GND +BATT

BT1 BT2
BS-02-A1AK006 BS-02-A1AK006

U3
ESP-WROOM-32E

C1 GND
10uF 3V3

GND GND
P_GND 39 GND
1 GND 38 GND
2 3V3 IO23 37 D23
3 EN IO22 36 D22
4 SENSOR_VP TXD0 35
5 SENSOR_VN RXD0 34
6 IO34 IO21 33 D21
7 IO35 NC 32
8 IO32 IO19 31 D19
9 IO33 IO18 30 D18
D25 10 IO25 IO5 29
26 11 IO26 IO17 28
D27 12 IO27 IO16 27
13 IO14 IO4 26
14 IO12 IO0 25

+3.3V
GND

J1
Conn_01x06
1 2 3 4 5 6

R1
300

GND IO13 SHD/SD2* SWP/SD3* SCS/CMD* SCK/CLK* SDO/SD0* SDI/SD1* IO15 IO2
15 16 17 18 19 20 21 22 23 24

GND

U1
AZ1117H-3.3TRG1
GND 1 ADJ/GND
+3.3V 2 OUTPUT
+BATT 3 INPUT
+3.3V 4 OUTPUT

U2
AMS1117-5.0_C347223
GND 1 ADJ(GND)
+5V 2 VOUT(TAB) TAB 4 +5V
+BATT 3 VIN

J2
Conn_01x04
CLK 1
DIO 2
+5V 3
4
GND

GND GND GND GND GND GND GND GND

LED8 LED7 LED6 LED5 LED4 LED3 LED2
C9 WS2812B-B C8 WS2812B-B C7 WS2812B-B C6 WS2812B-B C5 WS2812B-B C4 WS2812B-B C3 WS2812B-B
10uF 10uF 10uF 10uF 10uF 10uF 10uF

+5V 1 VDD DIN 4 +5V 1 VDD DIN 4 +5V 1 VDD DIN 4 +5V 1 VDD DIN 4 +5V 1 VDD DIN 4 +5V 1 VDD DIN 4 +5V 1 VDD DIN 4 +5V
2 DOUT VSS 3 GND 2 DOUT VSS 3 GND 2 DOUT VSS 3 GND 2 DOUT VSS 3 GND 2 DOUT VSS 3 GND 2 DOUT VSS 3 GND 2 DOUT VSS 3 GND

KEY1 +3.3V KEY2 +3.3V KEY3 +3.3V KEY4 +3.3V KEY5 +3.3V KEY6 +3.3V KEY7 +3.3V KEY8 +3.3V
B3F-4055 B3F-4055 B3F-4055 B3F-4055 B3F-4055 B3F-4055 B3F-4055 B3F-4055

C10 C11 C12 C13 C14 C15 C16 C17
0.1uF 0.1uF 0.1uF 0.1uF 0.1uF 0.1uF 0.1uF 0.1uF

D19 D21 D22 D23 D18 D25 26 D27

R2 R3 R4 R5 R6 R7 R8 R9
10k 10k 10k 10k 10k 10k 10k 10k

GND GND GND GND GND GND GND GND