Technical Description

The brief circuit description is listed as below:

For RF

- 1) U1 acts as 2.4GHz RF Module (BT_RF_BM_S02).
- 2) U2 acts as Audio Amplifier (GPY0030C).
- 3) U3 acts as Real Time Clock.
- 4) U5 and U7 act as SPI Flash.
- 5) U6 acts as Sound Controller.
- 6) U8 acts as Voltage Regulator.
- 7) Y2 is 32.768KHz crystal oscillator providing clock for U1.
- 8) Y1 is 32MHz crystal oscillator providing clock for U1
- 9) M1 and M2 act as DC Motor Driver.
- 10) M3 acts as Microphone.
- 11) J9 acts as Micro USB.

For RGB LED

- 12) U1 acts as mask version of U2.
- 13) U2 acts as 32KB sound controller (GPC11033D-LQFP44).
- 14) U3 acts as Voltage Regulator (LC1218-3.6V SOT-89).

For smart servo

- 15) U1 acts as motor drive.
- 16) U2 acts as Voltage Regulator (LC1218).

Antenna Type: Internal integral antenna

Antenna Gain: 0dBi

Nominal rated field strength: $83.6.0 \text{ dB}\mu\text{V/m}$ at 3m

Maximum allowed field strength of production tolerance: +/- 3dB