Motor enable Timer Transistor design
Specs

1 Load 12 Dual peripheral drivers 15 ma = 180 ma

2 supply V = 5V

3 Transistor 2N2907A $h_{FE} = 30$

4 Series resistor – don't need

5 —

6 —

7 Collector current : 180 ma

8 Base current $I_B = 2\dfrac{I_e}{h_{FE}} = \dfrac{.18 \times 2}{30} = .012$ Amp

9 Base resistor $R_B = \dfrac{V_i - V_{BE}}{I_B}$

$$= \dfrac{5 - .7}{.012} = 358\ \Omega$$

10

To Vcc on Dual Peripherals

510 Ω

B

C

E

+5V