LM2576S-5

SS24

D12

J6

100uF

C1

U5 LSA

J8

MPU

GND 3V3 NC

SCL SDA

3M 2M 3S 1S

D11 D9

SS34

T3

SS34 SS514

470uF

L4

D9 D13

L4

J2

SRA

R16

R17

J14

C4 C6

LM2575-5S

sravjti.in

Battery Port

EEPROM
SS-11W

Society of Robotics and Automation

GND 4V4 3V3 5V 3V3

J16

VM   PWM1
3.3V   IN2
GND   IN1
M1A
M1B   STBY
M2B   IN3
M2A   IN4
GND   PWM2

1k 1k
R12 R11

R13 R14
1k 1k

U3
TB6612FNG

GND

3.3V   GND
EN   23
36   22
39   TX
34   RX
35   21
32   GND
33   19
25   18
26   5
27   17
14   16
12   4
GND   0
13   2
SD2   15
SD3   SD1
CMD   SD0
5V   CLK

ESPRESSIF
WALLE v2.5
2024
ESP-32-WROOM-32D

ESP32-DEVKITC-32D
SRA DEVELOPMENT
BOARD 2024

U1

J5

J17

KiCad

PCB
POWER
MARKET

SRA DEVELOPMENT
BOARD 2024

MPU
NC | 3V3 | 23 | GND | 22 | 21
INT | SDA | SCL
LSA
22 | 35 | 34 | 33 | 36 | GND | 3V3

GND | 5V | 3V3

RX | TX
5V
5V3

ESPRESSIF
WALL-E v2.S
2024
ESP-32
5V3

GND
23
22
TX
RX
21
GND
19
18
5
17
16
4
0
2
15
SD1
SD0
CMD
5V
CLK

3.3V
EN
36
39
34
35
32
33
25
26
27
14
12
GND
13
SD2
SD3
CMD
5V

sravjti.in
Designed by
Raj Gupta

PWM1
IN2
IN1
STBY
IN3
IN4
PWM2
GND

VM
3.3V
GND
M1A
M1B
M2B
M2A
GND

LED port

UART 1

Output port

LFP1
LFP2

81.0005 mm

76.1500 mm

87.6500 mm

92.6825 mm

DCJ200-10-A-XX-X_REVA

H1
Fiducial_0.75mm_Mask2.25mm
MountingHole

J6

D12
C1
C2
U5

Screw_Terminal_01x02

D14

D9
D13

F1   F2

R16
10K
R17
1K

B2B-XH-A-LF_SN_

Screw_Terminal_01x05

J16

R12 R11

R13 R14

H2

MountingHole

LED
U2
LED

Conn_01x04_Female

Conn_01x19_Male

Conn_01x07_Male

J7 J8

LED 330
LED 330
LED 330
LED 330
LED 330
LED 330
LED 330
LED 330
LED 330

SW1   SW4

SW_Push_DPDT
T   E

SW2   SW3

T   E
SW_Push_DPDT

Conn_01x06_Male
MountingHole

H4

Conn_01x05_Male
Conn_01x05_Male
Conn_01x05_Male

Conn_01x03_Male
Conn_01x03_Male
Conn_01x03_Male
Conn_01x03_Male

Conn_01x06_Male

J17

Conn_01x19_Male

Fiducial_0.75mm_Mask2.25mm
H3

MountingHole

Drill Map:
$\times$ 3.200mm / 0.1260'' (4 holes) (not plated)
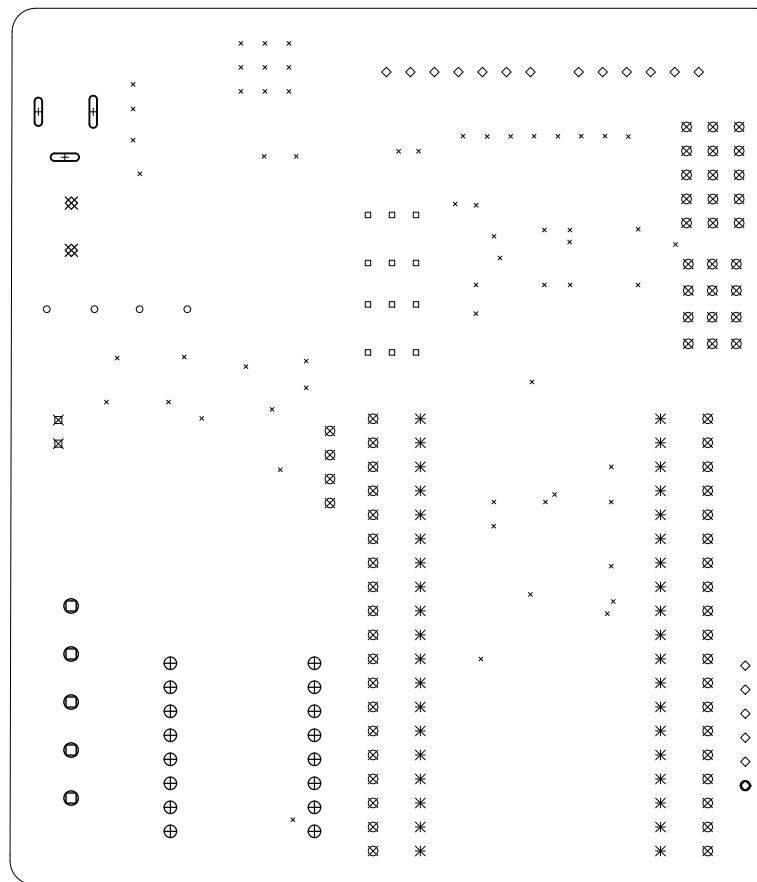
Drill Map:

× 0.400mm / 0.0157'' (62 holes)
○ 0.711mm / 0.0280'' (4 holes)
+ 0.800mm / 0.0315'' (0 holes + 3 slots)
□ 0.813mm / 0.0320'' (12 holes)
◇ 1.000mm / 0.0394'' (18 holes + 1 slot)
⊠ 1.016mm / 0.0400'' (69 holes)
✳ 1.040mm / 0.0409'' (38 holes)
⋈ 1.050mm / 0.0413'' (2 holes)
⧆ 1.300mm / 0.0512'' (2 holes)
⊕ 1.320mm / 0.0520'' (16 holes)
⬭ 1.520mm / 0.0598'' (5 holes)