

4/4/13 AME 3623

Quiz #8

(A) Given: 16 MHz clock
Timer 0
Prescaler: 64

What is the counting frequency?

$$\frac{16,000,000 \text{ ticks/sec}}{64 \text{ ticks/tick}} = 250,000 \text{ ticks/sec} \quad (250 \text{ kHz})$$

(B) Given: 16 MHz clock
Timer 1
Prescaler: 256

How long does it take to count from ϕ to 34252?

$$\frac{256 \text{ ticks/tick}}{16,000,000 \text{ ticks/sec}} \times 34252 \text{ ticks} = 0.548 \text{ sec}$$