FSC-DB004 User Guide

Release 3.8.0

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[中文版]

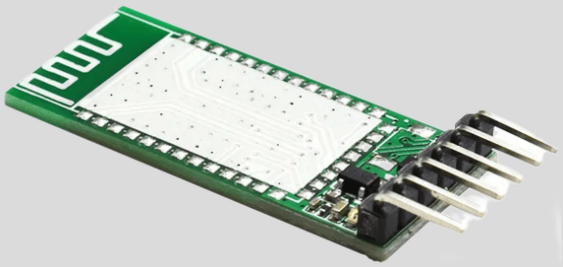
This guide introduces how to use the FSC-DB004-PIN and provides further information about this development board.

Chapter 1

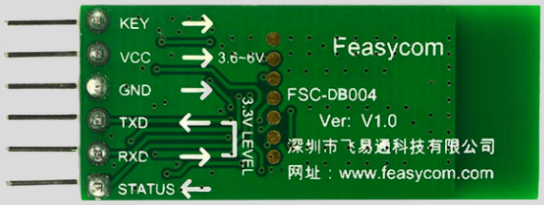
Overview

FSC-DB004-PIN development board supports Arduino Bluetooth connection development. It is compatible with various 13mm×26.9mm stamp 36-pin packaged Bluetooth modules, such as the FSC-BT616, FSC-BT618, FSC-BT826 Series, FSC-BT836 Series, and FSC-BT9101 Series, which are designed for data transmission applications.

Compared with using a single Bluetooth module, the FSC-DB004-PIN development board offers greater convenience and usability for users to quickly test products, thereby saving time during the testing process and ensuring safety.



FSC-DB004 - Side



FSC-DB004 - Back

Chapter 2

Feature

- LED indicators
- Key, VCC, GND, TXD, RXD, STATUS pin header expansion
- Flexible integration of 13mm×26.9mm stamp 36-pin form factor Bluetooth modules
- Flexible connection to other Feasycom USB-to-serial evaluation boards, while compatible with external connection of other evaluation boards

Chapter 3

Scope of Application

Applicable to :

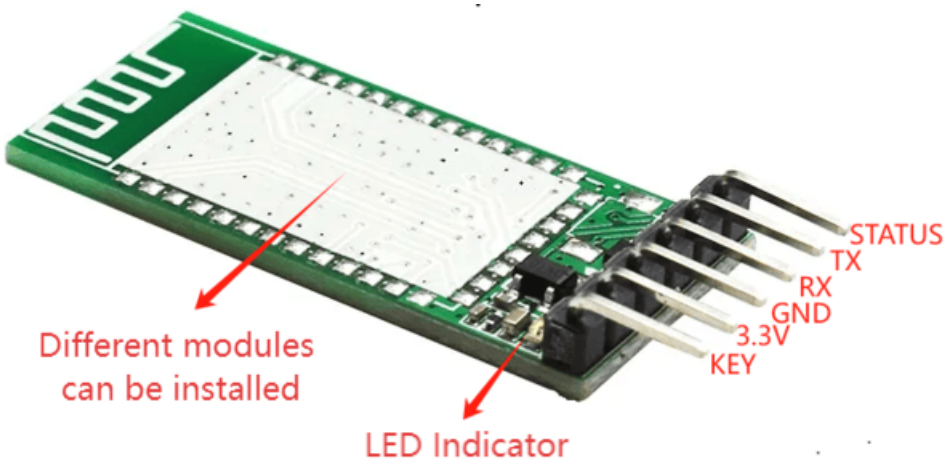
- FSC-BT616
- FSC-BT618
- FSC-BT826 Series
- FSC-BT836 Series
- FSC-BT9101AI

  …

and other Feasycom Bluetooth modules with 13mm×26.9mm stamp-type 36-pin package, for data transmission communication development.

Chapter 4

Functional Components



Main Components	Description
Module Area	Bluetooth module placement area,Support 13mm*26.9mm stamp 36-pin package Bluetooth modules.
LED	LED light
VCC	3.3V power supply
GND	GND
TXD	UART_TX
RXD	UART_RX
STATUS	Connection status pin

Chapter 5

What You Need

Take FSC-BT9101AI Bluetooth module as an example:

5.1 Required Hardware

- 1 x Development Board A : FSC-DB004-BT9101AI, FSC-DB004-PIN development board with Feasycom FSC-BT9101AI(optional) Bluetooth dual-mode data transmission module integrated.
- 1 x Development Board B: FT232RL USB-TTL Serial Converter or select the Feasycom FSC-DB005 USB-TTL Serial Converter, used to connect PC and FSC-DB004-BT9101AI. (Optional)
- 1 x PC（Windows / Mac）
- 4 x Dupont Wire Female-to-Female

5.2 Software and Setup

- Feasycom Serial Port Tool : A serial communication analysis tool based on Windows PC.
- FeasyBlue App : Feasycom APP & SDK resource supporting Android and iOS, which enables functions such as Bluetooth BLE & SPP data communication test, Feasycom module firmware version reading, firmware OTA upgrade, OTA command, parameter configuration, etc.
- Communication Interface : UART
- UART Configuration: 115200/8/N/1 (Feasycom general firmware default)

Chapter 6

Hardware Access

6.1 Power-on

- 3V3 / GND pin power supply

6.2 Hardware Access Note

- Before powering on, ensure the development board is intact and all components are secure without looseness or shorts;
- Development Board A (FSC-DB004-BT9101AI) and Development Board B (USB-TTL Serial Converter) are connected via Dupont wires for TXD/RXD/VCC/GND, and Development Board B (USB-TTL Serial Converter) is connected to the PC via USB;
- After power-on, the LED indicator of Development Board A (FSC-DB004-BT9101AI) flashes continuously, indicating that the development board has been successfully powered on and the Bluetooth module has been connected.

Chapter 7

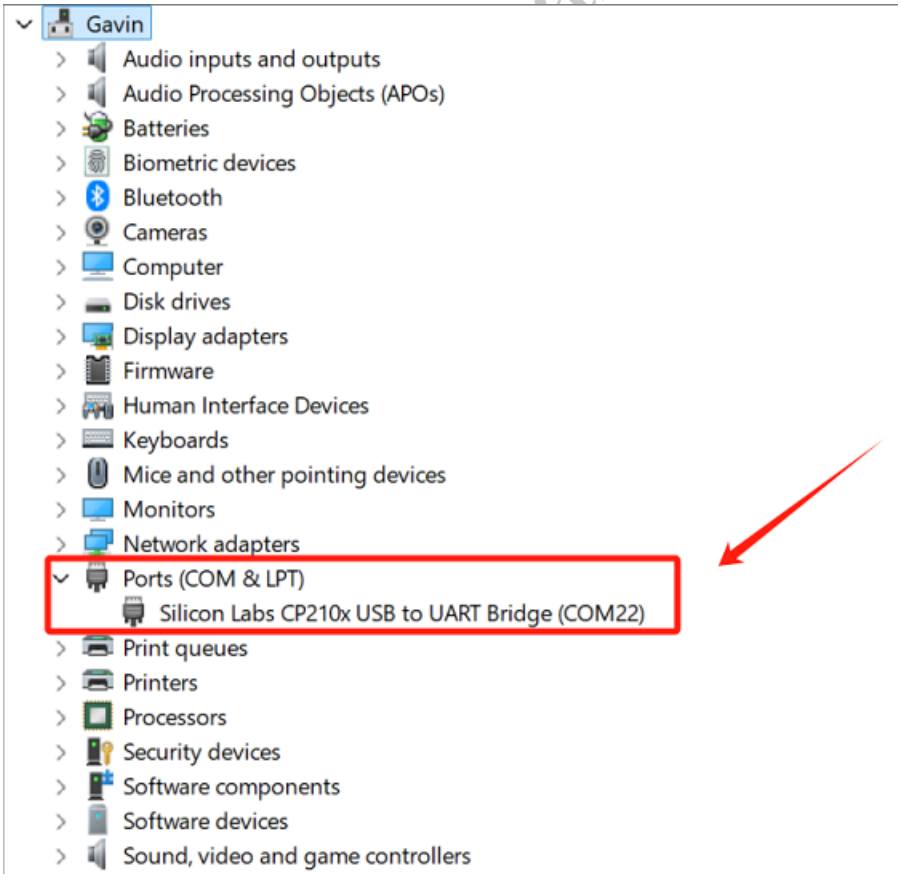
Communication Test

1.Power Supply Connection

Connect the intact Development Board A (FSC-DB004-BT9101AI) and Development Board B (USB-TTL Serial Converter) via Dupont wires for TXD/RXD/VCC/GND, and Development Board B (USB-TTL Serial Converter) is connected to the PC via USB.

2.Serial Port Recognition

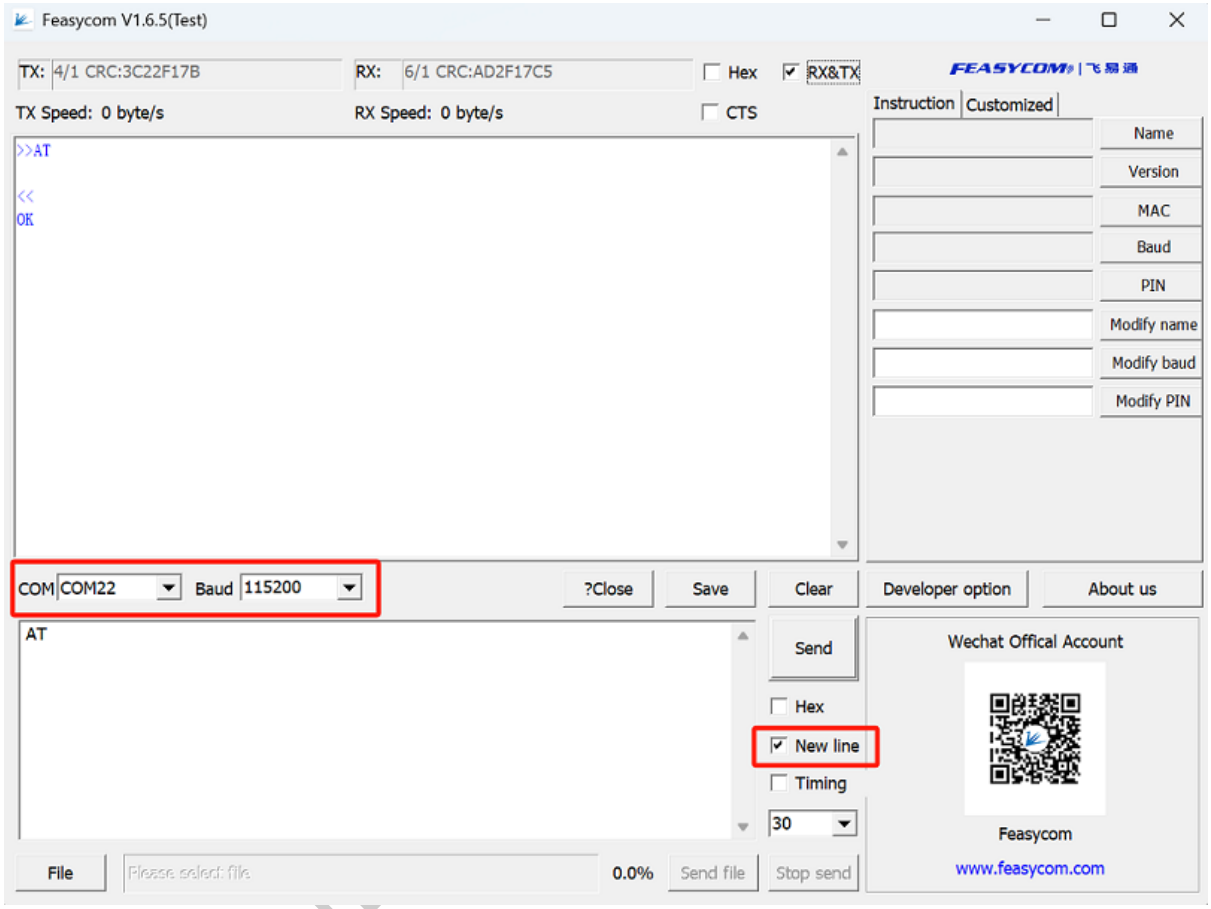
The PC detects the USB serial device and generates a virtual COMx.



3.UART Communication Test

Run the Feasycom Serial Port Tool on the PC, set the correct **COM** and **Baud**, and check the **New Line**.

Send the UART communication test command `AT`. If the response is `OK`, it indicates the serial communication test is successful.



Chapter 8

Related Documents

- FSC-DB004 DK Board Schematic (PDF)
- FSC-BT9101AI General Dual-Mode Data AT Command Manua (LINK)

Chapter 9

Contact Information

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Chapter 10

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