

Timer Data with 16MHz clock

ATmega48/88/168/328 etc.

Timer0	CS02	CS01	CS00	Divisor	clk _{T0} Hz	Resolution nSec	Overflow uSec	f _{MAX} (OCR0A = 00)	f _{MIN} (OCR0A = 255)
	0	0	0						
	0	0	1	1	16000000	63	16	8000000.0	31250.0
	0	1	0	8	2000000	500	128	1000000.0	3906.3
	0	1	1	64	250000	4000	1024	125000.0	488.3
	1	0	0	256	62500	16000	4096	31250.0	122.1
	1	0	1	1024	15625	64000	16384	7812.5	30.5
	1	1	0						
	1	1	1						

Timer1	CS12	CS11	CS10	Divisor	clk _{T1} Hz	Resolution nSec	Overflow uSec	f _{MAX} (OCR1A = 00)	f _{MIN} (OCR1A = 65536)
	0	0	0						
	0	0	1	1	16000000	63	4096	8000000.0	122.1
	0	1	0	8	2000000	500	32768	1000000.0	15.3
	0	1	1	64	250000	4000	262144	125000.0	1.9
	1	0	0	256	62500	16000	1048576	31250.0	0.5
	1	0	1	1024	15625	64000	4194304	7812.5	0.1
	1	1	0						
	1	1	1						

Timer2	CS22	CS21	CS20	Divisor	clk _{T2} Hz	Resolution nSec	Overflow uSec	f _{MAX} (OCR2A = 00)	f _{MIN} (OCR2A = 255)
	0	0	0						
	0	0	1	1	16000000	63	16	8000000.0	31250.0
	0	1	0	8	2000000	500	128	1000000.0	3906.3
	0	1	1	32	500000	2000	512	250000.0	976.6
	1	0	0	64	250000	4000	1024	125000.0	488.3
	1	0	1	128	125000	8000	2048	62500.0	244.1
	1	1	0	256	62500	16000	4096	31250.0	122.1
	1	1	1	1024	15625	64000	16384	7812.5	30.5