ISO 7816)	Other		Lowest power mode (µA)	Run mode (per MHz) (µA)	
STM8S003/005/007 Value line - 16 MHz CPU																		
STM8S003F3	8	1	128	TSSOP20, UFQFPN20	1x8-bit / 2x16-bit	2 x WDG, beeper	5x10-bit		16		1	1	1		2.95 to 5.5	5	230	-40 to +85
STM8S003K3	8	1	128	LQFP32	1x8-bit / 2x16-bit		4x10-bit		28		1	1	1		2.95 to 5.5	5	230	-40 to +85
STM8S005C6	32	2	128	LQFP48	1x8-bit / 3x16-bit		10x10-bit		38		1	1	1		2.95 to 5.5	5	430	-40 to +85
STM8S005K6	32	2	128	LQFP32	1x8-bit / 3x16-bit		7x10-bit		25		1	1	1		2.95 to 5.5	5	430	-40 to +85
STM8S007C8	64	6	128	LQFP48	1x8-bit / 3x16-bit		10x10-bit		38		1	1	2		2.95 to 5.5	5	500	-40 to +85
STM8S103/105 Access line - 16 MHz CPU																		
STM8S103F2	4	1	640	SO20, TSSOP20, UFQFPN20	1x8-bit / 2x16-bit	2 x WDG, beeper	5x10-bit		16		1	1	1		2.95 to 5.5	5	230	-40 to +125
STM8S103F3	8	1	640	SO20, TSSOP20, UFQFPN20	1x8-bit / 2x16-bit		5x10-bit		16		1	1	1		2.95 to 5.5	5	230	-40 to +125
STM8S103K3	8	1	640	LQFP32, PDIP32, UFQFPN32	1x8-bit / 2x16-bit		4x10-bit		28		1	1	1		2.95 to 5.5	5	230	-40 to +125
STM8S105C4	16	2	1024	LQFP48	1x8-bit / 3x16-bit		10x10-bit		38		1	1	1		2.95 to 5.5	5	430	-40 to +125
STM8S105K4	16	2	1024	LQFP32, PDIP32, UFQFPN32	1x8-bit / 3x16-bit		7x10-bit		25		1	1	1		2.95 to 5.5	5	430	-40 to +125
STM8S105S4	16	2	1024	LQFP44	1x8-bit / 3x16-bit		9x10-bit		34		1	1	1		2.95 to 5.5	5	430	-40 to +125
STM8S105C6	32	2	1024	LQFP48	1x8-bit / 3x16-bit		10x10-bit		38		1	1	1		2.95 to 5.5	5	430	-40 to +125

STM8S SERIES – MAINSTREAM MCUS

Part number	Flash size (Kbytes)	Internal RAM size (Kbytes)	Data EEPROM (bytes)	Package	Timer functions		ADC	DAC	I/Os	Serial interface					Supply voltage (V)	Supply current (Icc)		Maximum operating temperature range (°C)
					8-/16-bit timers	Others				CAN	SPI	I²C	UART (IrDA, ISO 7816)	Other		Lowest power mode (µA)	Run mode (per MHz) (µA)	
STM8S105K6	32	2	1024	LQFP32, PDIP32, UFQFPN32	1x8-bit / 3x16-bit	2 x WDG, beeper	7x10-bit		25		1	1	1		2.95 to 5.5	5	430	-40 to +125
STM8S105S6	32	2	1024	LQFP44	1x8-bit / 3x16-bit		9x10-bit		34		1	1	1		2.95 to 5.5	5	430	-40 to +125
STM8S207/208 Performance line - 24 MHz CPU																		
STM8S207C6	32	6	1024	LQFP48	1x8-bit / 3x16-bit	2 x WDG, beeper	10x10-bit		38		1	1	2		2.95 to 5.5	5	500	-40 to +125
STM8S207K6	32	6	1024	LQFP32	1x8-bit / 3x16-bit		7x10-bit		25		1	1	1		2.95 to 5.5	5	500	-40 to +125
STM8S207R6	32	6	1024	LQFP64	1x8-bit / 3x16-bit		16x10-bit		52		1	1	2		2.95 to 5.5	5	500	-40 to +125
STM8S207S6	32	6	1024	LQFP44	1x8-bit / 3x16-bit		9x10-bit		34		1	1	2		2.95 to 5.5	5	500	-40 to +125
STM8S208C6	32	6	2048	LQFP48	1x8-bit / 3x16-bit		10x10-bit		38	1	1	1	2		2.95 to 5.5	5	500	-40 to +125
STM8S208R6[1]	32	6	2048	LQFP64	1x8-bit / 3x16-bit		16x10-bit		52	1	1	1	2		2.95 to 5.5	5	500	-40 to +125
STM8S208S6	32	6	1536	LQFP44	1x8-bit / 3x16-bit		9x10-bit		34	1	1	1	2		2.95 to 5.5	5	500	-40 to +125
STM8S207C8	64	6	1536	LQFP48	1x8-bit / 3x16-bit		10x10-bit		38		1	1	2		2.95 to 5.5	5	500	-40 to +125
STM8S207K8	64	6	1024	LQFP32	1x8-bit / 3x16-bit		7x10-bit		25		1	1	1		2.95 to 5.5	5	500	-40 to +125
STM8S207M8	64	6	2048	LQFP80	1x8-bit / 3x16-bit		16x10-bit		68		1	1	2		2.95 to 5.5	5	500	-40 to +125
STM8S207R8	64	6	1536	LQFP64	1x8-bit / 3x16-bit		16x10-bit		52		1	1	2		2.95 to 5.5	5	500	-40 to +125
STM8S207S8	64	6	1536	LQFP44	1x8-bit / 3x16-bit		9x10-bit		34		1	1	2		2.95 to 5.5	5	500	-40 to +125
STM8S208C8	64	6	2048	LQFP48	1x8-bit / 3x16-bit		10x10-bit		38	1	1	1	2		2.95 to 5.5	5	500	-40 to +125
STM8S208M8[1]	64	6	2048	LQFP80	1x8-bit / 3x16-bit		16x10-bit		68	1	1	1	2		2.95 to 5.5	5	500	-40 to +125

STM8S SERIES – MAINSTREAM MCUS

Part number	Flash size (Kbytes)	Internal RAM size (Kbytes)	Data EEPROM (bytes)	Package	Timer functions		ADC	DAC	I/Os	Serial interface					Supply voltage (V)	Supply current (Icc)		Maximum operating temperature range (°C)
					8-/16-bit timers	Others				CAN	SPI	I²C	UART (IrDA, ISO 7816)	Other		Lowest power mode (µA)	Run mode (per MHz) (µA)	
STM8S208R8	64	6	2048	LQFP64	1x8-bit / 3x16-bit	2 x WDG, beeper	16x10-bit		52	1	1	1	2		2.95 to 5.5	5	500	-40 to +125
STM8S208S8[1]	64	6	1536	LQFP44	1x8-bit / 3x16-bit		9x10-bit		34	1	1	1	2		2.95 to 5.5	5	500	-40 to +125
STM8S207CB	128	6	2048	LQFP48	1x8-bit / 3x16-bit		10x10-bit		38		1	1	2		2.95 to 5.5	5	500	-40 to +125
STM8S207MB	128	6	2048	LQFP80	1x8-bit / 3x16-bit		16x10-bit		68		1	1	2		2.95 to 5.5	5	500	-40 to +125
STM8S207RB	128	6	2048	LQFP64	1x8-bit / 3x16-bit		16x10-bit		52		1	1	2		2.95 to 5.5	5	500	-40 to +125
STM8S207SB	128	6	1536	LQFP44	1x8-bit / 3x16-bit		9x10-bit		34		1	1	2		2.95 to 5.5	5	500	-40 to +125
STM8S208CB	128	6	2048	LQFP48	1x8-bit / 3x16-bit		10x10-bit		38	1	1	1	2		2.95 to 5.5	5	500	-40 to +125
STM8S208MB	128	6	2048	LQFP80	1x8-bit / 3x16-bit		16x10-bit		68	1	1	1	2		2.95 to 5.5	5	500	-40 to +125
STM8S208RB	128	6	2048	LQFP64	1x8-bit / 3x16-bit		16x10-bit		52	1	1	1	2		2.95 to 5.5	5	500	-40 to +125
STM8S208SB[1]	128	6	1536	LQFP44	1x8-bit / 3x16-bit		9x10-bit		34	1	1	1	2		2.95 to 5.5	5	500	-40 to +125
STM8S903/STM8SPLNB1 Application specific line - 16 MHz CPU																		
STM8S903F3	8	1	640	SO20, TSSOP20, UFQFPN20	1x8-bit / 2x16-bit	2 x WDG, beeper	5x10-bit		16		1	1	1		2.95 to 5.5	5	230	-40 to +125
STM8S903K3	8	1	640	LQFP32, PDIP32 , UFQFPN32	1x8-bit / 2x16-bit		7x10-bit		28		1	1	1		2.95 to 5.5	5	230	-40 to +125
STM8SPLNB1	8	1	640	SO20, TSSOP20, UFQFPN20			5x10-bit					4		2xDiSEqC	2.95 to 5.5	5	230	-40 to +85

Note:
1. On demand only

STM8AF SERIES – MAINSTREAM AUTOMOTIVE MCUS

Part number	Flash size (Kbytes)	Internal RAM size (Kbytes)	Data EEPROM (bytes)	Package	Timer functions		ADC	DAC	I/Os	Serial interface						Supply voltage (V)	Supply current (Icc)		Maximum operating temperature range (°C)
					8-/16- bit timers	Others				CAN	LIN-UART	USART (IrDA, ISO 7816, LIN 1.3, LIN 2.0)	SPI	I²C	IRTx		Lowest power mode (µA)	Run mode (per MHz) (µA)	
STM8AF Series																			
STM8AF52 CAN and LIN line - Up to 24 MHz CPU																			
STM8AF5268	32	6	1024	LQFP48	1x8-bit / 3x16-bit	IWDG, WWDG, AWU	10x10-bit		38	1	1	1	1	1		3 to 5.5	5	500	-40 to +150
STM8AF5269	32	6	1024	LQFP64	1x8-bit / 3x16-bit		16x10-bit		54	1	1	1	1	1		3 to 5.5	5	500	-40 to +150
STM8AF5288	64	6	2048	LQFP48	1x8-bit / 3x16-bit		10x10-bit		38	1	1	1	1	1		3 to 5.5	5	500	-40 to +150
STM8AF5289	64	6	2048	LQFP64	1x8-bit / 3x16-bit		16x10-bit		54	1	1	1	1	1		3 to 5.5	5	500	-40 to +150
STM8AF528A	64	6	2048	LQFP80	1x8-bit / 3x16-bit		16x10-bit		70	1	1	1	1	1		3 to 5.5	5	500	-40 to +150
STM8AF52A8	128	6	2048	LQFP48	1x8-bit / 3x16-bit		10x10-bit		38	1	1	1	1	1		3 to 5.5	5	500	-40 to +150
STM8AF52A9	128	6	2048	LQFP64	1x8-bit / 3x16-bit		16x10-bit		54	1	1	1	1	1		3 to 5.5	5	500	-40 to +150
STM8AF52AA	128	6	2048	LQFP80	1x8-bit / 3x16-bit		16x10-bit		70	1	1		1	1		3 to 5.5	5	500	-40 to +150
STM8AF62 LIN line - Up to 24 MHz CPU																			
STM8AF6223	8	1	640	TSSOP20	1x8-bit / 2x16-bit	IWDG, WWDG, AWU	5x10-bit 7x10-bit		16		1		1	1		3 to 5.5	5	230	-40 to +150
STM8AF6226	8	2	384	LQFP32	1x8-bit / 3x16-bit		7x10-bit		25		1		1	1		3 to 5.5	5	430	-40 to +150
STM8AF6226T	8	1	640	LQFP32, VFQFPN32	1x8-bit / 2x16-bit		5x10-bit		28		1		1	1		3 to 5.5	5	230	-40 to +150
STM8AF6246	16	2	512	LQFP32, VFQFPN32	1x8-bit / 3x16-bit		7x10-bit		25		1		1	1		3 to 5.5	5	430	-40 to +150
STM8AF6248	16	2	512	LQFP48	1x8-bit / 3x16-bit		10x10-bit		38		1		1	1		3 to 5.5	5	430	-40 to +150
STM8AF6266	32	2	1024	LQFP32, VFQFPN32	1x8-bit / 3x16-bit		7x10-bit		25		1		1	1		3 to 5.5	5	430	-40 to +150

STM8AF SERIES – MAINSTREAM AUTOMOTIVE MCUS

Part number	Flash size (Kbytes)	Internal RAM size (Kbytes)	Data EEPROM (bytes)	Package	Timer functions		ADC	DAC	I/Os	Serial interface						Supply voltage (V)	Supply current (Icc)		Maximum operating temperature range (°C)
					8-/16- bit timers	Others				CAN	LIN-UART	USART (IrDA, ISO 7816, LIN 1.3, LIN 2.0)	SPI	I²C	IRTx		Lowest power mode (µA)	Run mode (per MHz) (µA)	
STM8AF6268	32	2	1024	LQFP48	1x8-bit / 3x16-bit	IWDG, WWDG, AWU	10x10-bit		38		1		1	1		3 to 5.5	5	430	-40 to +150
STM8AF6269	32	6	1024	LQFP64	1x8-bit / 3x16-bit		16x10-bit		54		1	1	1	1		3 to 5.5	5	500	-40 to +150
STM8AF6286	64	6	2048	LQFP32	1x8-bit / 3x16-bit		7x10-bit		25		1		1	1		3 to 5.5	5	500	-40 to +150
STM8AF6288	64	6	2048	LQFP48	1x8-bit / 3x16-bit		10x10-bit		38		1	1	1	1		3 to 5.5	5	500	-40 to +150
STM8AF6289	64	6	2048	LQFP64	1x8-bit / 3x16-bit		16x10-bit		54		1	1	1	1		3 to 5.5	5	500	-40 to +150
STM8AF628A	64	6	2048	LQFP80	1x8-bit / 3x16-bit		16x10-bit		70		1	1	1	1		3 to 5.5	5	500	-40 to +150
STM8AF62A6	128	6	2048	LQFP32	1x8-bit / 3x16-bit		7x10-bit		25		1		1	1		3 to 5.5	5	500	-40 to +150
STM8AF62A8	128	6	2048	LQFP 48	1x8-bit / 3x16-bit		10x10-bit		38		1	1	1	1		3 to 5.5	5	500	-40 to +150
STM8AF62A9	128	6	2048	LQFP64	1x8-bit / 3x16-bit		10x10-bit		54		1	1	1	1		3 to 5.5	5	500	-40 to +150
STM8AF62AA	128	6	2048	LQFP80	1x8-bit / 3x16-bit		16x10-bit		70		1	1	1	1		3 to 5.5	5	500	-40 to +150

STM8AL SERIES – ULTRA-LOW-POWER AUTOMOTIVE MCUS

Part number	Flash size (Kbytes)	Internal RAM size (Kbytes)	Data EEPROM (bytes)	Package	Timer functions		ADC	DAC	I/Os	Serial interface						Supply voltage (V)	Supply current (Icc)		Maximum operating temperature range (°C)
					8-/16- bit timers	Others				CAN	LIN-UART	USART (IrDA, ISO 7816, LIN 1.3, LIN 2.0)	SPI	I²C	IRTx		Lowest power mode (µA)	Run mode (per MHz) (µA)	
STM8AL30 Value low-power line - 16 MHz CPU																			
STM8AL3026	4	1.5	2048	LQFP32, VFQFPN32	1x8-bit / 2x16-bit	IWDG, AWU, beeper			30			1	1	1	1	1.65 to 3.6	0.35	150	-40 to +125
STM8AL3036	8	1.5	2048	LQFP32, VFQFPN32	1x8-bit / 2x16-bit				30			1	1	1	1	1.65 to 3.6	0.35	150	-40 to +125
STM8AL31 Standard low-power line - 16 MHz CPU																			
STM8AL3126	4	2	256	LQFP32, VFQFPN32	1x8-bit / 3x16-bit	IWDG, WWDG, AWU, RTC, beeper	22x12-bit	1x12-bit	30			1	1	1		1.8 to 3.6	0.4	195	-40 to +125
STM8AL3136	8	2	256	LQFP32, VFQFPN32	1x8-bit / 3x16-bit		22x12-bit	1x12-bit	30			1	1	1		1.8 to 3.6	0.4	195	-40 to +125
STM8AL3138	8	2	1024	LQFP48	1x8-bit / 3x16-bit		25x12-bit	1x12-bit	41			1	1	1		1.8 to 3.6	0.4	195	-40 to +125
STM8AL3146	16	2	1024	LQFP32, VFQFPN32	1x8-bit / 3x16-bit		22x12-bit	1x12-bit	30			1	1	1		1.8 to 3.6	0.4	195	-40 to +125
STM8AL3148	16	2	1024	LQFP48	1x8-bit / 3x16-bit		25x12-bit	1x12-bit	41			1	1	1		1.8 to 3.6	0.4	195	-40 to +125
STM8AL3166	32	2	1024	LQFP32, VFQFPN32	1x8-bit / 3x16-bit		22x12-bit	1x12-bit	30			1	1	1		1.8 to 3.6	0.4	195	-40 to +125
STM8AL3168	32	2	1024	LQFP48	1x8-bit / 3x16-bit		25x12-bit	1x12-bit	41			1	1	1		1.8 to 3.6	0.4	195	-40 to +125
STM8AL3L LCD (4x17) or (4x28) Standard low-power line - 16 MHz CPU																			
STM8AL3L46	16	2	1024	LQFP32, VFQFPN32	1x8-bit / 3x16-bit	IWDG, WWDG, AWU, RTC, beeper	21x12.bit	1x12-bit	29			1	1	1		1.8 to 3.6	0.4	195	-40 to +125
STM8AL3L48	16	2	1024	LQFP48	1x8-bit / 3x16-bit		25x12-bit	1x12-bit	41			1	1	1		1.8 to 3.6	0.4	195	-40 to +125
STM8AL3L66	32	2	1024	LQFP32, VFQFPN32	1x8-bit / 3x16-bit		21x12-bit	1x12-bit	29			1	1	1		1.8 to 3.6	0.4	195	-40 to +125
STM8AL3L68	32	2	1024	LQFP48	1x8-bit / 3x16-bit		25x12-bit	1x12-bit	41			1	1	1		1.8 to 3.6	0.4	195	-40 to +125

Notes:
- All STM8AL part numbers have DMA with 4 channels except STM8AL30
- For all STM8AL3Lx6 LCD is(4x17) and for all STM8AL3Lx8 LCD (4x28)

STM8L SERIES – ULTRA-LOW-POWER MCUS

Part number	Flash size (Kbytes)	Internal RAM size (Kbytes)	Data EEPROM (bytes)	Package	Timer functions		ADC	DAC	I/Os	Serial interface				Supply voltage (V)	Supply current (Icc)		Maximum operating temperature range (°C)	Display controller (LCD)
					8-/16-bit timers	Others				SPI	I²C	USART (IrDA, ISO 7816)	IRTx		Lowest power mode (µA)	Run mode (per MHz) (µA)		
STM8L051/052 Value line - 16 MHz CPU																		
STM8L051F3	8	1	256	TSSOP20	1x8-bit / 2x16-bit	2 x WDG, IWDG, RTC, beeper	10x12-bit		18	1	1	1		1.8 to 3.6	0.35	180	-40 to +85	
STM8L052C6	32	2	256	LQFP48	1x8-bit / 3x16-bit		25x12-bit		41	1	1	1		1.8 to 3.6	0.35	180	-40 to +85	4x28
STM8L052R8	64	4	256	LQFP64	1x8-bit / 4x16-bit		28x12-bit		54	2	1	3		1.8 to 3.6	0.4	200	-40 to +85	4x28/8x24
STM8L101 entry line - 16 MHz CPU																		
STM8L101F1	2	1.5		UFQFPN20	1x8-bit / 2x16-bit	IWDG, AWU, beeper			18	1	1	1	1	1.65 to 3.6	0.3	150	-40 to +85	
STM8L101F2	4	1.5		TSSOP20, UFQFPN20	1x8-bit / 2x16-bit				18	1	1	1	1	1.65 to 3.6	0.3	150	-40 to +125	
STM8L101G2	4	1.5		UFQFPN28	1x8-bit / 2x16-bit				26	1	1	1	1	1.65 to 3.6	0.3	150	-40 to +125	
STM8L101F3	8	1.5	[1]	TSSOP20, UFQFPN20	1x8-bit / 2x16-bit				18	1	1	1	1	1.65 to 3.6	0.3	150	-40 to +125	
STM8L101G3	8	1.5	[1]	UFQFPN28	1x8-bit / 2x16-bit				26	1	1	1	1	1.65 to 3.6	0.3	150	-40 to +125	
STM8L101K3	8	1.5	[1]	LQFP32, UFQFPN32	1x8-bit / 2x16-bit				30	1	1	1	1	1.65 to 3.6	0.3	150	-40 to +125	
STM8L151/152 - 16 MHz CPU																		
STM8L151C2	4	1	256	LQFP48	1x8-bit / 2x16-bit	2 x WDG, AWU, RTC, beeper	28x12-bit		41	1	1	1		1.65 to 3.6	0.35	180	-40 to +125	
STM8L151F2	4	1	256	TSSOP20, UFQFPN20	1x8-bit / 2x16-bit		10x12-bit		18	1	1	1		1.65 to 3.6	0.35	180	-40 to +125	
STM8L151G2	4	1	256	UFQFPN28	1x8-bit / 2x16-bit		18x12-bit		26	1	1	1		1.65 to 3.6	0.35	180	-40 to +125	
STM8L151K2	4	1	256	UFQFPN32	1x8-bit / 2x16-bit		23x12-bit		30	1	1	1		1.65 to 3.6	0.35	180	-40 to +125	
STM8L151C3	8	1	256	LQFP 48	1x8-bit / 2x16-bit		28x12-bit		41	1	1	1		1.65 to 3.6	0.35	180	-40 to +125	

STM8L SERIES – ULTRA-LOW-POWER MCUS

Part number	Flash size (Kbytes)	Internal RAM size (Kbytes)	Data EEPROM (bytes)	Package	Timer functions		ADC	DAC	I/Os	Serial interface				Supply voltage (V)	Supply current (Icc)		Maximum operating temperature range (°C)	Display controller (LCD)
					8-/16-bit timers	Others				SPI	I²C	USART (IrDA, ISO 7816)	IRTx		Lowest power mode (µA)	Run mode (per MHz) (µA)		
STM8L151F3	8	1	256	TSSOP20, UFQFPN20	1x8-bit / 2x16-bit	2 x WDG, AWU, RTC, beeper	10x12-bit		18	1	1	1		1.65 to 3.6	0.35	180	-40 to +125	
STM8L151G3	8	1	256	UFQFPN28	1x8-bit / 2x16-bit		18x12-bit		26	1	1	1		1.65 to 3.6	0.35	180	-40 to +125	
STM8L151K3	8	1	256	UFQFPN32	1x8-bit / 2x16-bit		23x12-bit		30	1	1	1		1.65 to 3.6	0.35	180	-40 to +125	
STM8L151C4	16	2	1024	LQFP48, UFQFPN48	1x8-bit / 3x16-bit		25x12-bit	1x12-bit	41	1	1	1		1.65 to 3.6	0.35	180	-40 to +125	
STM8L151G4	16	2	1024	UFQFPN28, WLCSP28	1x8-bit / 3x16-bit		18x12-bit	1x12-bit	26	1	1	1		1.65 to 3.6	0.35	180	-40 to +125	
STM8L151K4	16	2	1024	LQFP32, UFQFPN32	1x8-bit / 3x16-bit		22x12-bit	1x12-bit	30	1	1	1		1.65 to 3.6	0.35	180	-40 to +125	
STM8L152C4	16	2	1024	LQFP48, UFQFPN48	1x8-bit / 3x16-bit		25x12-bit	1x12-bit	41	1	1	1		1.65 to 3.6	0.35	180	-40 to +125	4x28
STM8L152K4	16	2	1024	LQFP32, UFQFPN32	1x8-bit / 3x16-bit		21x12-bit	1x12-bit	29	1	1	1		1.65 to 3.6	0.35	180	-40 to +125	4x17
STM8L151C6	32	2	1024	LQFP48, UFQFPN48	1x8-bit / 3x16-bit		25x12-bit	1x12-bit	41	1	1	1		1.65 to 3.6	0.35	180	-40 to +125	
STM8L151G6	32	2	1024	UFQFPN28, WLCSP28	1x8-bit / 3x16-bit		18x12-bit	1x12-bit	26	1	1	1		1.65 to 3.6	0.35	180	-40 to +125	
STM8L151K6	32	2	1024	LQFP32 , UFQFPN32	1x8-bit / 3x16-bit		22x12-bit	1x12-bit	30	1	1	1		1.65 to 3.6	0.35	180	-40 to +125	
STM8L151R6	32	2	1024	LQFP64	1x8-bit / 4x16-bit		28x12-bit	2x12-bit	54	2	1	3		1.65 to 3.6	0.4	200	-40 to +125	
STM8L152C6	32	2	1024	LQFP48, UFQFPN48	1x8-bit / 3x16-bit		25x12-bit	1x12-bit	41	1	1	1		1.65 to 3.6	0.35	180	-40 to +125	4x28
STM8L152K6	32	2	1024	LQFP32, UFQFPN32	1x8-bit / 3x16-bit		21x12-bit	1x12-bit	29	1	1	1		1.65 to 3.6	0.35	180	-40 to +125	4x17
STM8L152R6	32	2	1024	LQFP64	1x8-bit / 4x16-bit		28x12-bit	2x12-bit	54	2	1	3		1.65 to 3.6	0.4	200	-40 to +125	4x40/8x36
STM8L151C8	64	4	2048	LQFP48, UFQFPN48	1x8-bit / 4x16-bit		25x12-bit	2x12-bit	41	2	1	3		1.65 to 3.6	0.4	200	-40 to +125	

STM8L SERIES – ULTRA-LOW-POWER MCUS

Part number	Flash size (Kbytes)	Internal RAM size (Kbytes)	Data EEPROM (bytes)	Package	Timer functions		ADC	DAC	I/Os	Serial interface				Supply voltage (V)	Supply current (Icc)		Maximum operating temperature range (°C)	Display controller (LCD)
					8-/16-bit timers	Others				SPI	I²C	USART (IrDA, ISO 7816)	IRTx		Lowest power mode (µA)	Run mode (per MHz) (µA)		
STM8L151M8	64	4	2048	LQFP80	1x8-bit / 4x16-bit	2 x WDG, AWU, RTC, beeper	28x12-bit	2x12-bit	68	2	1	3		1.65 to 3.6	0.4	200	-40 to +125	
STM8L151R8	64	4	2048	LQFP64	1x8-bit / 4x16-bit		28x12-bit	2x12-bit	54	2	1	3		1.65 to 3.6	0.4	200	-40 to +125	
STM8L152C8	64	4	2048	LQFP48, UFQFPN48	1x8-bit / 4x16-bit		25x12-bit	2x12-bit	41	2	1	3		1.65 to 3.6	0.4	200	-40 to +125	4x32/8x28
STM8L152M8	64	4	2048	LQFP80	1x8-bit / 4x16-bit		28x12-bit	2x12-bit	68	2	1	3		1.65 to 3.6	0.4	200	-40 to +125	4x44/8x40
STM8L152R8	64	4	2048	LQFP64	1x8-bit / 4x16-bit		28x12-bit	2x12-bit	54	2	1	3		1.65 to 3.6	0.4	200	-40 to +125	4x40/8x36
STM8L162 - 16 MHz CPU																		
STM8L162M8	64	4	2048	LQFP80	1x8-bit / 4x16-bit	2 x WDG, AWU, RTC, beeper	28x12-bit	2x12-bit	68	2	1	3		1.65 to 3.6	0.4	200	-40 to +125	4x44/8x40
STM8L162R8	64	4	2048	LQFP64	1x8-bit / 4x16-bit		28x12-bit	2x12-bit	54	2	1	3		1.65 to 3.6	0.4	200	-40 to +125	4x44/8x40

Note:
1. Up to 2 Kbytes of EEPROM

Abbreviations and packages

ABBREVIATIONS

ADC	:	Analog-to-digital converter
ART	:	Auto-reload timer
ATAPI	:	AT attachment packet interface
AWU	:	Auto wake-up from halt
BLPD	:	Byte level protocol decoder
BOD	:	Brown-out detector
CAN	:	Controller area network
CAPCOM	:	Capture compare
CSS	:	Clock security system
DALI	:	Digital addressable lighting interface
DDC	:	Data display channel
DiSEqC	:	Digital satellite equipment control
DMA	:	Direct memory access
DSC	:	Dual supply control
DTC	:	Data transfer coprocessor
ETM	:	Embedded trace macrocell
EMI	:	External memory interface
HDLC	:	High-level data link control
IAP	:	In-application programming
IC/OC	:	Input capture/output compare
ICP	:	programming
IR	:	Infrared
IrDA	:	Infrared data association
ISP	:	In-situ programming
I²C	:	Inter-integrated circuit
I²S	:	Inter-IC sound
LCD	:	Liquid crystal display
LIN	:	Local interconnect network
LVD	:	Low voltage detection
MAC	:	Multiply accumulator
MC	:	Motor control
MFT	:	Multifunction timer
MMC	:	MultiMediaCard
NMI	:	Non-maskable interrupt
OSG	:	Oscillator safeguard
PCA	:	Programmable counter array
PDR	:	Power-down reset
PHW	:	Programmable halt wake-up
PEC	:	Peripheral event controller
PLD	:	Programmable logic device
PLL	:	Phase locked loop
POR	:	Power-on reset
PVD	:	Programmable voltage detector
PVR	:	Programmable voltage regulator
PWM	:	Pulse width modulation
ROP	:	Readout protection
RTC	:	Real-time clock timer
SC	:	Smartcard
SCI	:	Serial communication interface
SCR	:	Smartcard reader
SDIO	:	Secure digital input output
SMI	:	Serial memory interface
SPI	:	Serial peripheral interface
SSC	:	Single-cycle switching support
SSP	:	Synchronous serial port
TBU	:	Time base unit
TLI	:	Top level interrupt
UART	:	Universal asynchronous receiver transmitter
USART	:	Universal sync/async receiver transmitter
USB	:	Universal Serial Bus
WDG	:	Watchdog timer
WWDG	:	Window watchdog timer

PACKAGES

DIP	: Dual in-line package
LCC	: Leaded chip carrier
PDIP Shrink	: Shrink Plastic Dual In-line Package
PQFP	: Plastic quad flat package
SO	: Small outline
LQFP	: Low-profile quad flat package
PBGA	: Plastic ball grid array
DFN	: Dual flat no-lead
QFN	: Quad flat no-lead

MCU – Typical designations and part number suffixes

STM32	F	051	R	8	T	6

Family

STM32	32-bit MCUs
STM8	8-bit MCUs
STM8A	8-bit Automotive MCUs

Product type

F	Foundation
L	Ultra-low power
P	Pre-programmed
S	Standard
T	Touch sensing
W	Wireless

Specific features (3 digits)

Depends on product series
None exhaustive list.

STM32x...	
051	Entry-level
407	High-performance and DSP with FPU
152	Ultra-low-power
STM8x... / STM8Ax...	
103	Mainstream access line
52	Automotive CAN
31	Automotive low-end

Pin count (pins)

Y	16
F	20
E	24
G	28
K or 6	32
L	34
T	36
D	38
H	40
J	42
S	44
C or 8	48
N	56
U	63
R or 9	64
M or A	80
O	90
V	100
W	128
Q	132
Z	144
I	176
B	208
X	336
P	420

Code size (Kbytes)

0	1
1	2
2	4
3	8
4	16
5	24
6	32
7	48
8	64
9	72
A	96 or 128*
B	128
Z	192
C	256
D	384
E	512
F	768
G	1024
H	1536
I	2048

Note:
* For STM8A only

Packaging

B	Plastic DIP*
D	Ceramic DIP*
G	Ceramic QFP
H	UFBGA or TFBGA
I	UFBGA
M	Plastic SO
P	TSSOP
Q	Plastic QFP
T	Plastic TQFP
U	UQFN
Y	CSP

*Dual in-line package

Temperature range

6 and A	-40 to +85 °C
7 and B	-40 to +105 °C
3 and C	-40 to +125 °C
D	-40 to +150 °C

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