

Chapter 8

Digital and Analog Interfacing Methods

Lesson 14 Part c

Hall effect based based Proximity of Magnet Sensors

Position Proximity Sensors

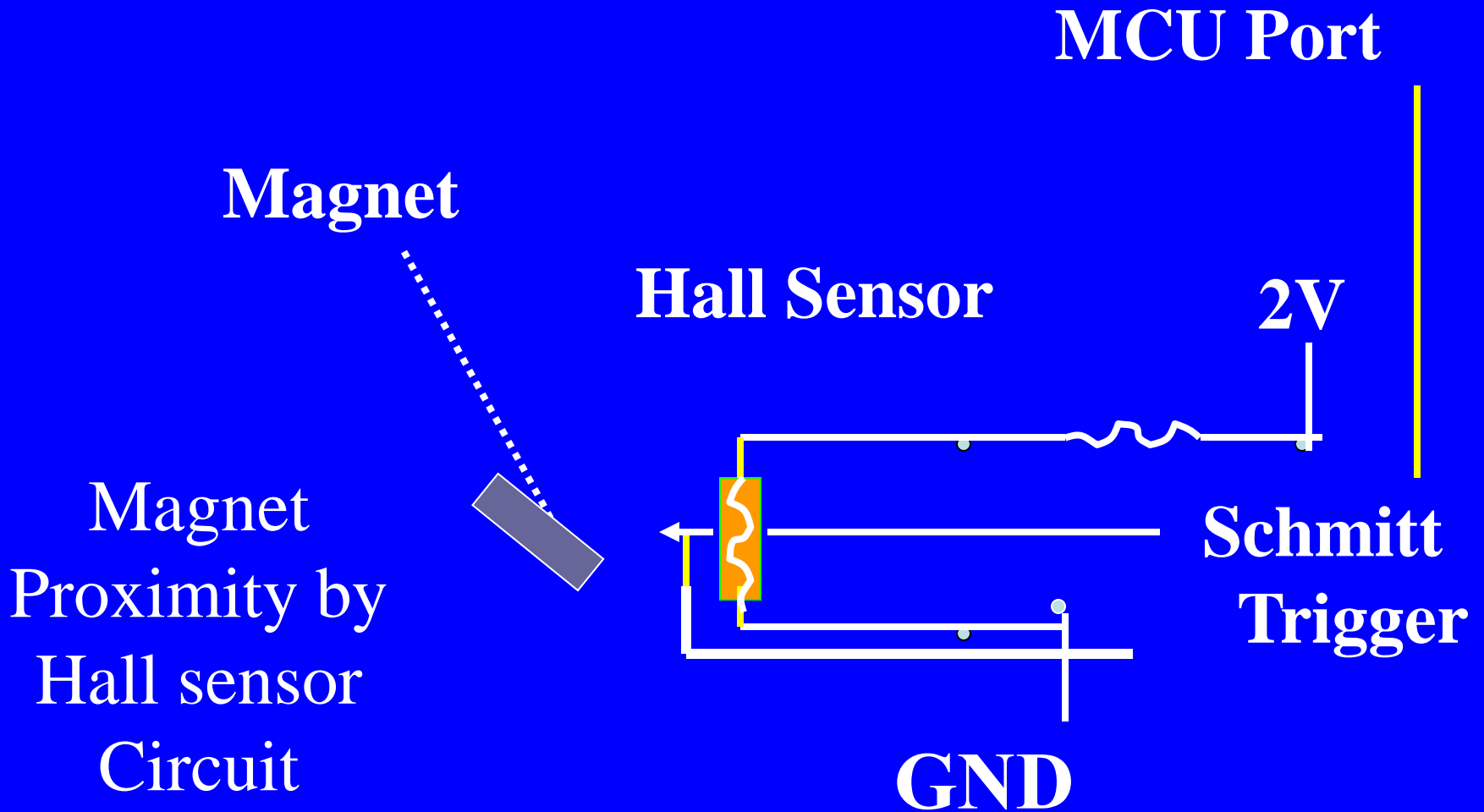
- Hall effect is that a Hall Voltage along z axis generates if there is magnetic field along x and current flowing in a semiconductor along y-axis.

Position Proximity Sensors

- Motion detection for a moving a magnet attached to wind cup shaft in a wind-velocity measuring system
- Finding the motor rpm

Position Proximity Sensors

- Broken part detection
- Index Position sensing, AT origin a magnet is placed. When shaft comes in vicinity, the Hall sensor attached to the shaft induces the Hall current



Summary

We learnt

- Hall sensor senses Hall voltage change generated by a perpendicular magnetic field in a current carrying semiconductor

End of Lesson 14 Part c

Hall effect based based Proximity of Magnet Sensors