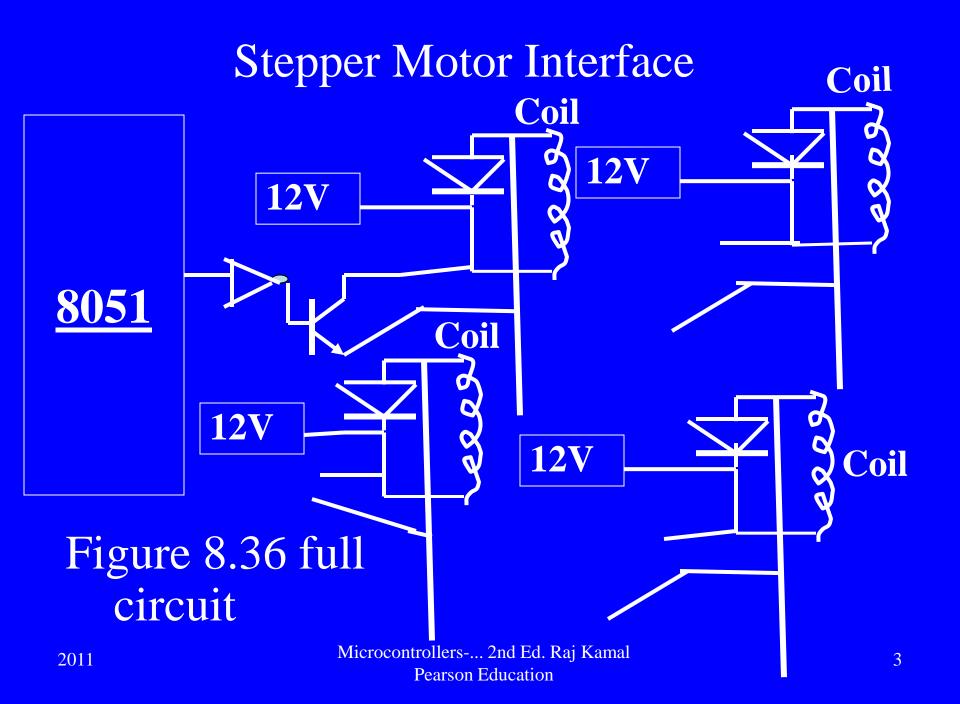
Chapter 8

Digital and Analog Interfacing Methods

Lesson 9 Part e

Stepper Motor Interface



Stepper Motor(s) Applications

- Printer
- Drive
- Robot

Stepper Motor

- one step- A motor step angle example-1.8°
- half step at an instance

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Four Pole Stepper Motor

Four Coils A, B, C and D, cyclically fed current for one steps at a time rotation
Pair of Coils cyclically fed current for one steps at a time rotation

Stepper Motor Mode 1

•A, B, C, and D given the current cyclically at the successive instances T0, T1, T2,....to rotate in one direction
• *Programming Example 8.10*

Stepper Motor Mode 2

•Stepper Coils A, B, C, and D given the current cyclically at the successive instances T0, T1, T2,....to rotate in another direction

•Programming Example 8.10

Four Stepper Motors Circuit

• Refer Figure 8.37

Summary

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Stepper Motor

• Four Coils, each coil interfaces to a port bit

End of Lesson 9 Part e

Stepper Motor Interface

THANK YOU

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Key, keypad and keyboard

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