Description of Operation

BEM201 is compliant by Bluetooth V1.2. It is a fully integrated Bluetooth Class 1 module using ST STLC2416 Baseband controller with integrated 4 Mbit flashmemory and the STLC2150 is a fully integrated single chip radio transceiver.

Feature

- Bluetooth specification compliant : V1.2

- Point-to-point, point-to-multi-point (Up to 7 slaves) and scatternet capability

- Asynchronous Connection-Less(ACL) link logical transport link

- Synchronous Connection-Oriented (SCO) link : 2 simultaneous SCO Channels

- Supports Pitch-Period Error Concealment (PPEC)

  - Improves Speech quality in the vicinity of interference

  - Improves coexistence with WLAN

  - Works at receiver , no Bluetooth implication

- Adaptive Frequency Hopping (AFH) : hopping kernel , channel assessment as Master and as Slave

- Faster Connection : Interlaced scan for Page and Inquiry scan , first FHS without random backoff , RSSI used to limit range

- Extended SCO (eSCO) links

- Standard BlueRF bus interface

- Qos Flush

- Clock support

  - System clock input : any integer value from 12………..33 MHz

  - LPO clock input at 3.2 and 32 KHz or via the embedded 32 KHz crystal oscillator cell

- ARM7TDMI 32-bit CPU

- Communication interfaces

  - Synchronous Serial Interface , supporting up to 32 bit data and different industry standards

  - Two enhanced 16550 UART's with 128 byte FIFO depth

  - 12Mbps USB interface

  - Fast master I2C bus interface

  - Multi slot PCM interface

Product Details

EUT IS a audio transmitter with Bluetooth radio functions. Only the radio detail of Bluetooth is shown in the table below. For more detailed features description, please refer to the manufacturer's specifications or user's manual.

Items	Description
Radio Type	Intentional Transceiver
Power Type	Battery & Adapter
Interface Type	**DC port, Audio port**
Modulation	FHSS (GFSK)
Data Rate (Mbps)	1
Frequency Range	2400 ~ 2483.5MHz
Channel Number	79
Channel Band Width (99%)	741.00 MHz
Conducted Output Power	-1.23 dBm
Carrier Frequencies	2402~2480 MHz
Antenna	PCB Antenna

Accessories

Power	Brand	Model	Rating
Adapter	Touch	SA01-6US05R-D	Input: 100~240VAC Output: 5.0VDC
Others			
Audio Cable			

Table for Filed Antenna

Ant.	Antenna Type	Connector	Gain (dBi)
1	PCB Antenna	NA	1.00