

Arduino Bootcamp : Learning Through Projects

Remote Controlled Car - Understanding Bluetooth Connectivity - Part 3

Lecture Objectives

- In this lecture you will learn:
 - What is Bluetooth
 - How this technology will be used in our project
 - Understanding the Bluetooth Module HC-05
 - How to connect the Bluetooth Module to our Arduino

Bluetooth Technology



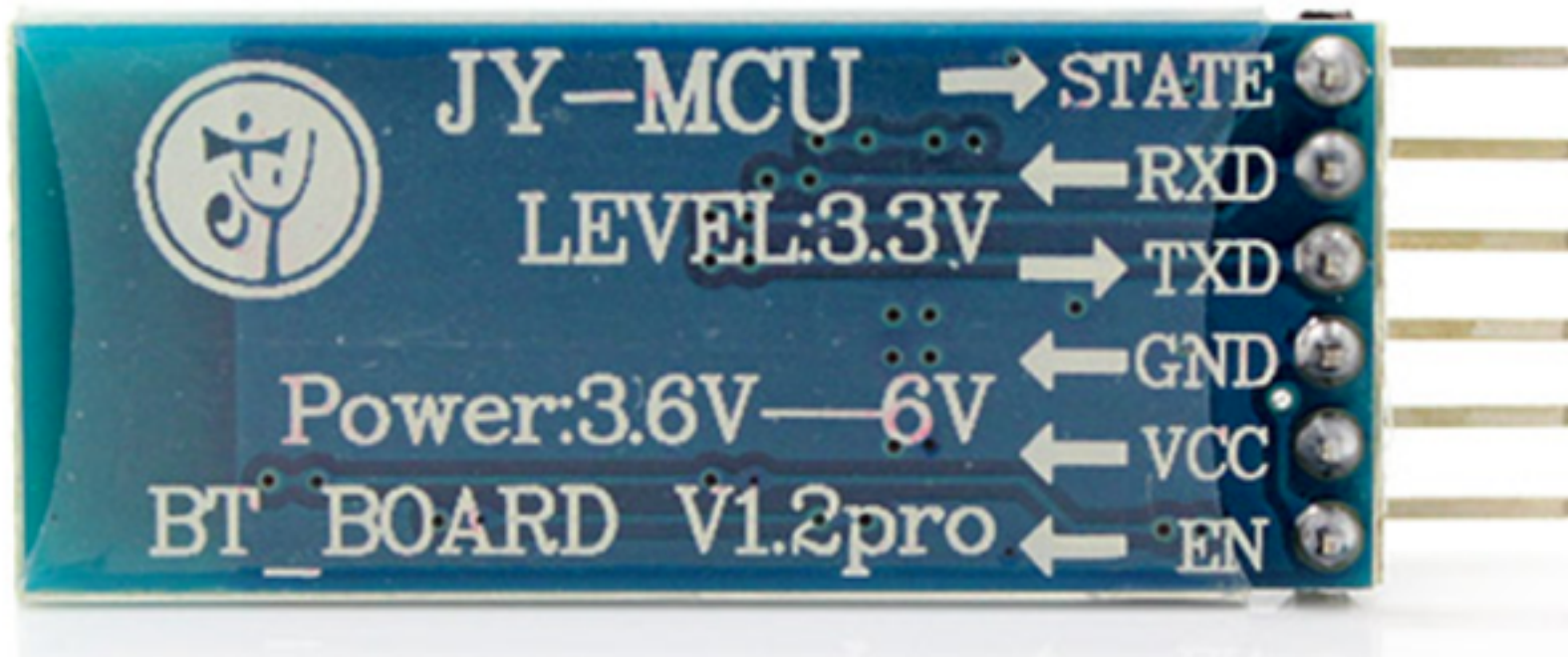
A networking standard

- Provides physical level agreements
- Provides protocol level agreements

Bluetooth Characteristics

- Wireless
- Inexpensive
- Signals are very weak so it uses very little power
- Has a limited range of 10 meters (32 feet)
- Does not rely on line of sight like IR
- Can connect up to 8 devices
- Has some built-in security to allow pairing of devices

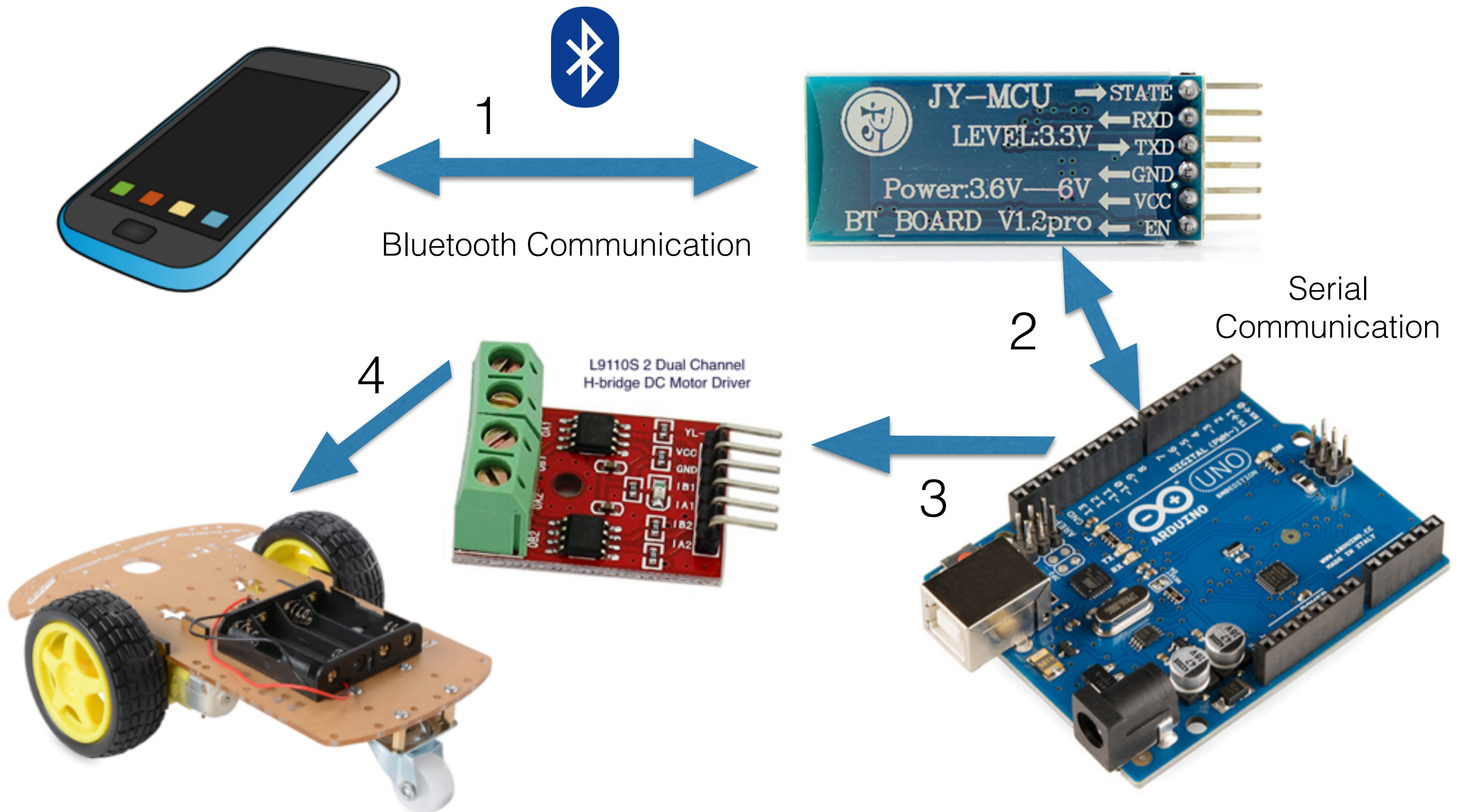
Bluetooth Module - HC-05



- Uses Serial Communications
- Default Password 1234

HC-05 Pin	Arduino Pin
RXD	TX - Pin 1
TXD	RX - Pin 0
GND	GND
VCC	5 V

Bluetooth Project Operation



Summary

- In this project you learnt:
 - What is Bluetooth technology
 - How we will use this in our project
 - How the HC-05 Bluetooth module can be used and how to interface it with our Arduino