Product Functional Specification

Product Name	Bluetooth Headset
Product Model	HL-501
Support Profiles	Headset and Hands-free Profiles
REVISION	V1.2
DATE	2005-12-08

Design By	Prepared By	Approved By

➢ Introduction

Bluetooth Headset HL-501 is a portable hand-free headset solution based on CSR Bluetooth wireless technology. The design is developed based on CSR Headset Pioneer Program reference design with Bluecore02-Headset chipset. Use SUNITEC Class 2 Module BCM-04.

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➢ **Appearance**

Figure 1: Appearance of the headset

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➤ Specifications

Operating Frequency Band	2.4GHz ~ 2.48GHz unlicensed ISM band
Bluetooth Specification	V1.2
Support Profiles	Headset & Hand-free profiles
Output Power Class	Class 2
Battery Used	150mAh
Battery Voltage	3.7V DC
Charger	$6.0\pm 5\%$ V (type. 250mA)
Talk Time	Up to 6 hrs
Standby Time	Up to 150 hrs
Battery Charging Time	2 hrs
Range of operation	Max 10m line of sight
Dimension & Weight	64mm*28mm*30mm/16g
Visual Indication	2 LEDs (Blue and Red)
Number of Operating Buttons	3 Buttons function

Specifications are subject to change without prior notice

Table 1: General Specification

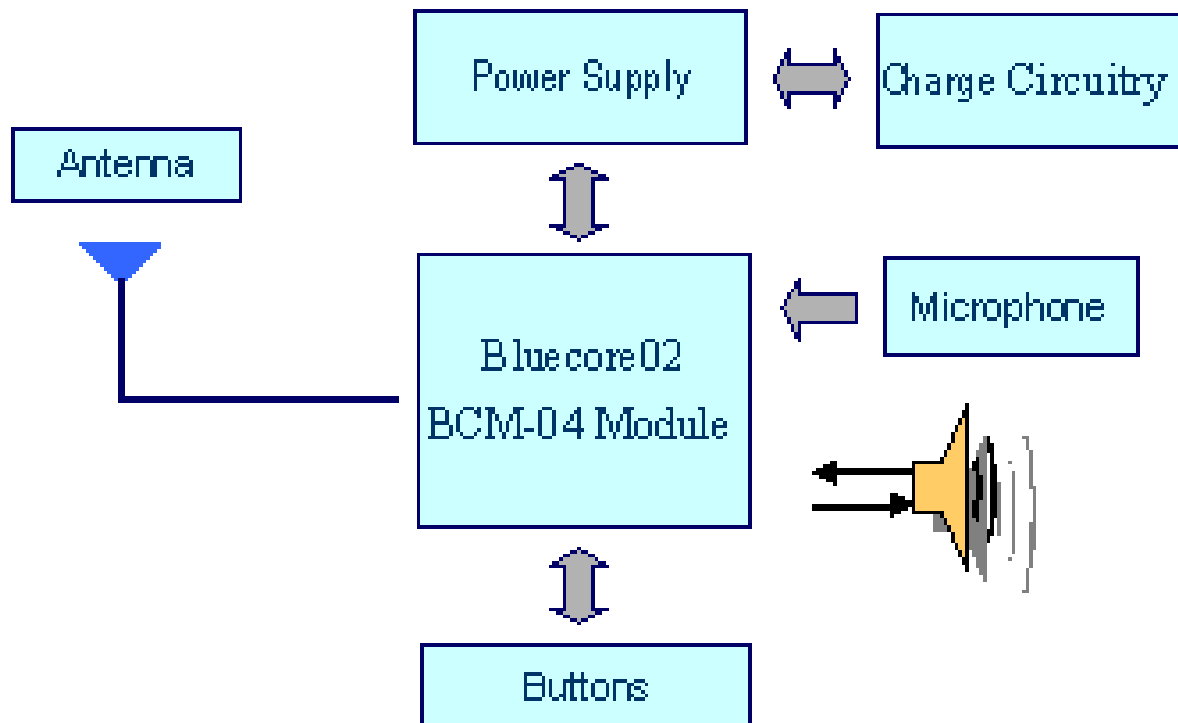➤ **System Architecture**

Figure 2: System Architecture

➤ **PCB Layout**

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➢ Operation Procedure

1. Switching ON and OFF

Function	Operation
Switch ON	• During OFF stage, press and hold the MFB button for 5 seconds. • The headset will be turned on. Blue LED will flash once every 3 seconds.
Switch OFF	• During ON stage, press and hold the MFB button for 2 seconds until Red LED flashes rapidly. • The headset will now be turn off. Red LED and Blue LED will turn off.

2. Pairing

Function	Operation
Pairing	• Turn off the headset. • Press and hold the MFB button until Blue Red LEDs flash alternately. • Perform a device discovery from the phone. • Press the "YES" key on the phone to bond to the headset. • Enter passkey "0000", and then "OK" to pair the headset with the phone.

3. Answering call

Function	Operation
Answering call	• When a call comes in to the paired phone, the headset will start making a ring tone. • Press the MFB button to answer.

4. Reject call

Function	Operation
Reject call	• When a call comes in to the paired phone, the headset will start making a ring tone. • Press and hold the MFB button 3 seconds to reject.

5. End call

Function	Operation
Ending call	• During on going call press the MFB button to end a call

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6. Interchange call

Function	Operation
Interchange call	• Press and hold VOL- button 3 seconds to interchange headset and mobile handset.

7. Making Call using headset

Function	Operation
Voice dialing	• Press the MFB button • Wait for the beep, then say the name of the person you want to call
Re-dialling	• Press and hold the VOL+ button 3 seconds to re-dial the last number

8. Mute and Un-mute

Function	Operation
Mute	• Press VOL+ and VOL- button 3 seconds • A periodic tone will be heard to indicate that the microphone is muted.
Un-mute	• Press VOL+ or VOL-

9. Volume Adjustment

Function	Operation
Volume Adjustment	• To increase speaker volume, press the VOL+ button repeatedl until the user reaches the desired volume level. • To decrease speaker volume, press the VOL- button repeatedly until the user reaches the desired volume level

10. Charging Battery

Function	Operation
Charging Battery	• Plug in DC adaptor. • RED LED will light up when charging is in progress. • RED LED will off when charging is completed.
Note: The headset will not function during charging.	

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FCC NOTE:

THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

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.