

The type for the calculation is the following:

$$f_{timer} = f_{system} / N_{prescaler}$$

$$value = T * f_{timer}$$

The ATmega4808 operates at maximum $F=20\text{ MHz}$ and $N_{prescaler}$ takes the value we have set for the clock frequency. For example, in our code we gave a value of $value=20$ so the timer time is:

$$f_{timer} = 20\text{MHz} / 1024 = 19,531\text{KHz}$$

$$T = value / f_{timer} = 1,024\text{ms}$$