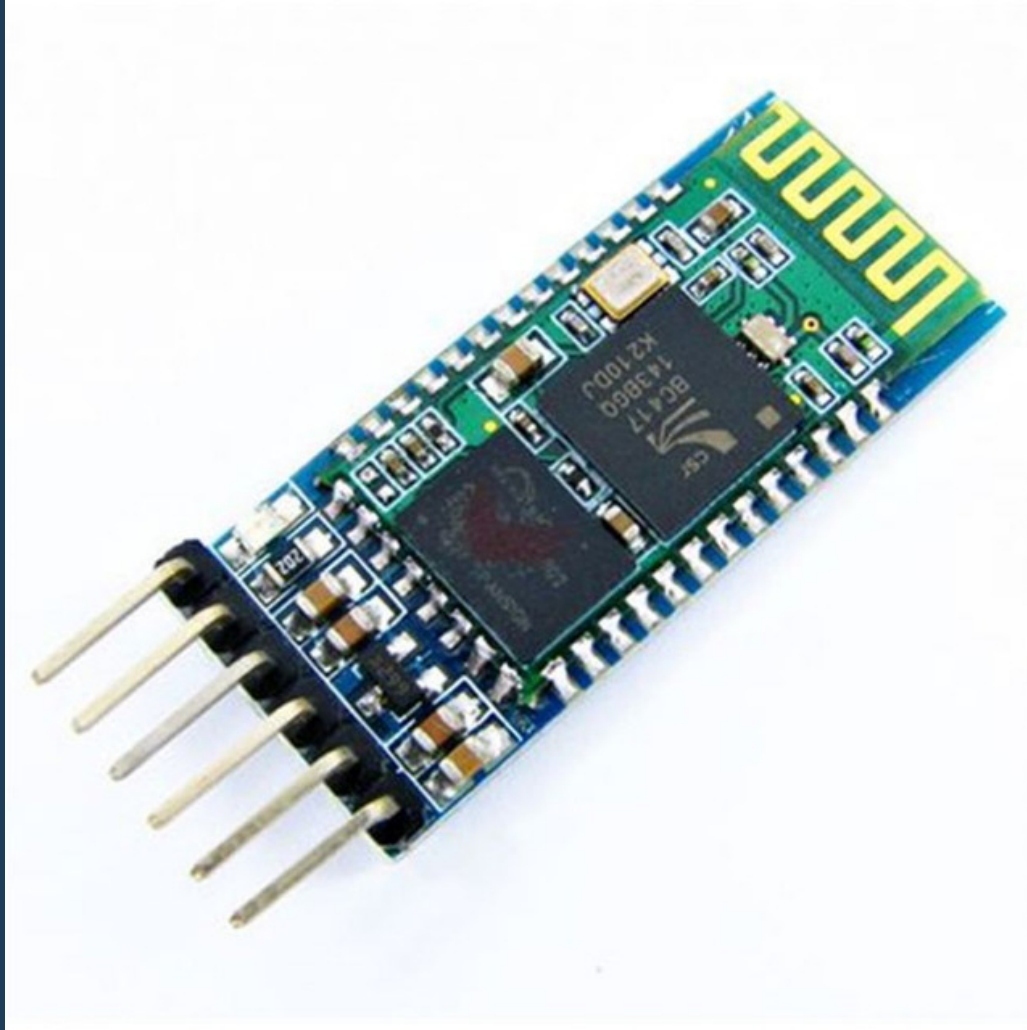


Bluetooth Module HC-05

A BRIEF OVERVIEW



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Introduction

HC-05 module is an easy to use Bluetooth SPP (Serial Port Protocol) module, designed for transparent wireless serial connection setup. The HC-05 Bluetooth Module can be used in a Master or Slave configuration, making it a great solution for wireless communication.



How to use the HC-05 Bluetooth Module

- The HC-05 is a very cool module which can add two-way (full-duplex) wireless functionality to your projects. You can use this module to communicate between two microcontrollers like Arduino or communicate with any device with Bluetooth functionality like a Phone or Laptop.
- The HC-05 has two operating modes, one is the Data mode in which it can send and receive data from other Bluetooth devices and the other is the AT Command mode where the default device settings can be changed. We can operate the device in either of these two modes by using the key pin as explained in the pin description.

Pin Description

PIN 1- ENABLE / KEY

Used to toggle between Data Mode (set low) and AT Command mode (set High).
Default- Data mode

PIN 2 - VCC

Powers the module. Supply Voltage- +3.3V to +5V

PIN 3- GROUND

Ground pin of module.

PIN 4- TX TRANSMITTER

Transmits Serial Data. received via Bluetooth

PIN 5- RX RECEIVER

Receives Serial Data. Data received by this pin is broadcasted via Bluetooth

PIN 6- STATE

This pin is connected to on board LED. Can be used as a feedback tp check proper working of Bluetooth..

LED

Blinks to indicates the status of Module

BUTTON

Used to control Key/Enable pin to toggle between Data and Command mode

How to connect HC-05 with Arduino UNO?

Hardware and Software Required

- HC-05 Bluetooth Module
- Arduino UNO
- Arduino IDE (Software)

APPLICATIONS

- Wireless communication between two microcontrollers
- Communicate with Laptop, Desktops and Mobile phones
- Wireless Robots
- Home Automation