

Manufact.	Type	Instr. Cycle	max.freq.	SRAM	FLASH	EEPROM	bus	other	package	supply volt.	flash programming	DPTR	external memory
Intel	8051	12x	12MHz	no	4kB	no	UART		DIL40, PLCC44	5V	parallel	1	yes
various	RD2 (incl. P89C668)	6x	20MHz	0.75kB (1kB-7.75kB)	64kB (+8kB)	(2kB)	UART, (I2C, SPI)	PCA, WDT	DIL40, PLCC44 (TQFP44)	5V (3V)	parallel, UART ISP, IAP	2	yes
STM	uPSD3354	4x	40MHz	32kB (program may execute)	256kB+32kB	no	2xUART (IrDA), SPI, I2C	16 macrocell PLD, freely mappable FLASH/RAM via PLD, JTAG onchip debug, PCA, WDT, BOD, 8MUX 10bit 100ksps ADC, push-pull output (8x)	TQFP52, TQFP80	5V+3.3V/3.3V	parallel, JTAG ISP, IAP	2, autotoggle, autoinc/dec	yes (80-pin only)
PHILIPS	P89LPC935	2x	12MHz	0.5kB	8kB	0.5kB	UART, I2C, SPI	onchip RC oscillator, 2x 4MUX 8bit ADC, push-pull outputs, 2x comparator, BOD, WDT, RTC, capture/compare unit	TSSOP28, PLCC28, HVQFN28	3.3V	parallel, SPI-like "ICP", IAP (enabling UART ISP)	2	no
DALLAS/MAXIM	DS80C320	4x	33MHz	no	no	no	2xUART	BOD, WDT	DIP40, PLCC44, TQFP44	5V	no	2 (different SFR)	yes
DALLAS/MAXIM	DS89C450	1x	33MHz	1kB	64kB	no	2xUART	BOD, WDT	DIP40, PLCC44, TQFP44	5V	UART ISP, IAP	2 (different SFR), autotoggle, autoinc/dec	yes
SILABS	C8051F120	1x	100MHz	8kB	128kB	no	2xUART, I2C, SPI	onchip oscillator + PLL, onchip JTAG debugger, 8MUX 12bit 100ksps ADC, 8MUX 8bit 500ksps ADC, 2x 12bit DAC, MAC, 5x 16bit timers, WDT, BOD, onchip temperature sensor, PCA, push-pull outputs, partially exchangeable	TQFP100	3.3V	JTAG, IAP	1	data only (A-bus may be non-muxed)
AD	ADuC841	1x	20MHz	2kB (can contain stack)	62kB	4kB	UART, I2C or SPI	8MUX 420kSPS 12bit ADC, on chop reference, 2x12bit DAC, PWM, on chip temperature monitor, WD, power supply monitor	PQFP52, CSP56	3V/5V	parallel, UART ISP, IAP	2, autotoggle, autoinc/dec/LSB-toggle	data only (up to 16MB)
GOAL	VERSA1	4x	16MHz	1kB	64kB (+2kB OTP)	no	2xUART, SPI, RS485	4MUX 12bit ADC BOD, MAC	PQFP44	5V	I2C (12V)	2 (different SFR)	no
GOAL	VERSA MIX VMX1020	1x	14MHz	1kB	56kB		2xUART, SPI, I2C, RS485	onchip debugger (UART), 3xcompare/capture, onchip voltage reference, 4x16-bit PWM, 4MUX 12bit 10kSps ADC, programmable current source, OPAMP, 2x digipot, 1x switch, BOD, WDT	QFP64	5V	I2C (12V)	2 (different SFR)	no
ATMEL	AT89LP4052	1x	20MHz	no	4kB	no	UART, SPI	WDT, BOD, POR, Push-pull capable IO, comparator, PWM	DIL20, SOIC20, TSSOP20	2.4-5V	parallel, SPI		1 no
WINBOND	W77E516	4x	40MHz	1kB	64kB+4kB	64B	2xUART	WDT, WaitState for XRAM	DIL40, PLCC44, QFP44	5V	parallel, IAP		2 yes
TI	MSC1211Y5	4x	30MHz	1kB (program can execute)	32kB (can be mapped data)	no	2xUART, SPI, I2C	8xMUX 24-bit ADC+PGA, 4x16bit DAC, onchip reference, WaitState, BOD, WDT, LowVoltage detect, 16-bit PWM, 2 HW breakpoints, boot+debug ROM	TQFP64	2.7-5V	parallel, UART	2 (different SFR)	yes

Manufacturer	Type	Instr. Cycle	max.freq.	Mini-benchmark		
				Instruction cycles	Oscillator cycles	Execution time
Intel	8051	12x	12MHz	49	588	49,00
various	RD2 (incl. P89C668)	6x	20MHz	49	294	14,70
STM	uPSD3354	4x	40MHz	49	196	4,90
PHILIPS	P89LPC935	2x	12MHz	49	98	8,17
DALLAS/MAXIM	DS80C320	4x	33MHz	72	288	8,73
DALLAS/MAXIM	DS89C450	1x	33MHz	72	72	2,18
SILABS	C8051F120	1x	100MHz	55	55	0,55
AD	ADuC841	1x	20MHz	74	74	3,70
GOAL	VERSA1	4x	16MHz	73	292	18,25
GOAL	VERSA MIX VMX1020	1x	14MHz	94	94	6,71
ATMEL	AT89LP4052	1x	20MHz	74	74	3,70
WINBOND	W77E516	4x	40MHz	70	280	7,00
TI	MSC1211Y5	4x	30MHz	72	288	9,60