Microcontroller Family	GPIO Pins	Power Consumption	CPU	Clock Speed (MHz)	SRAM KiB	RTC SRAM KiB	Core Coupled Mem KiB	ROM KiB	Has SPI/ Can do SD Cards	Price	Notes
ESP32-S2	43	~66 mW	XTensa LX7	240	320	16		128	☑	~$8-15	
ESP32-S3	45	~80-130 mW	XTensa LX7	240	512	16		384	☑	~$10-25	
ESP32-C2	14	~78 mW	RISC-V 1-core	120	272			576	☑	~$3-5	
ESP32-C3	22,16,15	~83-89 mW	RISC-V 1-core	160	400	8		384	☑	~$5-15	
ESP32-C6	30,22	~80-115 mW	RISC-V 2-core	160	512			320	☑	~$8-15	
STM32F0	32-64	~26-50mW	Cortex-M0	48	4-32			16-128	☑	~$10-30	
STM32F1	~37	~90mW	Cortex-M3	24-72	4-96			16-1024	☑	~$5-30	
STM32F2	51,82,140+	~70 mW	Cortex-M3	120	64-128			128-1024	☑	~$15-50+	Less common, often a part of eval boards
STM32F3	30-50	~80-130 mW	Cortex-M4F	72	16-40			64-256	☑	~$10-35	
STM32F4	50-100+	~110-140 mW	Cortex-M4F	84-180	192	4	64	512-2048	☑	~$15-50	
STM32F7	up to 168	~590 mW	Cortex-M7F	216	512	4	144	2048	☑	~$40-70	
STM32G0	50+	~21 mW	Cortex-M0+	64	8-128			16-512	☑	~$10-25	
STM32G4	51-107	~96 mW	Cortex-M4F	170	32-128			128-512	☑	~$10-30	
STM32H7	100+	~726 mW @400MHz		480-600	1024	4	192	2048	☑	~$40-70	
STM32L0	~64	~8 mW	Cortex-M0+	32	8	20 bytes		32-64	☑	~$15-30	Low power
STM32L1	30-100+	~20 mW	Cortex-M3	32	10-80	80 bytes		32-512	☑	~$15-30	Low power
STM32L4	26-52	~21 mW	Cortex-M4F	80	64			256	☑	~$20-50	Low power
STM32L4+	51-83+	~14 mW	Cortex-M4F	120	640			2048	☑	~$45-60	Low power
STM32L5	~50	~5-6 mW	Cortex-M33	110	256			256-512	☑	~$25-60	Low power
STM32WB	up to 72	~33-50 mW	Cortex-M4F and M0+	64	96-256			512-1024	☑	~$20-40	Wireless
STM32U0	up to 68	~1.5 mW	Cortex-M0+	56	12-40			256	☑	~$11-30	Low power
STM32U5	up to 137	~9.12 mW	Cortex-M33	160	3072			4096	☑	~$25-90	Low power

STM32H7 vs STM32F7/F4

Feature	STM32F4	STM32F7	STM32H7
Core	Cortex-M4	Cortex-M7	Cortex-M7 / Dual-core
Max Frequency	180 MHz	216 MHz	**550 MHz**
RAM	192 KB	320 KB	**Up to 1 MB**
Flash Memory	1 MB	1 MB	**Up to 2 MB**
Graphics	No	Basic	**Advanced**
Security	Basic	Improved	**Full TrustZone**