

### Description:

ADIY BT986 TTL is a high-performance, highly integrated Bluetooth 5.2 BR/EDR/BLE, designed to operate on the 2400MHz to 2480 MHz ISM frequency band. Abundant peripherals, power-on reset and UART, arithmetic accelerators further reduce the cost and size of the entire system. Supports communicating with the FeasyBlue app and many other Bluetooth apps. By default, Feasycom standard firmware is built-in, and customized firmware is also available.

### Features:

1. 5V DC input power (Recommended)
2. Bluetooth 5.2 Classical/BLE Proprietary double-mode RF SOC
3. UART programming and data interface (baud rate up to 921600 bps)
4. Digital Peripherals
5. UART, up to 400 kbps
6. LED drive capability
7. AES256 HW encryption

8. USB2.0 full speed, 4Eps, support host mode
9. Dual Core Digital Architecture
10. ARM Cortex-M0 Core for application.
11. CPU clock speed up to 192 MHz
12. 2.4GHz Transceiver
13. Single-end RFIO -95dBm in BLE mode
14. Support 250kbps, 1/2/3 Mbps data rates.

#### Antenna:

- For this module, the default mode of the antenna is internal antenna.
- The user can connect the 50 Ohm antenna directly to the RF port.
- 2402–2480 MHz TX output power of +5dBm.
- Receiver to achieve maximum sensitivity -95dBm @ 0.1% BLE.

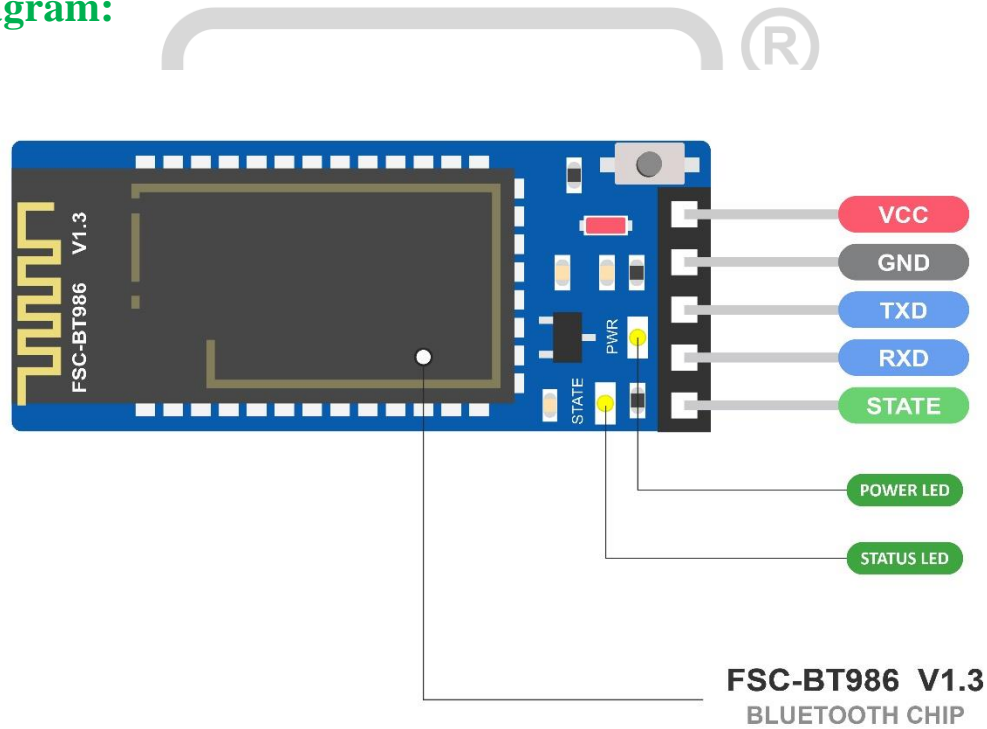
#### Serial Interfaces:

ADIY BT986 TTL provides one channel of Universal Asynchronous Receiver/Transmitters (UART)(Full-duplex asynchronous communications). The UART Controller performs a serial-to-parallel conversion on data received from the peripheral and a parallel-to-serial conversion on data transmitted from the CPU. Each UART Controller channel supports ten types of interrupts. This is a standard UART interface for communicating with other serial devices. The UART interface provides a simple mechanism for communicating with other serial devices using the RS232 protocol. When the module is connected to another digital device, UART\_RX and UART\_TX transfer data between the two devices. This module output is at 3.3V~ 3.6V CMOS logic levels (tracks VCC). Level conversion must be added to the interface with an RS-232 level compliant interface.

**Interface:**

USB to Serial Device	HLK-B50 Module
5V	VCC
GND	GND
RX	TX
TX	RX

**Pin Diagram:**



STATE: Status Indication