

$$T_{\max} = \frac{256 \times 1024}{16M} = 16.384 \text{ ms}$$

$$n = \frac{5000 \text{ ms}}{16.384 \text{ ms}} = 30.52 \approx 30$$

$$n = \frac{10000 \text{ ms}}{16.384 \text{ ms}} = 61.04 \approx 61$$