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EASY TO USE, VERSATILE ROBOTICS KITS

Robokits Bluetooth Module
UART, PCM & USB compatible
[RKI-1546]

Users Manual & AT Command Set

Robokits India - http://www.robokits.co.in

Robokits World - http://www.robokitsworld.com

info@robokits.co.in

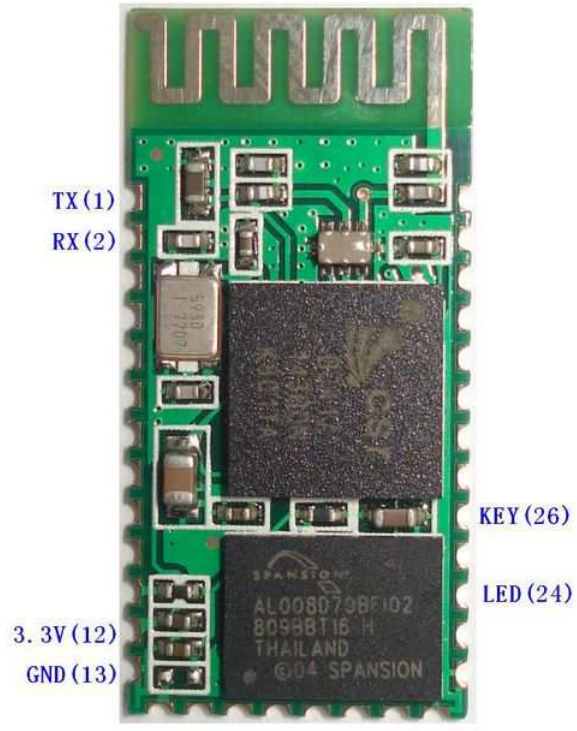
Robokits Bluetooth Module

Bluetooth Module is a Drop-in replacement for wired serial connections, transparent usage. You can use it simply for serial port replacement to establish connection between MCU and GPS, PC to your embedded project / Robot etc. The module can be configured for baud rates 1200 to 115200 bps.

Features

- **Use the CSR Bluetooth chip, compatible with the Bluetooth V2.0 protocol**
- **Operating Voltage 3.3V (3.0V to 4.2V compatible)**
- **Adjustable baud rate : 1200, 2400, 4800, 9600,19200, 38400, 57600, 115200**
- **Size: 28mm x 15 mm x 2.35mm**
- **Operating Current 40 mA**
- **Sleep Current < 1mA**

Pin-Outs for Bluetooth Module



PIN description :

PIN1	**UART_TXD , TTL/CMOS level, UART Data output**
PIN2	**UART_RXD, TTL/COMS level, s UART Data input**
PIN11	**RESET, the reset PIN of module, inputting low level can reset the module, when the module is in using, this PIN can connect to air.**
PIN12	**VCC, voltage supply for logic, the standard voltage is 3.3V, and can work at 3.0-4.2V**
PIN13	**GND**
PIN22	**GND**
PIN24	**LED, working mode indicator** **Slave device: Before paired, this PIN outputs the period of 102ms square wave. After paired, this PIN outputs high level.** **Effect of Master Device Status (Other device status): On the condition of having no memory of pairing with a slave device, this PIN outputs the period of 110ms square wave. On the condition of having the memory of pairing with a slave device, this PIN outputs the period of 750ms square wave. After paired, this PIN outputs high level.**
PIN26	**For master (other) device, this PIN is used for emptying information about pairing. After emptying, master device will search slaver randomly, and then remember the address of the new got slave device. In the next power on, master device will only search this address.**

Default Settings:

- **Slave, 9600 baud rate, N, 8, 1. Pincode 1234**

AT commands:

Activity	AT Command	Response	Comment
Communications Test	AT	OK	
Change baud rate	AT+BAUD1	OK1200	Set Baud Rate to 1200bps
	AT+BAUD2	OK2400	Set Baud Rate to 2400bps
	AT+BAUD3	OK4800	Set Baud Rate to 4800bps
	AT+BAUD4	OK9600	Set Baud Rate to 9600bps
	AT+BAUD5	OK19200	Set Baud Rate to 19200bps
	AT+BAUD6	OK38400	Set Baud Rate to 38400bps
	AT+BAUD7	OK57600	Set Baud Rate to 57600bps
	AT+BAUD8	OK115200	Set Baud Rate to 115200bps
Set Device Name	AT+NAMERobokits	OKRobokits	Set device name "Robokits"
Set Pin Code	Sent : AT+PIN0000	OK0000	Set Pin Code to 0000

Note : AT Commands in this module will work only if sent to device within 1 second. There is no need to send <CR><LF> after AT command. Correct AT command sent within 1 Second will be accepted.

If you are using software like hyperterminal, copy the command to clipboard and then use Paste to host in Edit menu or simply press Ctrl+V.

Before pairing, the module is in AT command mode. After pairing AT commands will not work and module will enter transparent communication mode.

Pairing is only possible from other master Bluetooth device like PC or Phone. The module cannot pair to other device as its always in slave mode.

Service and Support

Service and support for this product are available from Robokits India. The Robokits Web site (http://www.robokits.co.in) maintains current contact information for all Robokits products.

Limitations and Warrantees

The **Robokits Bluetooth Module** is intended for personal experimental and amusement use and in no case should be used where the health or safety of persons may depend on its proper operation. Robokits provides no warrantee of suitability or performance for any purpose for the product. Use of the product software and or hardware is with the understanding that any outcome whatsoever is at the users own risk. Robokits sole guarantee is that the software and hardware perform in compliance with this document at the time it was shipped to the best of our ability given reasonable care in manufacture and testing. All products are tested for their best performance before shipping, and no warranty or guarantee is provided on any of them. Of course the support is available on all of them for no cost.

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