

Benchmark - AVR

MCU	Flash Size	Interface	Autoprogram [s]	Write [s]	Read [s]	Programming speed [kBytes/s]	Read speed [kBytes/s]
ATXmega128A1U	128 kB	JTAG (12MHz)	2.9	2.3	0.5	60	580
-----	-----	PDI (12MHz)	3.2	2.5	0.8	53	280
ATmega644PA	64 kB	JTAG (7.5MHz)	3.1	1.8	0.8	46	250
-----	-----	SPI (200 kHz)	31	15.5	15	4.3	4.4
ATmega4809	48 kB	UPDI (900 kHz)	3.8	3.1	1.0	17	60
ATtiny814	8 kB	UPDI (900 kHz)	1.2	0.9	0.4	11.5	57
ATtiny48	4 kB	SPI (200 kHz)	2.8	1.1	1.1	3.6	4.6
ATtiny102	8 kB	TPI (2 MHz)	2.8	2.5	0.3	0.42	27

Note:

- Autoprogram time → Interface initialization, Erase, Program and Verify (Flash only)
- Write time → Interface initialization, Program (Flash only)
- Read time → Interface initialization, Read (Flash only)
- Programming speed – Whole flash programming speed without interface initialization
- Read speed – Flash reading speed without interface initialization