

Iteduino BT 1.0



Overview

Iteduino-BT is an Arduino compatible board with a master/slave Bluetooth Module HC-05. It based on Arduino Duemilanove, 100% compatible to its existing program, shield and IDE. On the hardware part, remarkable changes are taken to improve the flexibility and user experience.

Basic features

- Design for Bluetooth communication.
- Inherits all of Arduino Duemilanove' s features.
- Compatible with Arduino UNO/Duemilanove pins, holes and dimensions.
- 3.3V/5V Operating Voltage selection
- More visible location of Indicator LEDs
- Wide range external input from 7~23V DC
- All pins out for Sensor and Servo
- UART/IIC interface breakout

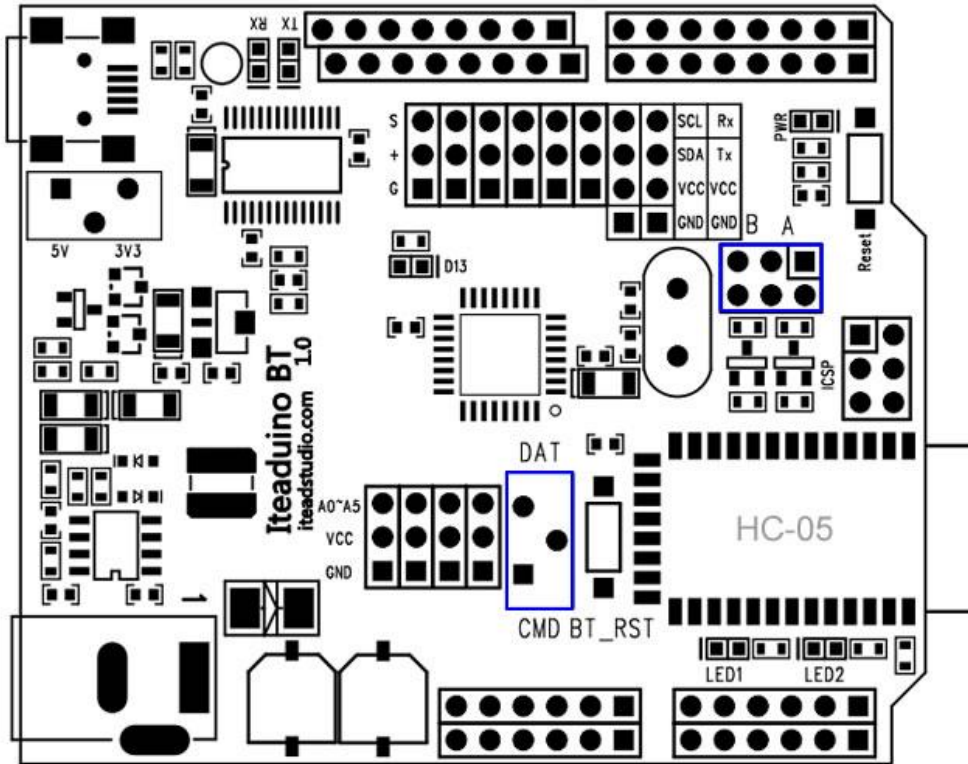
Specifications

Microprocessor	ATmega328P
PCB size	10mm X 82mm X 1.6mm
Indicators	Power,TX,RX,D13,LED1,LED2
Power supply(recommended)	7-23V DC
Power supply(limits)	23 VDC (max)
Communication Protocol	UART,SPI,IIC
Clock Speed	16MHz
RoHS	Yes

Electrical Characteristics

Specification	Min	Type	Max	Unit
Input voltage	7	-	23	VDC
Operating Voltage	-	3.3/5	-	VDC
DC Current per I/O Pin	-	40	-	mA

Hardware



Digital/Servo Interface: D0~D13 pin

Sensor Interface: A0 A1 A2 A3 A4 A5 pin

HC-05 operate mode set switch

There is a 1P2T switch for HC-05 operation mode set. When the switch is set on "DAT" side, the HC-05 will work in the data mode. When the switch is set on "CMD" side, the HC-05 will work in command mode, in this mode, Iteaduno/FT232R could send the AT command to configure the HC-05 module (Using Baud Rate 38400).

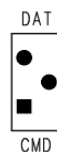


Figure 1

Communicate mode set jumper

There is a jumper to set the connections of HC-05. When the jumper is set in A, the HC-05 communicates to FT232R, when the jumper is set to B, the HC-05 communicates to Atmega328P(board).

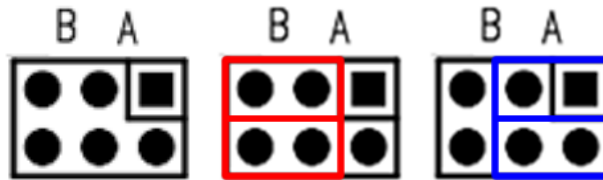


Figure 2A

Figure 2B

Figure 2C

Figure 2A: Communicate mode set jumper

Figure 2B: The jumper is set to B

Figure 2C: The jumper is set to A

Links and References

- ITEAD Studio Site: iteadstudio.com
- Arduino site: arduino.cc
- Getting started with Arduino: arduino.cc/en/Guide/Windows

Revision History

Rev.	Description	Release date
v1.0	Initial version	2011-9-15
V1.1	Fix some description bug	2012-03-06
V1.2	Add some description	2012-04-23