ITead Studio
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Iteaduino BT 1.0

Overview

Iteaduino-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
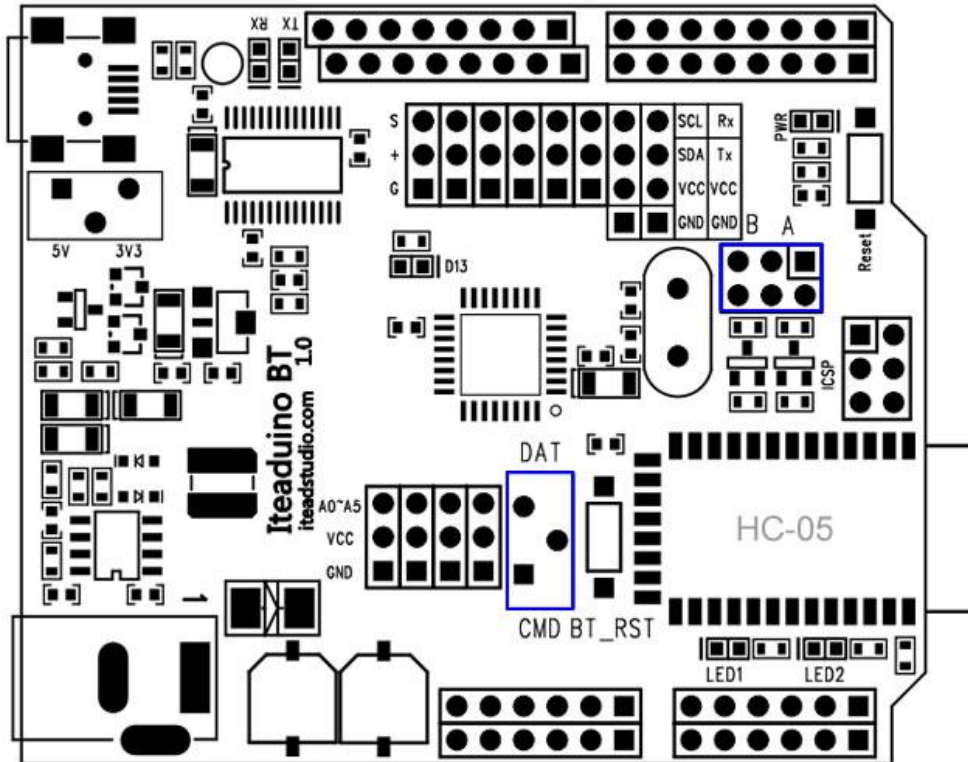- All pins out for Sensor and Servo
- UART/IIC interface breakout

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, Iteaduino/FT232R could send the AT command to centigrade the HC-05 module (Using Baud Rate 38400).
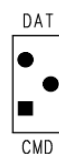

Figure 1

Communicate mode set jumper

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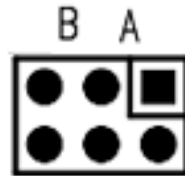

Figure 2

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