

## PRODUCT SPECIFICATION

Product Name: TheBlazarPortableBluetoothStereoDevice

Model Number: BCN\_blz-rp/slvr

## Development History

[illegible]

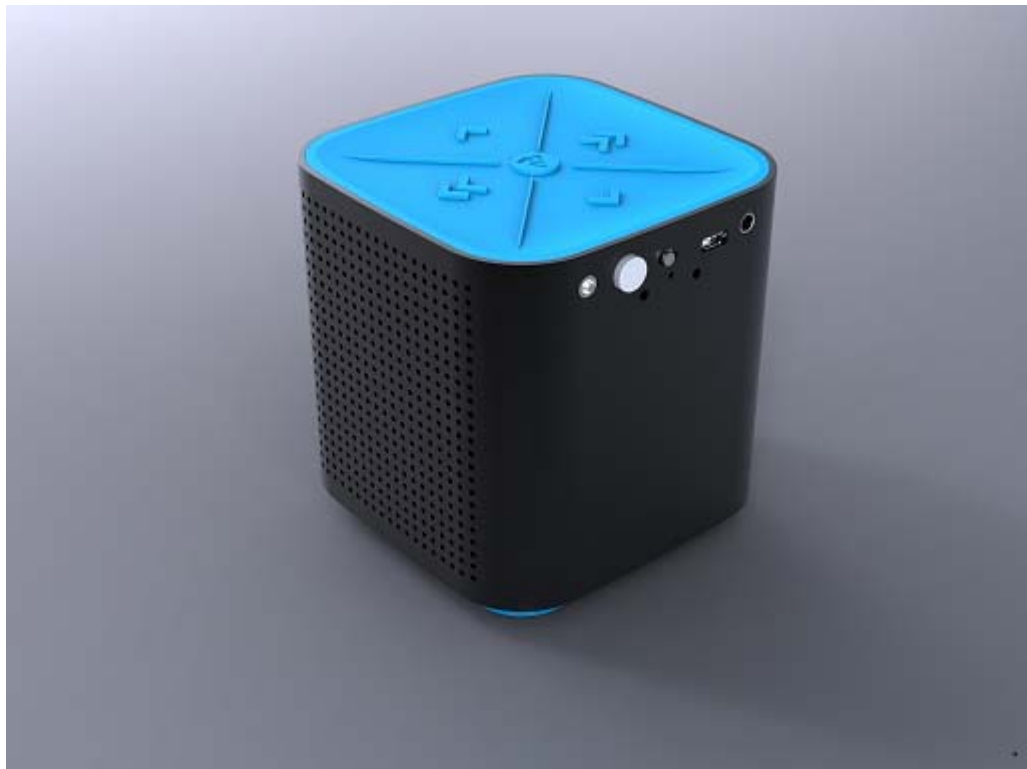
## 1. PRODUCT OVERVIEW

### 1.1. Critical Success Factor (Descending Order):

- 1) **Material Cost**
  - i) Low price, high performance
- 2) **Performance and Feature:**
  - ii) Perfect outlook
  - iii) Great Sound Performance
  - iv) The utility function
- 3) **Outlook**
  - i) Portable Size for Travel

### 1.2. Product Brief

- 2.0 Speakers with the support of Bluetooth and Aux
- Bluetooth 3.0: A2DP, AVRCP, HFP, HSP
- Portable Size
- Speaker Phone (Phone Conference Hands-free)



### 1.3. Feature

- Stereo Speaker System using ONE 325cc Acoustic Volume Cubes (Active Driver )
- Playtime: Up-to 4.5 hours at 60% Volume
- Red/Blue LED w/ Light Pipe around the key
- Sound + LED Indication of Power On &Off/ Try-to-Connect/ Connected/ Disconnecting
- 1 Main Power switch at the side
- 1 Pair (self pairing ) switch at the side
- 1 Button for Stand-by/ Pairing/ Play&Pause/Phone Call Answering
- 2 Buttons for Volume Control
- 2 Buttons for Track Selection

- Any key for 1<sup>st</sup> Phone Call Answering
- Operated by Power Adaptor or Built in Battery
- Initial Volume is 50% of the Max. Vol. as ex-factory default setting
- Noise Reduction & Echo Cancellation of the Mic

## 2. CONFIGURABLE OPTIONS

### 2.1. Factor Configurable Options:

Configurable Option	Parameter
a) Speaker Phone	Yes / No
b) Battery	Built in Battery

### 2.2. Consideration of each option

#### a. Speaker Phone

##### i) Advantage / Usage:

- Pick up phone call while music playback by a mobile phone
- Hand-free in Phone Conference
- Noise reduction & Echo cancellation

#### b. Battery

##### i) Advantage / Usage:

- Cost Adjustment is offering Power Adaptor
- 4.5 Hours at 60% Max Loudness Playing music

##### ii) Disadvantage / Impact:

- Cost-up if providing Power Adaptor in the package

### 2.3. Customer Configurable Options

Configurable Option	Parameter	Cost Impact
LED	Red / Blue	No
Initial Volume Level	10- 50 % of Max	No
3.5 mm Line-in Cable	40mm / 100mm	Yes
Color on Body	Black / any color	Yes

### 3. MECHANICAL SPECIFICATION

#### 3.1. *Dimension:*

- Design: Closed: 91 mm x 91mm x91mm(L x D x H)  
Driver unit: 50mm x2

#### 3.2. *Weight: approx. TBD*

#### 3.3. *Connectors*

- Power Adaptor Micro USB at the back
- 3.5 mm Line-in Jack

#### 3.4. *8-Switches Control*

- i. Main Power
- ii. Stand-by / Pairing/ Play&Pause/ Phone Answer
- iii. Volume Up
- iv. Volume Down
- v. Next Track
- vi. Last Track
- vii. Self pairing
- viii. Reset

### 4. ELECTRICAL SPECIFICATION

#### 4.1. *Audio Requirement:*

- 325cc Acoustic Vol. w/ Active Driver
- Driver configuration: 2 x 50 mm full range driver
- Both Batt & Adaptor: RMS Output is 3W + 3W (Total: 6W RMS)
- Hum Noise level (in Operation mode ): < 500nW in Max Volume
- Hum Noise level (Stand-by mode): = 0 dB
- The Max Audio output signal level should be same as the level drawn from A2DP
  - System SNR: >60 dB @ 1W
  - THD: <1% at 1kHz
  - Loudness: SPL >75dB @ 1kHz sine wave (1m, input: 230mV, Max Volume)
  - Frequency response: 80 – 16kHz
- Microphone Condenser Dia. 4.0mm 2.2kΩ
- Sensitivity: -34 ± 3dB
- S/N = 60dB 3.0V

#### 4.2. *Bluetooth Requirement*

- Bluetooth ver.: 3.0
- Bluetooth class: 3 (coverage up to 10M, less in buildings)

#### 4.3. *Power Requirement:*

- Stand-by Current should be less 50uA
- **Battery life:**
  - 4.5 Hours at 60% Max Loudness Playing Bluetooth Music Device

#### 4.4. *Compatibility (Bluetooth 3.0 or below music device)*

- Mobile
  - Nokia:
  - Samsung:
  - SonyEricsson

- iPhone, iPod,iPad
- Blackberry
- Motorola

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#### **4.5. Operation Mode and Sequence:**

##### **4.5.1. Operation Mode vs. Source input with Signal:**

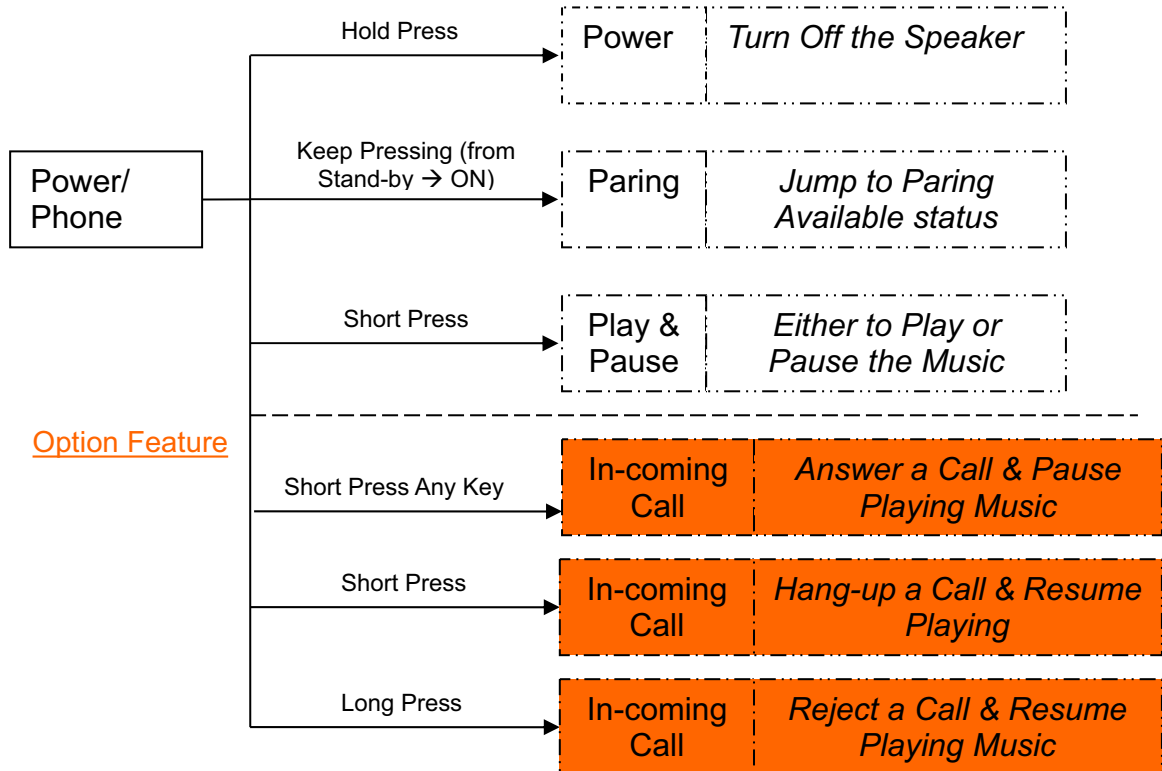
**\*\*Line-in audio signal is function when BT is connected\*\***

- Pairing Code: "0000"
- Reaction of Keys:
  - Short press  $\leq$  less 0.8 sec: all keys react when release them
  - Long press  $>$  longer 0.8 sec: reaction after 0.8 sec
  - Keep Pressing = 4.5 sec reaction after 4.5sec
- Volume keys react directly when pressing;
- Voice Volume level is according to the Music Volume, until the Max Volume for the voice is reached by Sound Signal
- Next & Previous keys react directly when pressing. Short press goes to play Next or Previous Track. Long press plays music Fast-forward or Rewind
- Pick up phone; Short press Any button
- End of phone; Short press at "Stand-by or Phone " button
- Reject phone; Long press at "Stand-by or Phone" button
  - Switch over between the phone and speaker during the conference call with Long press at "Stand-by or Phone" button
- 16 Volume Level steps from 0 (mute) to Max
- Turn ON and Paired: Pull the power button to "on" position , then there three "beep" sound the Red and Blue light started flashing, Start the pairing. then there twice "beep" sound, blue light started flashing
- Pause the Music, when the Phone is picked up by Speaker
- Music resume to play, when the End of the phone

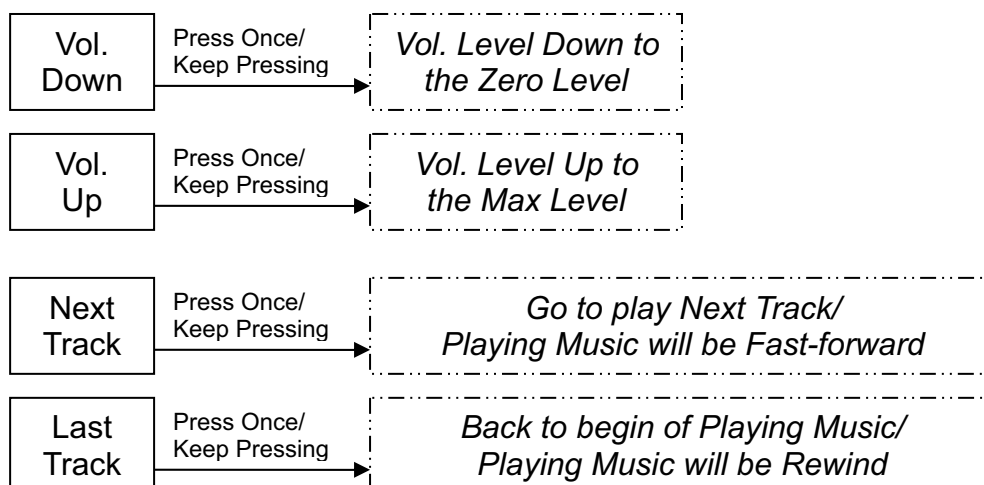
## Control Illustration



## Multi-function Key Operation



## Single-function Key Operation



## 5. DESIGN

**ID:** See Below Rendering (Reference Only, ID will be updated)

**Color Specification:** Black versions

**Material and Finishing:** *Matt Finishing*

**Product hexahedral map**







## 6. RELIABILITY

**General Operating Temperature:** 0 - 45 °C

**General storage temperature:** -20 - 65 °C

**Heat Storage test:** 98.5 hours with Temp Cycling

**General Humidity test:** 90% (Operating @ 45 °C)

**Vibration test:** 0.75 mm, 13Hz to 25Hz, 3 axis, 30 mins

**Drop test (in pack outer carton):** 1 corner, 3 edges, 6 faces

**Drop test (out of pack drop test):** 3 faces when opened, two faces when close at 1m height

**Product Life:** 36 Months (3 years)

## 7. STANDARDS AND APPROVALS

- FCC

## 8. PACKAGING

- Gift Box
  - 4 – 5 colors
  - 250g Paper
  - Coating: UV Coating
  - Insert: Paper Pulp
  - Packing method
    - ◆ Number of inner carton: 12 pcs / inner
    - ◆ Number of outer carton: 48 pcs / outer

## 9. Packing Content

- Main Unit
- 3.5mm Jack Line-in Cable (Optional)
- USB cable

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.

This device complies with Part 15 of the FCC rules and Industry Canada licence-exempt RSS standard(s).

Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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

The device complies with RF specifications when the device used at 5mm from your body