

Bluetooth Module BF10

1. Key Features

- * Bluetooth Spec v2.0+EDR Compliant
- * Enhanced Data Rate (EDR) compliant with V2.0.E.2 of specification for both 2Mbps and 3Mbps modulation modes
- * Class 2 type Output Power
- * Full Speed Bluetooth Operation with Full Piconet Support
- * Scatternet Support
- * 3.3V operation
- * Minimum External Components
- * USB,UART,SPI,PCM interface
- * Support for 8Mbit External Flash Onboard
- * Support for 802.11Co-Existence
- * RoHS Compliant



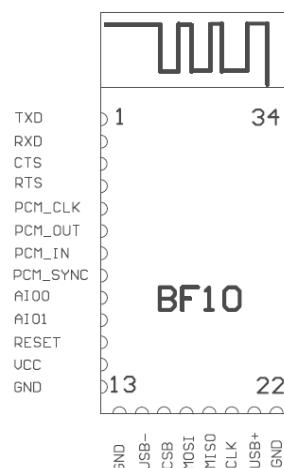
2. Product Description

BF10 is a Class 2 Bluetooth module using BlueCore4 chipset from leading Bluetooth chipset supplier Cambridge Silicon Radio. BF10 interfaces up to 8Mbit external Flash memory. When used with the CSR Bluetooth software stack, it provides a Bluetooth specification V2.0+EDR fully compliant system for data and voice communications .

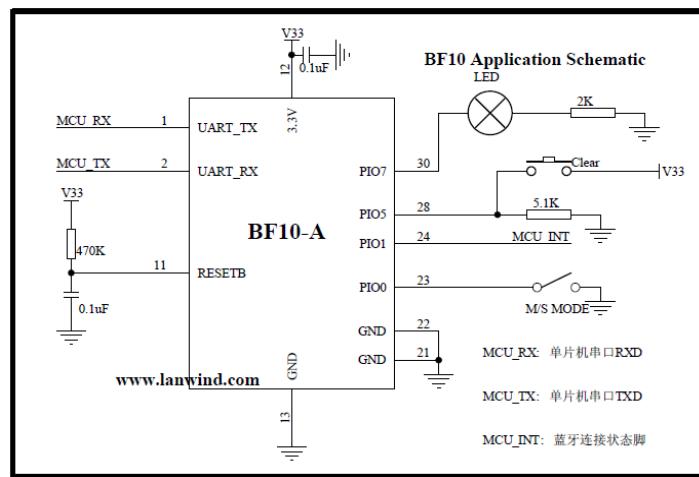
3. Product Description

- * Bluetooth carkit
- * PCs
- * Personal Digital Assistants (PDAs)
- * Computer Accessories (compact Flash Cards, PCMCIA Cards, SD Cards and USB Dongles)
- * Acess Points
- * Digital Cameras

4. Module description and application schematic:



BF10 Pin diagram



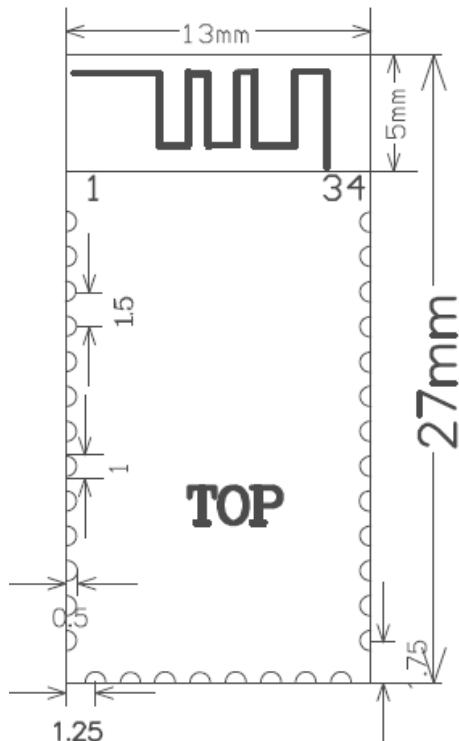
BF10-A Application circuit diagram

Pin Description:

PIN NO.	NAME	TYPE	Description
1	TXD	CMOS Output	UART Data Output
2	RXD	CMOS Input	UART Data Input
3	CTS	CMOS Input	UART Clear To Send Active Low
4	RTS	CMOS Output	UART Request To Send Active Low
5	PCM_CLK	Bi-directional	Synchronous Data Clock
6	PCM_OUT	CMOS Output	Synchronous Data Output
7	PCM_IN	CMOS Input	Synchronous Data Input
8	PCM_SYNC	Bi-directional	Synchronous Data Sync
9	AIO0	Bi-directional	Programmable Input/Output Line
10	AIO1	Bi-directional	Programmable Input/Output Line
11	RESET	RESET	RESET
12	VCC	VCC	3.3V
13	GND	GND	Ground
14	GND	GND	Ground
15	USB -	USB -	USB-
16	SPI_CSB	CMOS Input	Chip Select For Synchronous Serial Interface
17	SPI_MOSI	CMOS Input	Serial Peripheral Interface Data Input
18	SPI_MISO	CMOS Output	Serial Peripheral Interface Data Output
19	SPI_CLK	CMOS Input	Serial Peripheral Interface Clock
20	USB +	USB +	USB +
21	GND	GND	Ground
22	GND	GND	Ground
23	PIO0	Bi-directional	Programmable Input/Output Line
24	PIO1	Bi-directional	Programmable Input/Output Line
25	PIO2	Bi-directional	Programmable Input/Output Line
26	PIO3	Bi-directional	Programmable Input/Output Line
27	PIO4	Bi-directional	Programmable Input/Output Line
28	PIO5	Bi-directional	Programmable Input/Output Line
29	PIO6	Bi-directional	Programmable Input/Output Line
30	PIO7	Bi-directional	Programmable Input/Output Line

31	PIO8	Bi-directional	Programmable Input/Output Line
32	PIO9	Bi-directional	Programmable Input/Output Line
33	PIO10	Bi-directional	Programmable Input/Output Line
34	PIO11	Bi-directional	Programmable Input/Output Line

5. Module Size:



You could ask for the detailed packaging files and documents with the technology support of our company.

6. Notes :

- a. About the operating environment of wireless Bluetooth, the wireless signals include the Bluetooth application are affected largely by the environment around, such as trees, metals,etc. The barriers will absorb the wireless signals partly and the distance of the data-transmission will be affected partly in the real application.
- b. Module serial port level is 3.3V. You need to increase level translator chip if you need to connect with 5V level system.

c. The Bluetooth module need to be matched with the existing system, put in the outer shell. Because the wireless radio-frequency signal will be shield by metal shell, you'd better not to install in the metal shell.

d. PCB Design: The metal will weaken radio, you'd better not to set the ground and wire under the antenna,

e. The computer Bluetooth drive issue. For the slave-mode situation, there is Bluetooth adapter used for the computer. The all-purpose: WIDCOMM, IVT, windows self-driver. We recommend you to use windows self-driver.

7. Contact us:

We supply with the whole Bluetooth data-transmission solution, various kinds of Bluetooth data-transmission, industrial application areas, PC Bluetooth drive software development technology support .

Shenzhen BlueFive Technology Co., Ltd.

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TEL:0086-755-29739852

Fax: 0086-755-8601-7852

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Please notice that if the FCC identification number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains FCC ID: N8DBF10-A" any similar wording that expresses the same meaning may be used.