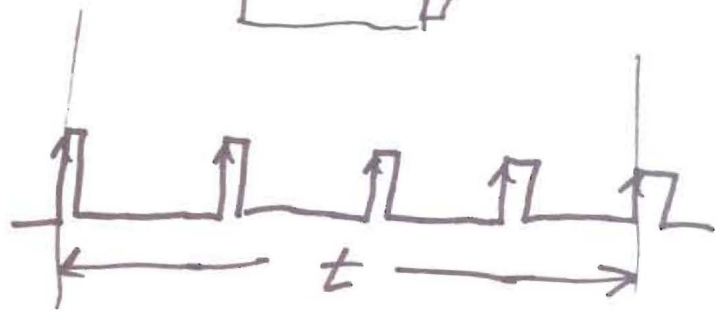
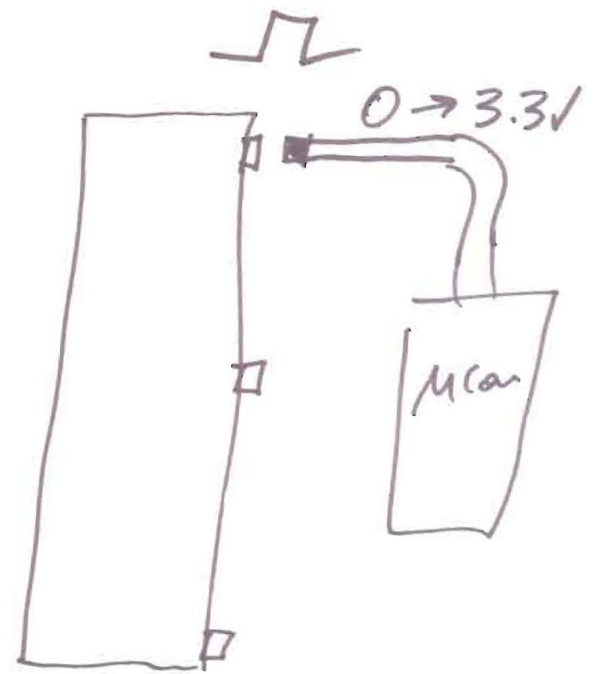
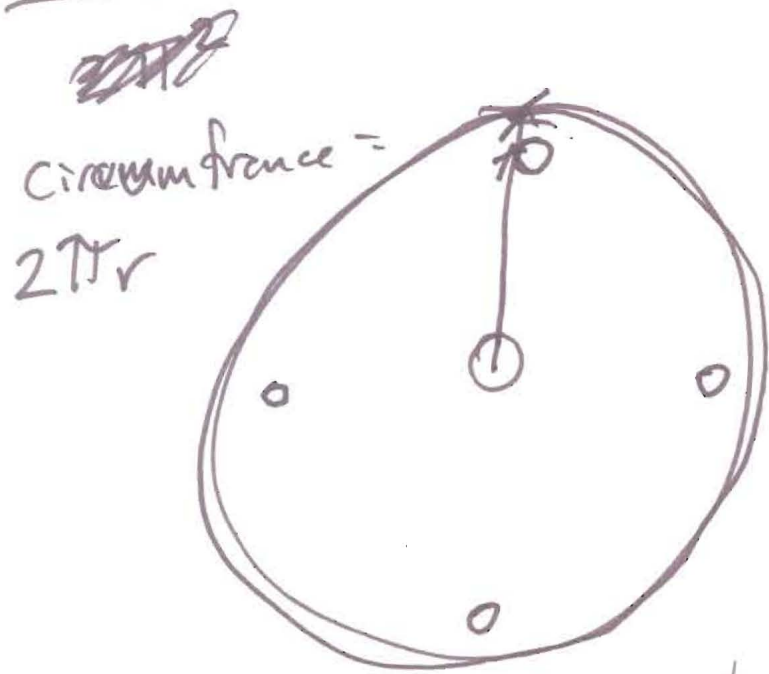
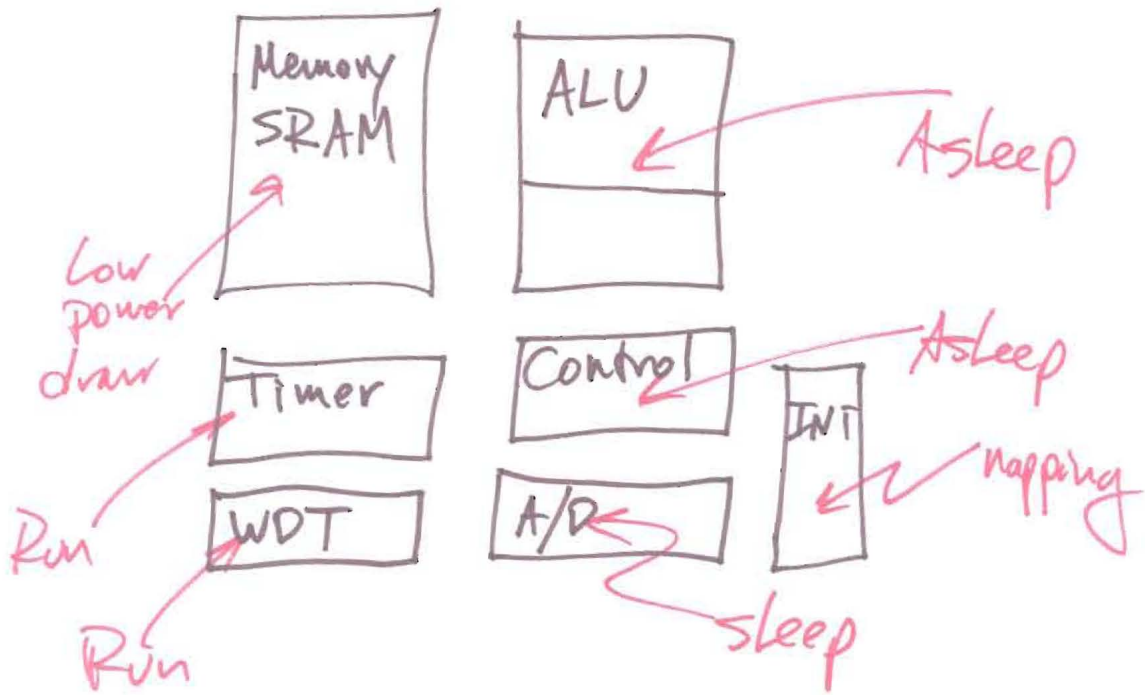


ECOR 4101/5101 - Lecture 18

①



ECOR410/5101 - Lecture 18

$$\frac{2\pi r}{t} = \text{speed}$$

(2)

$$r = .4 \text{ m}$$

$$\text{speed} = 1 \text{ m/sec}$$

Interrupt Once every 10 seconds
How many "events" should I see

$$\frac{1 \text{ m}}{\text{Sec}} = \frac{2\pi \cdot 0.4 \text{ m}}{t}$$

$$n \text{ events} = \frac{4 \text{ events}}{\uparrow \text{revolution}} \times \frac{1 \text{ revolution}}{2\pi \cdot 0.4 \text{ m}} \times \frac{10 \text{ sec}}{1} \times \frac{1 \text{ m}}{1 \text{ sec}}$$

$$= \frac{40}{.8\pi}$$

$$= 15.9 \text{ events}$$

