

Bluetooth Serial Converter UART Interface 9600bps User's Guide

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Bluetooth Serial Converter UART Interface 9600bps

NOTES:

Product Version : Ver 1.0

Document Version : Ver 1.0

Chapter1. Bluetooth Serial Converter UART Interface

9600bps

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
- ✧ UART Interface
- ✧ Support for 8Mbit External Flash Onboard
- ✧ Support for 802.11Co-Existence
- ✧ RoHS Compliant



Product Description

GL-6B is a Class 2 Bluetooth module using BlueCore4-AudioROM chipset from leading Bluetooth chipset supplier Cambridge Silicon Radio.

This converter is used to convert a UART with 9600bps, one start bit, 8 data bits, one stop bit, no parity bit format to Bluetooth UART protocol. It can not talk to a same device but only to PC Bluetooth dongle. That is, it will create communication between an embedded microcontroller and a PC, but not between 2 embedded devices.

For the password, normally it doesn't need a password, when PC could find the converter, just double click it and the connection will be created. If it requests you to input password all the same, it shall be 0000 or 1234.

Applications

- ✧ Bluetooth Carkit
- ✧ PCs
- ✧ Computer Accessories

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◇ Access Points

Specifications

Operating Frequency Band	2.4GHz-2.48GHz unlicensed ISM band
Bluetooth Specification	V2.0+EDR
Output Power Class	Class2
Operating Voltage	3.3V
Host Interface	UART
Dimension	26.9mm(L)×13mm(W)×2.2mm(H)

* Specification are subject to change without prior notice

Electronics Characteristics

Absolute Maximum Ratings		
Rating	Min	Max
Storage Temperature	-40°C	+150°C
Supply Voltage	-0.4V	5.6V
Other Terminal Voltage	VSS-0.4V	VDD+0.4V

Recommended Operating Conditions		
Operating Conditions	Min	Max
Operating Temperature Range	-40°C	+150°C
Guaranteed RF Performance Range*	-40°C	+150°C
Supply Voltage	2.2V	4.2V

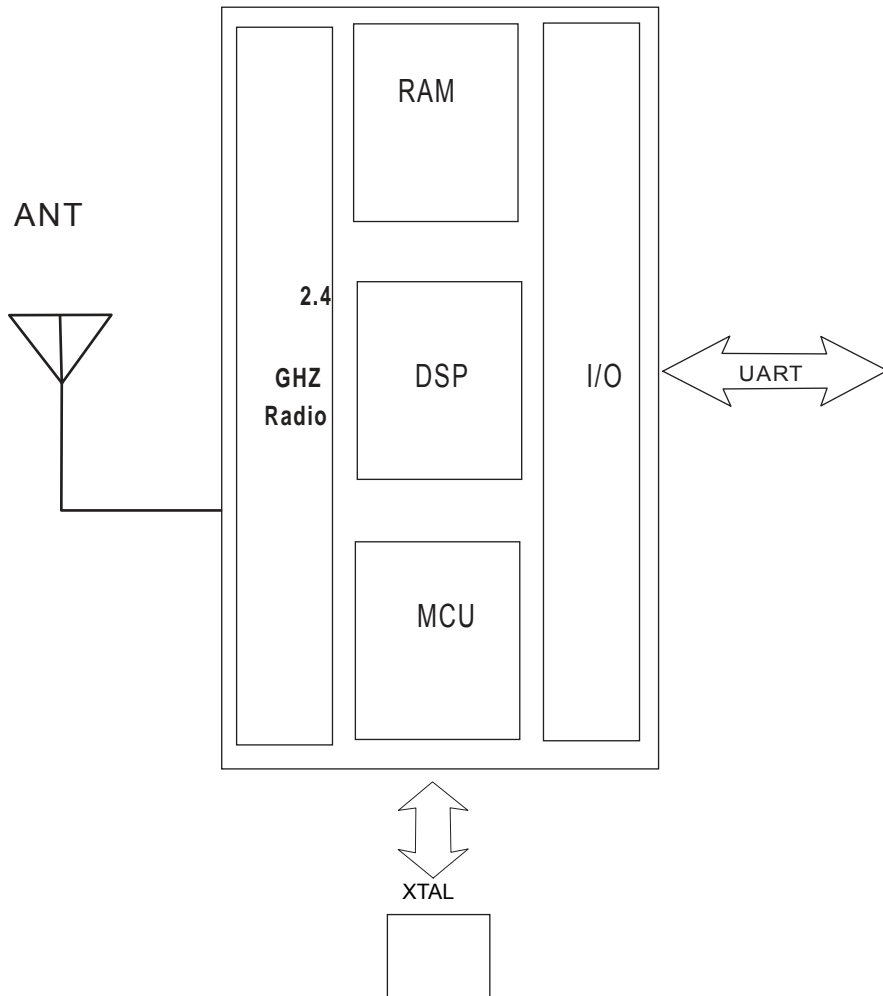
* Typical figures are given for RF performance between -40°C and +105°C.

Power Consumption

Operation Mode	Connection Type	UART Rate (Kbps)	Average	Unit
Page Scan	-	115.2	0.42	mA
ACL No Traffic	Master	115.2	4.60	mA
ACL with File Transfer	Master	115.2	10.3	mA
ACL 1.28s Sniff	Master	38.4	0.37	mA
ACL 1.28s Sniff	Slave	38.4	0.42	mA
Standby Host Connection	-	38.4	40	µA

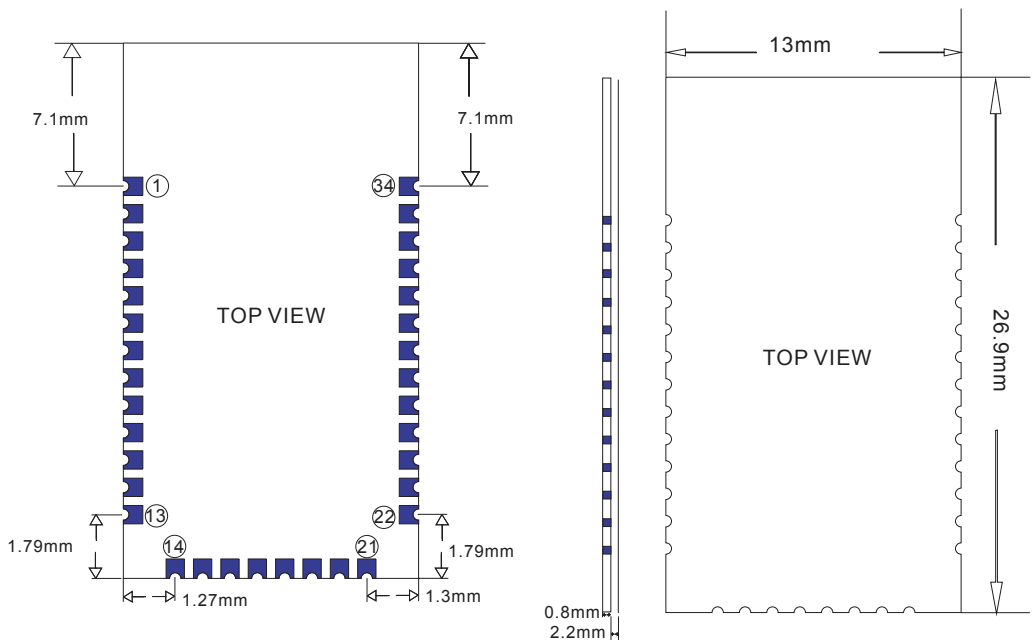
* Low power mode on the linear regulator is entered and exited automatically when the chip enters/leaves Deep Sleep mode. For more information about the electrical characteristics of the linear regulator, see section 4 in this document.

Block Diagram



Bluetooth Serial Converter UART Interface 9600bps

Dimension



Pin Configuration

PIN NO.	NAME	TYPE	FUNCTION	RE-MARK
1	UART-TX	CMOS Output	UART Data Output	
2	UART-RX	CMOS Input	UART Data Input	

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3	UART-CTS	CMOS Input	UART Clear to Send Active Low	
4	UART-RTS	CMOS Output	UART Request to Send Active Low	
5	NC	-	-	
6	NC	-	-	
7	NC	-	-	
8	NC	-	-	
9	NC	-	-	
10	NC	-	-	
11	RESETB	CMOS Input	Reset if low. Input debounced so must be for >5ms to cause a reset.	
12	3.3V	POWER	+3.3V Supply	For 3.3V Version
13	GND	GND	Ground	
14	GND	GND	Ground	
15	NC	-	-	
16	NC	-	-	
17	NC	-	-	
18	NC	-	-	
19	NC	-	-	
20	NC	-	-	
21	GND	GND	Ground	
22	GND	GND	Ground	
23	NC	-	-	
24	NC	-	-	
25	NC	-	-	
26	NC	-	-	
27	NC	-	-	
28	NC	-	-	
29	NC	-	-	
30	NC	-	-	
31	NC	-	-	
32	NC	-	-	
33	NC	-	-	
34	NC	-	-	

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More information about the application schematics and hardware can be got on our website with product number GP-GS010.

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