

Smart Sensors – PBL 1 – Task 3 (Calculation of blinking period) *Group 4*

Counter Bit length (Bit used for LED state): 23

Clock frequency (HZ): 12000000

Change state every counter: $2^{23} = 8388608$.

duration of a state (on/off) (s): $8388608 / 12000000 = 0.6990506666666667$

period, complete cycle (s): $0.6990506666666667 * 2 = \mathbf{1.3981013333333334}$

frequency (hz): $1 / \text{period} = 0.7152557373046875$