Model：BH17

KEY FEATURES

* Supports connect to 2 phones simultaneously
* Operating range: 10M
* Certificate:

SPECIFICATION

* Bluetooth Specification v2.1+EDR class 2
* RF Frequency Range: 2.402-2.480GHZ, 2.4G ISM band
* Radio Performance: Receive Sensitivity of -92dBm, TX Power Max 4dBm
* Supports Bluetooth Headset and Handsfree profiles,
* Speaker volume gain control
* 3 Button design: MFB, VOL+, VOL-,
* LED Indicator Status: Blue, Red
* Rechargeable 130mAh Li-Polymer Battery
* USB charging Port
* Charger adapter Output: DC 5V&200mA
* Nominal charging time: Max 1.5 hours
* Talk time: Up to 9 hours
* Standby time: Up to 200 hours
*Operating Temperature: -10 ℃～50℃
*Storage Temperature: -20 ℃～60℃
* Dimensions (main body): ∮48mmx (T) 20mm
* Weight: grams

Package Accessories

* Box: standard or customization
* User Manual x1

Solution Description:

Bluetooth Standard		Bluetooth 2.1+EDR
Chipset		CSR BC6130A04-IQQB-R
Speaker		16□ 15% ohm, Normal 0.01W,Maximum 0.02W,
Microphone		Omnidirectional, -42±3dB
Charging interface		2.0mm DC Jack
Button		MFB,VOL+,VOL-,
RF Specification	Frequency band	2.4G ISM band
	Frequency range	2.402-2.480GHZ
	Spectrum	FHSS
	Modulation	GFSK，π/4 DQPSK，8DPSK
	Antenna	PCB antenna

Electrical Characteristics:

	Min	Typ	Max	Unit
Power consumption				
Charging input voltage range	4.7	5	6	V
Charger input current requirements	200			mA
Ripple And Noise (Charger input)			200	mV p-p
Battery Charging Saturation voltage	4.1		4.3	V
Battery capacity		130		mAH
Battery charge current(constant-current mode)		100		mA
Low-voltage warning	3.2	3.3	3.4	V
Low-voltage automatic shutdown	2.9	3.0	3.1	V
Talk Current(HV3 connection,Dc=3.7V)		15		mA
Standby current(ACL connection sniff mode, Dc=3.7V)		400	600	uA
leakage current(Power off mode, DC=3.7V)		0.1		uA
Talk time		9		H
Standby time		200		H
Audio Characteristics				
Speaker Output frequency range	20		4000	HZ
Distortion and noise (relative to full scale)(32ohm Speaker)	-72	-75		dB
Output Sound Pressure Level(S.P.L)(1Khz at 1cm)	100	105		dB
Microphone input frequency range	200		4000	HZ
Distortion and noise at 1Khz(Microphone)	-75	-78		dB
RF Characteristics				
Frequency Range	2.402		2.480	GHZ
Transmitter power	0		4	dBm
Initial carrier	-40		40	KHZ
Operating range(positive direction)	10			Meter
Operating range(opposite direction)	5			Meter
RF Receiver:				

Sensitivity at 0.1% BER for all packet types at 2.441GHZ (Bluetooth Specification ≤-70dBm)	-82	-88		dBm
Maximum received signal at 0.1% BER (Bluetooth Specification≥-20dBm)	0	3		dBm
RF Transmitter:				
Transmit power(Bluetooth Specification-6to +4)	-2	0	4	dBm
△f1avg Maximum Modulation.(Bluetooth Specification 140＜f1avg＜175)	140	165	175	kHZ
△f2avg Minimum Modulation (Bluetooth Specification ≥115)	115	140		kHZ
△f1avg/△f2avg (Bluetooth Specification≥0.8)	0.8	0.9		-
Reliability Specifications				
Operating Temperature **1.High, Low Temperature Operation Test：** Under ambient temperature on -10 Degree Celsius and +50 Degree Celsius (RH 20—30%) to power on 4 hours each. Then place it on often-wet environment (Room temperature 25Degree C, room humidity) for testing after 2 hours. The test duration is for 6 cycles and must end in the hot cycle, Sample should not have any problems in order to pass the high, low temperature operation test。	-10		50	℃
Storage Temperature **1.High Temperature Storage** Temperature : +60℃ Test Time : 48 Hrs Load : No load Mode: off mode After the test, shall be left in ambient temperature for 1~2hrs. Electrical and cosmetic defects should not happen. The battery capacity do not guarantee **2. Low Temperature Storage** Under ambient temperature on -20 Degree Celsius, 48 hours on power off mode then place on often-wet environment, i.e. 60% relative humidity, 25 Degree Celsius for 2 hours. Sample should not have any problems in order to pass the low temperature	-20		60	℃
Operating humidity **1.High humidity Operation Test:** Under ambient temperature on 0 Degree Celsius (RH 75%) to power on 12 hours , Sample should not have any problems in order to pass the High humidity Operation Test .			75	%
Storage humidity			95	%

1. High humidity Storage Test: Under ambient temperature on 0 Degree Celsius (RH 95%) to power off mode 48 hours , After the test, shall be left in ambient temperature for 1~2hrs. Electrical and cosmetic defects should not happen.				
Drop test height 1. Inspect the external appearance and function before a unit is dropped (6 sides-each side 1 times) from a height listed below Drop height: 150cm to concrete floor Power off mode	150cm 6 times, cement floor			
Button Operating Force	180 + -50gf			
Vibration Test	X, Y, Z three directions and do 30 minutes 10 ~ 55Hz sweep cycle of vibration, scan rate for 1oct/min; 10 ~ 30Hz when the amplitude of 0.38mm, 30 ~ 50Hz at 0.19mm amplitude			
Continuous Infliction Life Test: **1. Charging port test:** Power off mode, a continuous plug 1000, and then test the function of a single charge, 10 cycles, charging should be no problem. 2.earphone jack testing: power on mode, a continuous plug 1000, and then plug in your headphones, 360-degree rotating plug headphones sound without exception, 10 cycles, functions should be no problem。 3. key test: power off mode, applied force 350gf, 20000 times, and then power on the test key functions should be no problem	- Plug : 10,000 times - Key : 20,000 times			
Abrasion test	Use Rub an external edge of the test sample by ethanol cotton cloth (coated surface:500gf, 25times/min;Printed surface 1kg,50 times/min.).Paint must stand 100cycles without exposing the plastic materiall The test environment must not exceed 50% relative humidity. Paint must stand 15cycles at 175gf force without expose the underlying material.			
Chemical test	Put a drop of 90% alcohol on painted surface and wait for 2 min. Wipe the surface with white cloth to remove the chemical. There can be small amount of paint that can stick to white cloth. And no major dis-colouration or paint removal is allowed.			
ESD Test	Reference Standard :IEC 801-2 Part 2 ; Sample Size: 3 sets			

	(Temperature: 15℃ ~35℃, Humidity: 30~60%RH, Atmospheric Pressure: 68~106Kpa) 1. Contact Discharge: (+/- 1KV to +/-4KV) Conductive parts which are normally touched by human body during operation, e.g. “MFB” key and “Vol” key (Metal),etc. Start from 1KV for 10 times discharge. (Every time need do the discharge for outside metal part) Every Step increases 1KV and need achieve the following requirements at the same times. Up to +/- 4KV, there is no operation error occurs and maintain the output specification; 2. Air Discharge : (+/-1KV to +/-8KV, far away 1cm) Non-conductive parts and areas which are normally touched by human body during operation, e.g. Microphone, Speaker, DC jack, etc. Start from 1KV for 10 times discharge. (Every time need do the discharge for outside metal part) Every Step increases 1KV and need achieve the following requirements at the same times. Up to +/- 8KV, there is no physical defect and maintain the output specification;

FCC Caution

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.

NOTE 1: 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.

NOTE 2: Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.