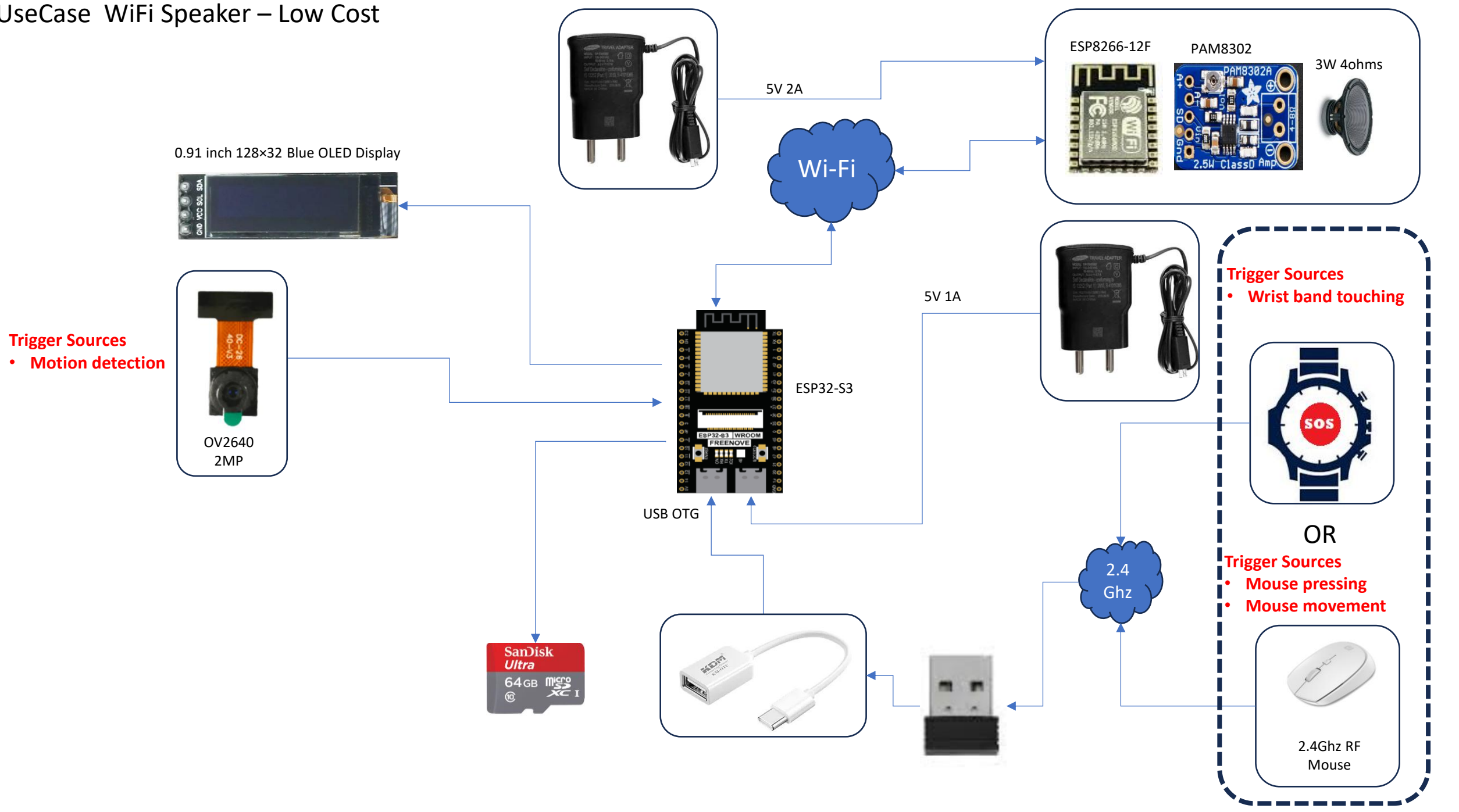
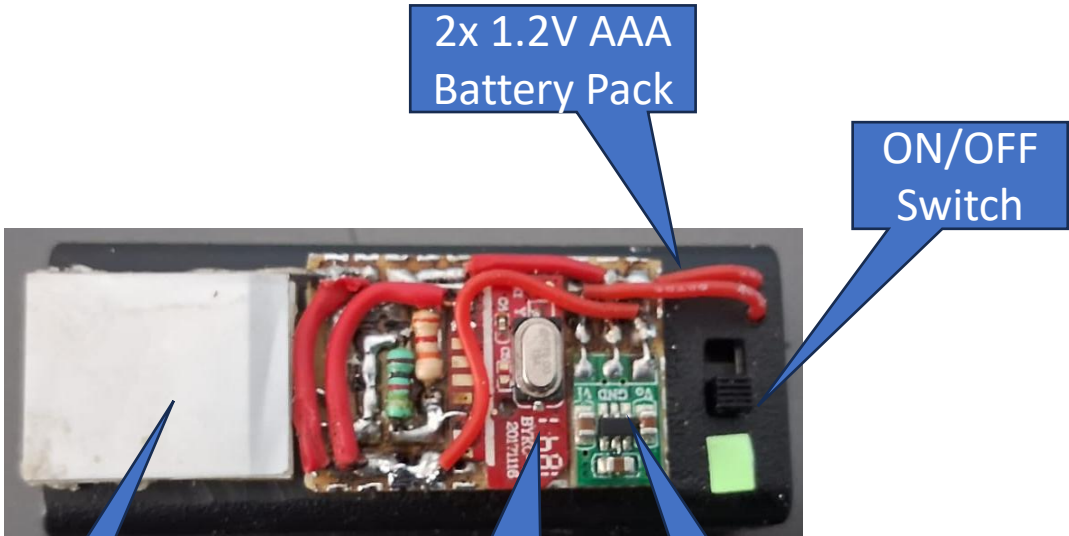
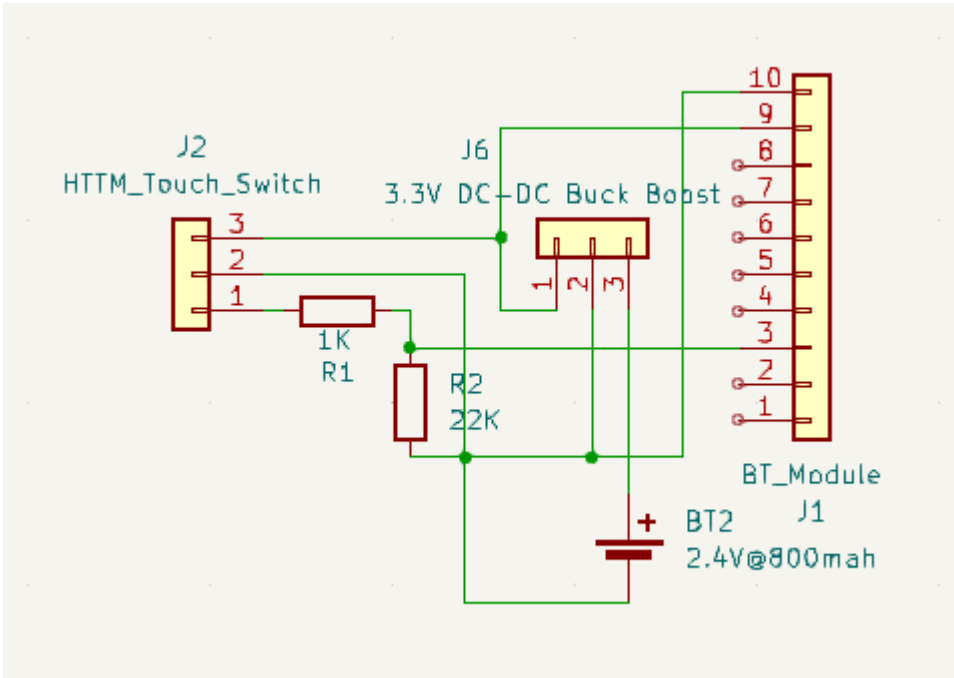


UseCase WiFi Speaker – Low Cost



# Wrist Band



Mouse RF Module  
BYKC-V1.8

深圳市多亿科技有限公司  
SHENZHEN DUOYI TECHNOLOGY CO., LTD

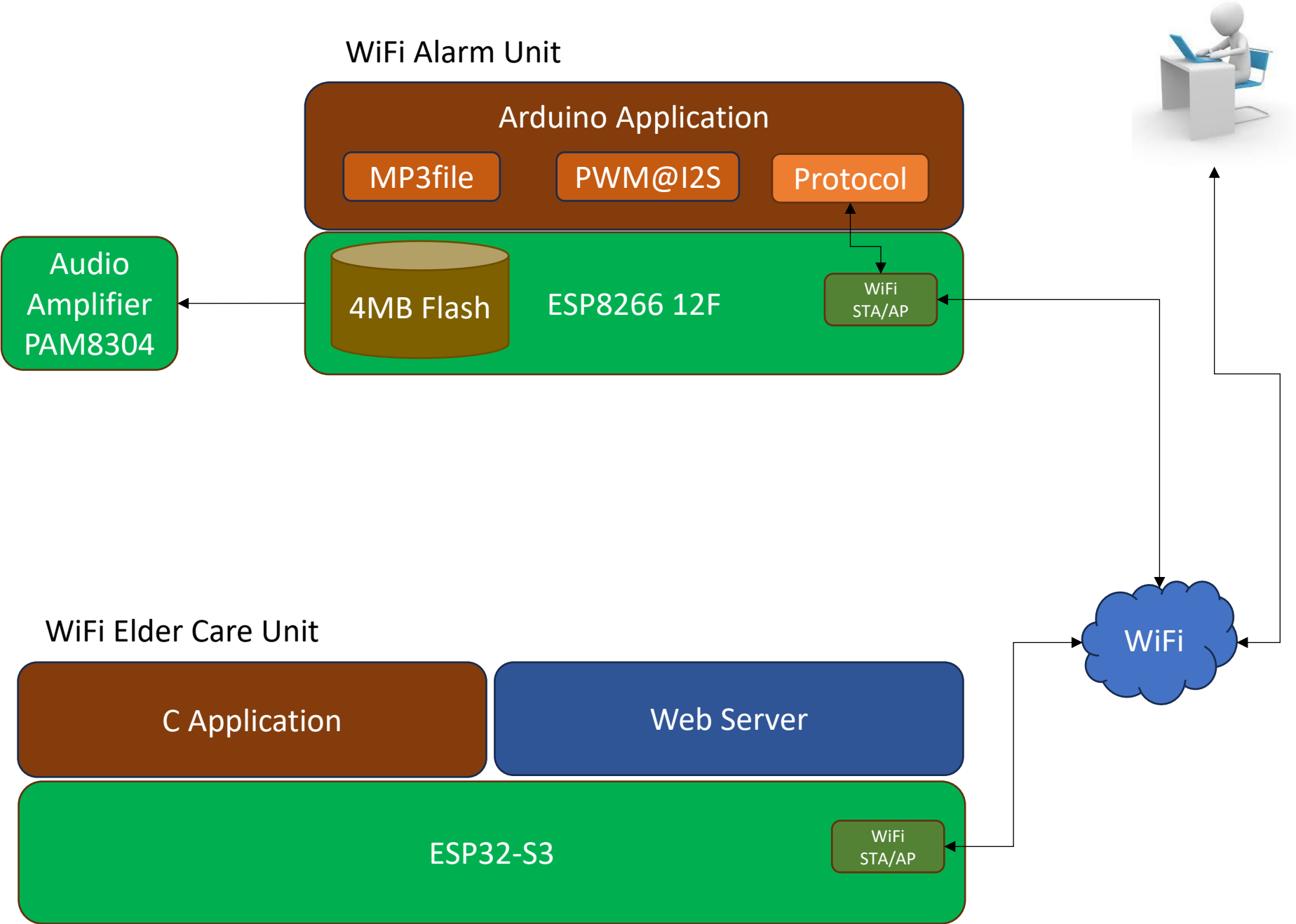
Danny Weng Sales Department

多亿科技  
DUOYI TECHNOLOGY  
—— 服务至上 ——

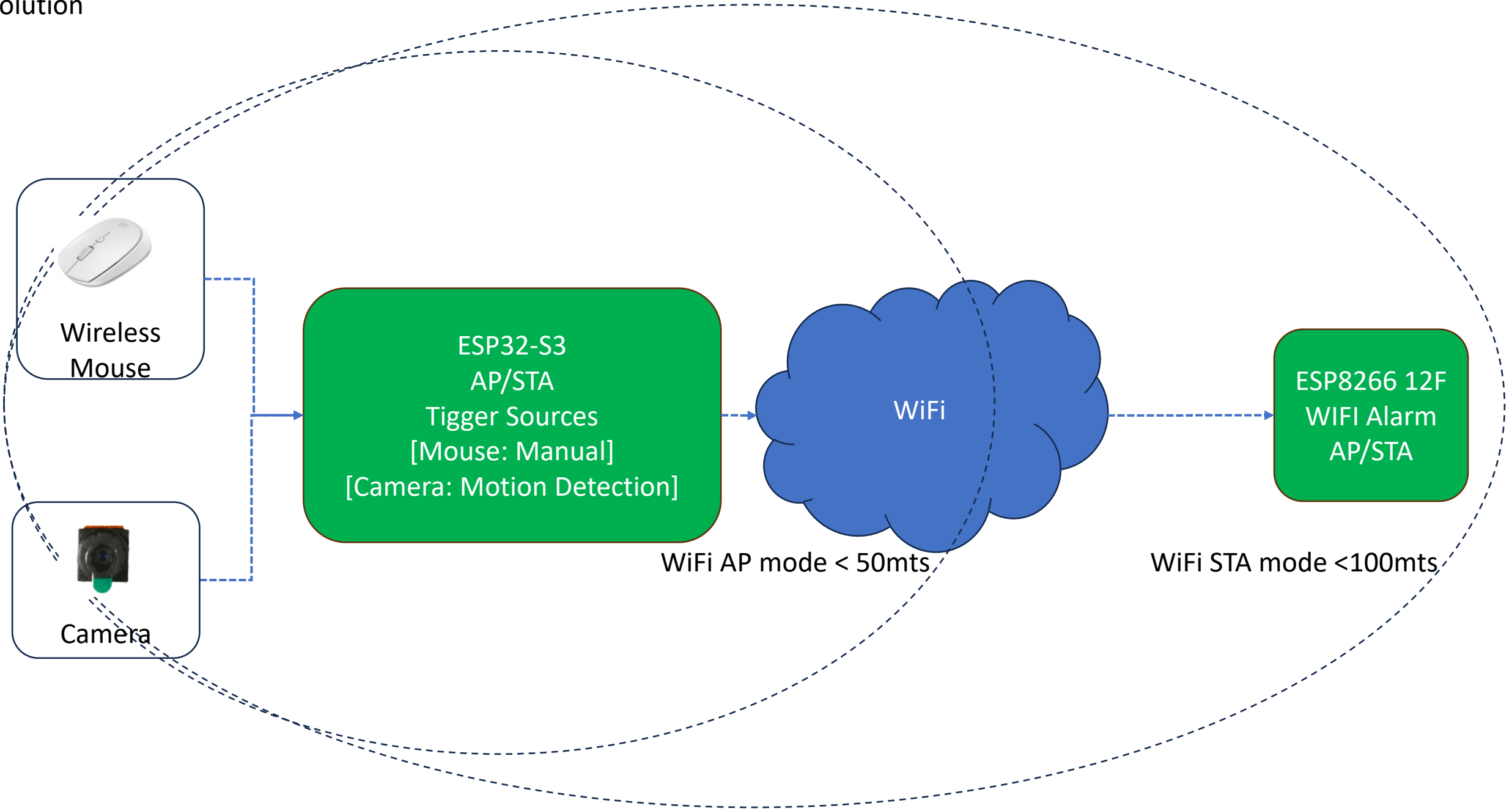
Mobile phone: +86-13556872654  
Telephone: +86-0755-21032448  
E-mail: ID:sales2\_dy@163.com  
QQ ID: 40293927  
Address: 1001-48, No. 1 Workshop, Kanghual Industrial Park, No. 60, Ping'an Road, Dafu Community, Guanlan Street, Longhua District, Shenzhen

DC-DC Buck  
Boost 3.3V  
HX4002B

System



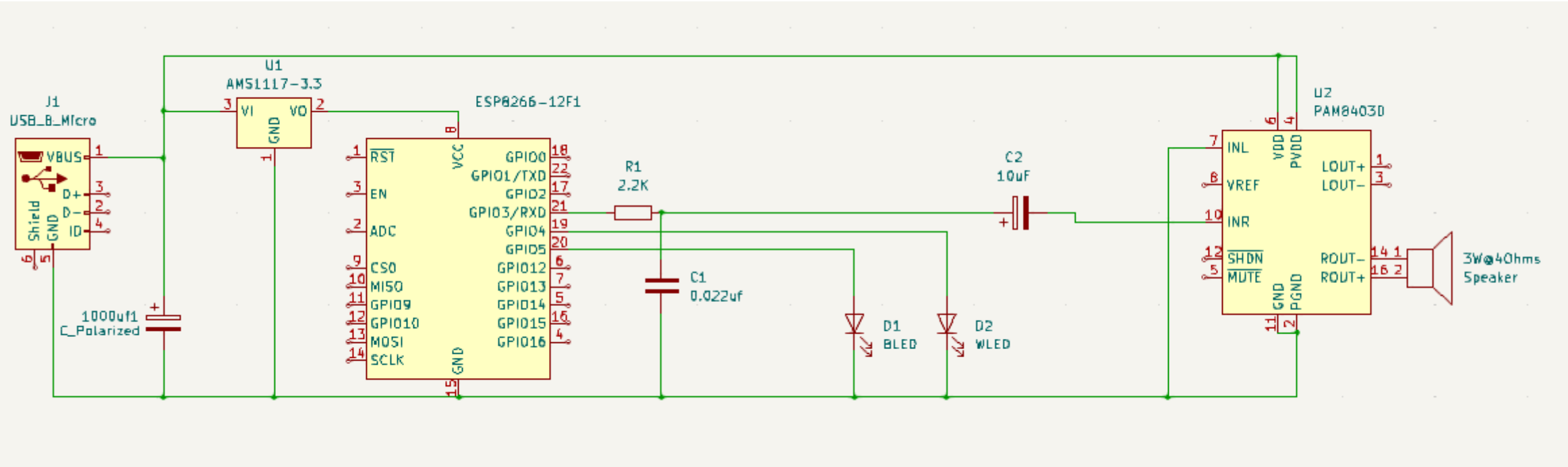
Solution



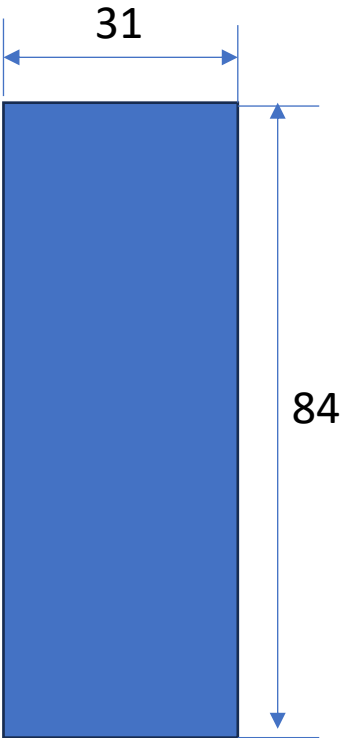
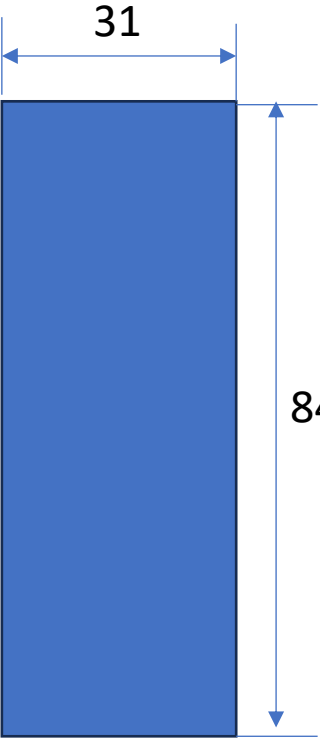
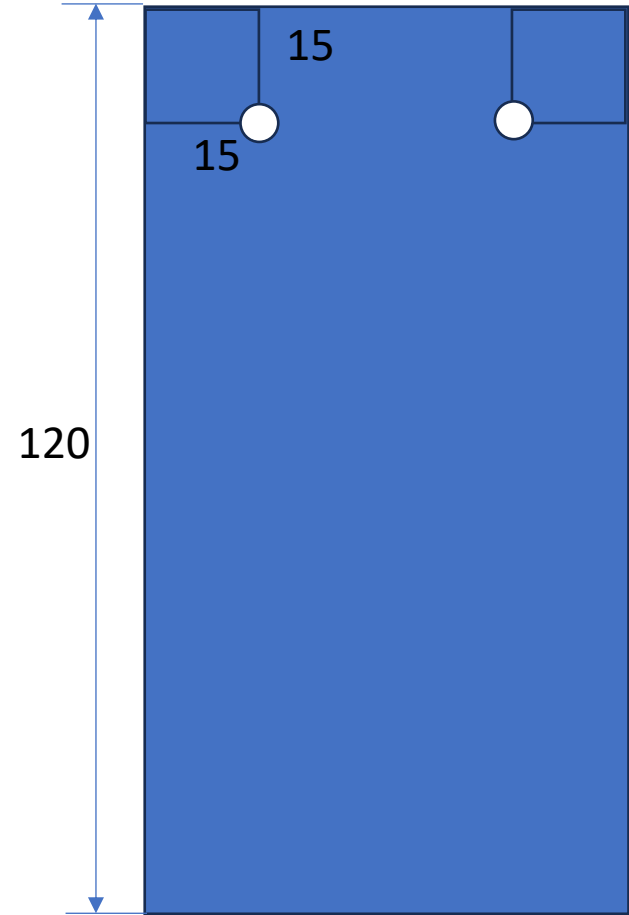
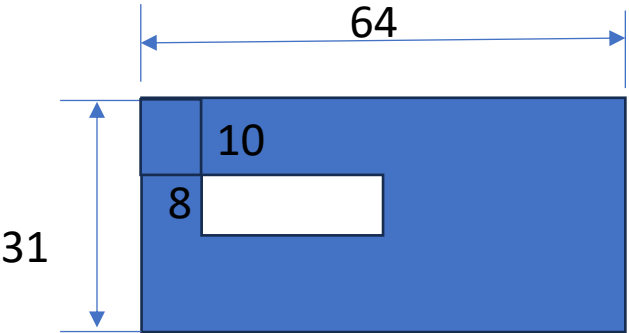
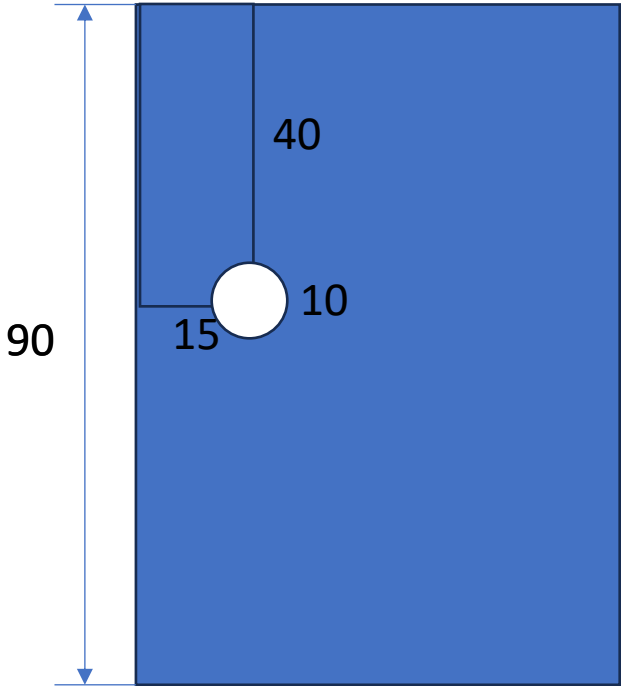
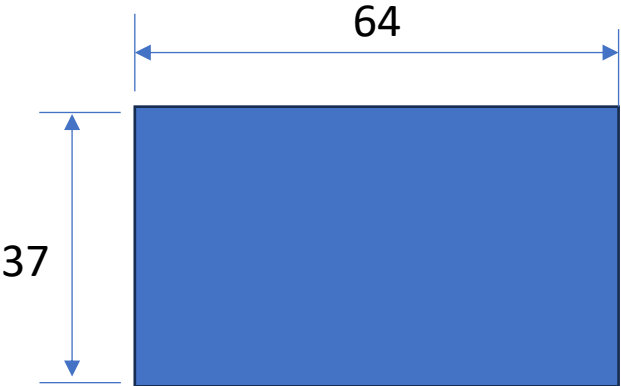
BOM

Item	INR	Comments
Wireless Mouse	269	<a href="https://www.portronics.com/products/toad-23">https://www.portronics.com/products/toad-23</a>
ESP32 S3 + OV2640	827	<a href="https://www.autables.com/product-page/esp32-s3-cam-n16r8-development-board-wifi-bluetooth-ov2640-camera-type-c-arduino">https://www.autables.com/product-page/esp32-s3-cam-n16r8-development-board-wifi-bluetooth-ov2640-camera-type-c-arduino</a>
USB OTG	160	<a href="https://kdmindia.in/product/km-otc/">https://kdmindia.in/product/km-otc/</a>
ESP8266-12F	99	<a href="https://robu.in/product/latest-esp-12f-esp8266-wifi-module-ap-station-remote-serial-wireless-iot-board/">https://robu.in/product/latest-esp-12f-esp8266-wifi-module-ap-station-remote-serial-wireless-iot-board/</a>
SPEAKER	40	
PAM8304	19	
USB micro	7	
PCB	40	
Acrylic Works	250	
OLED	135	
Total	1851	22\$ USD

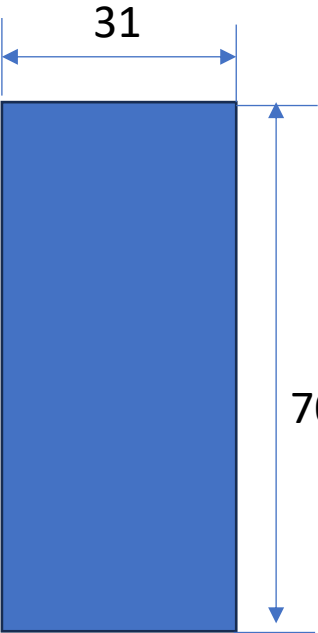
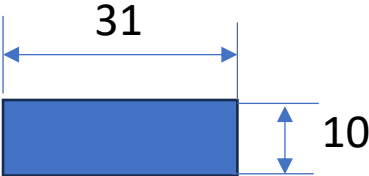
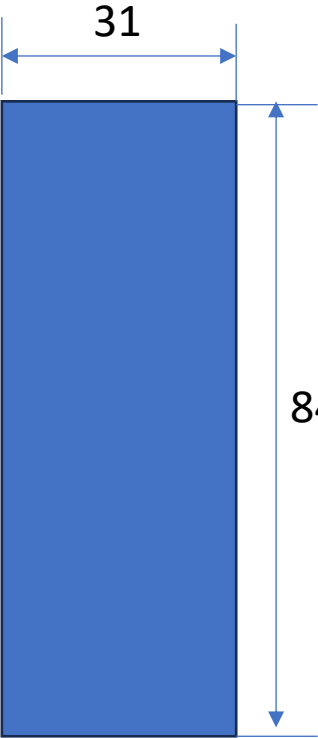
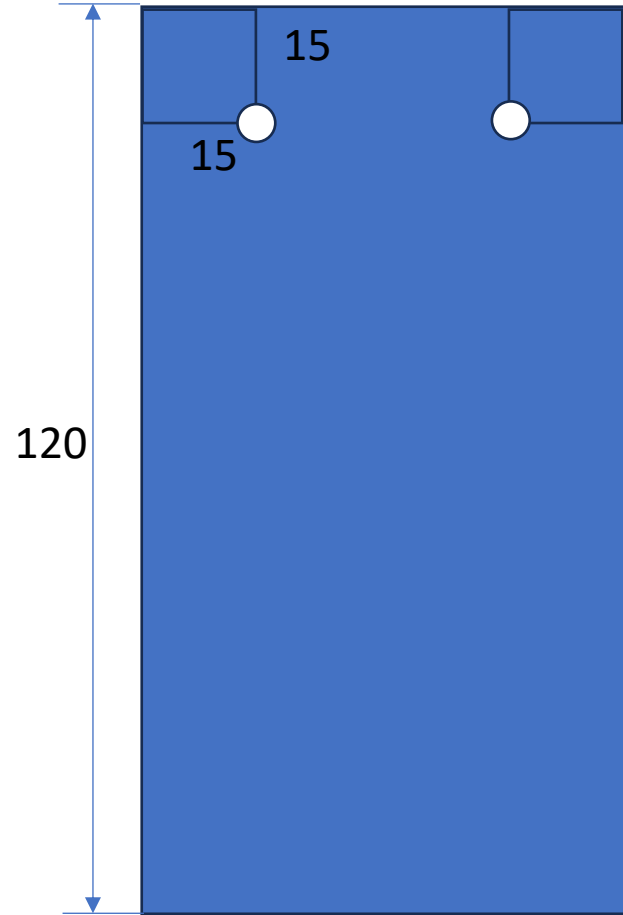
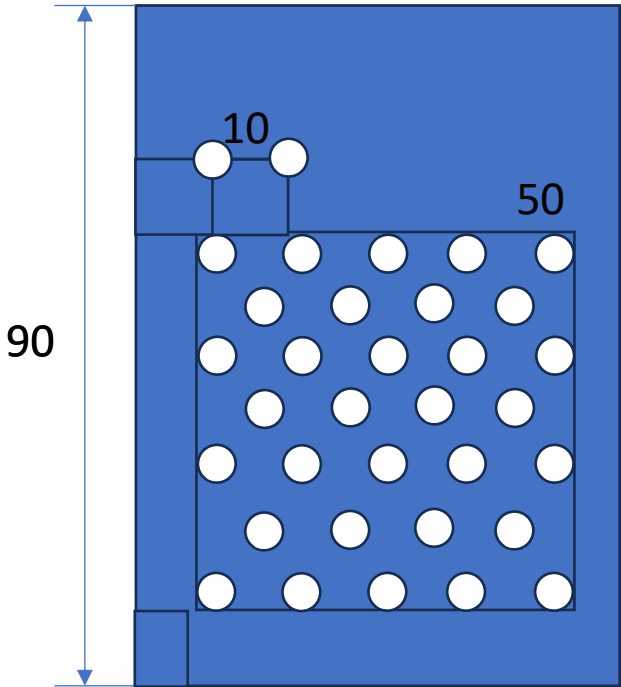
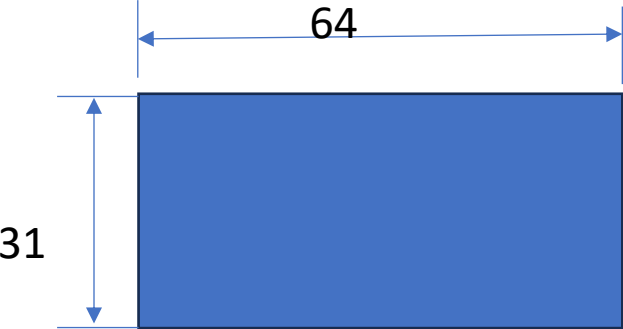
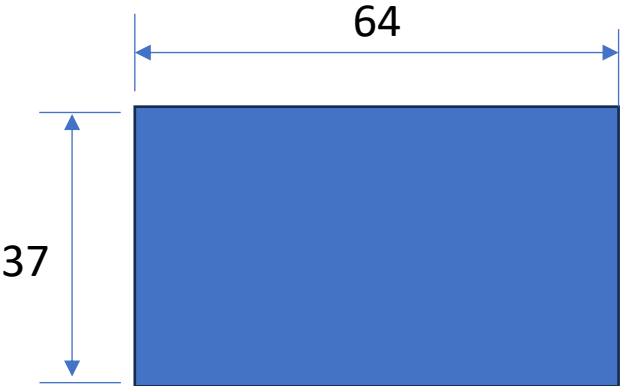
ESP 8266 -12F



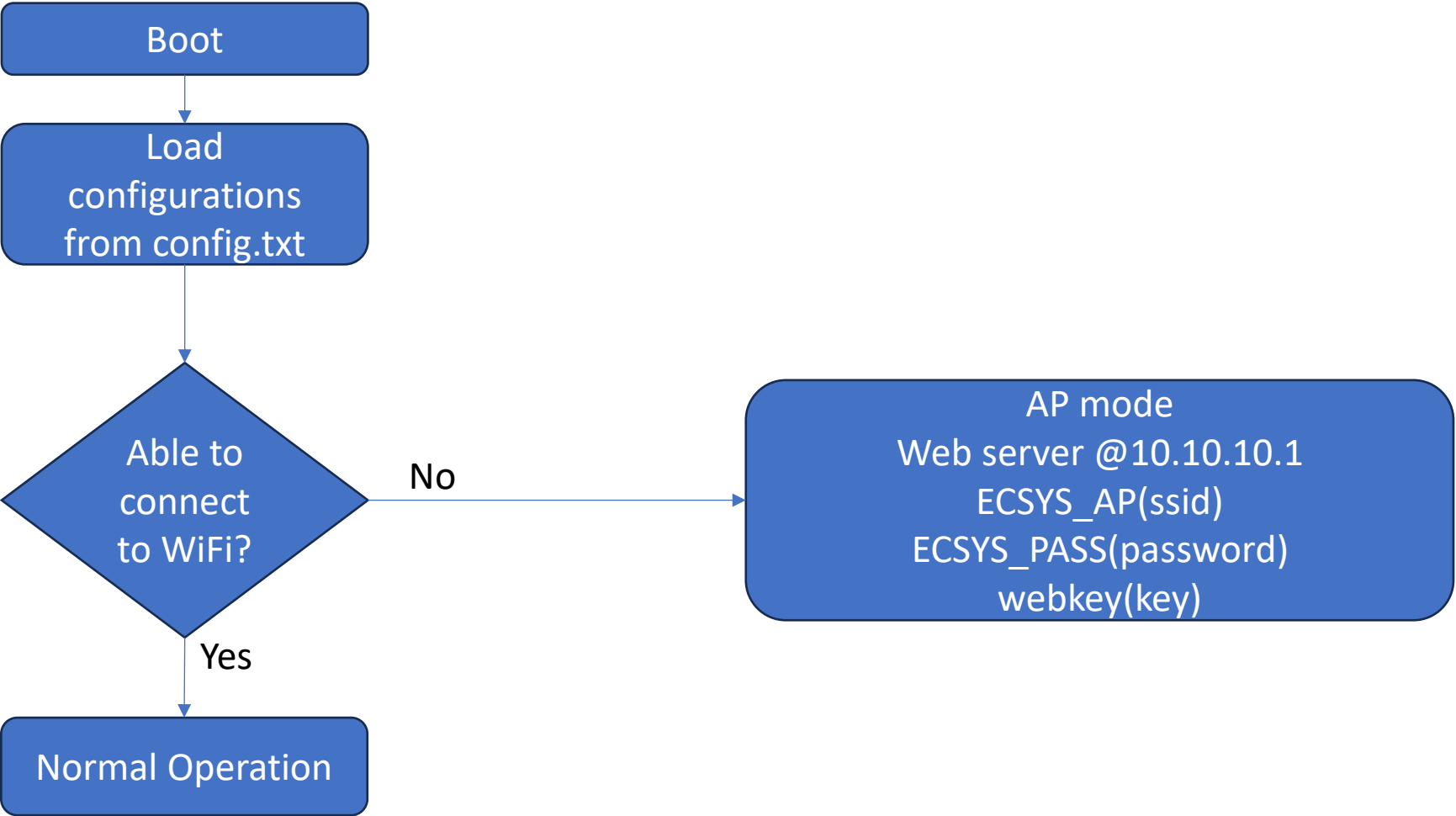
Acrylic Sheet 6mm



Acrylic Sheet 6mm







On Boot

LED Colour = ON  
LED White = ON

On Attempt to Connect to WiFi

Both LED's will  
Blink in Sync

WiFi\_SSID:

WiFi\_PASSWORD:

KEY:

Reboot

AP Mode  
Both LED's will blink  
in Alternative

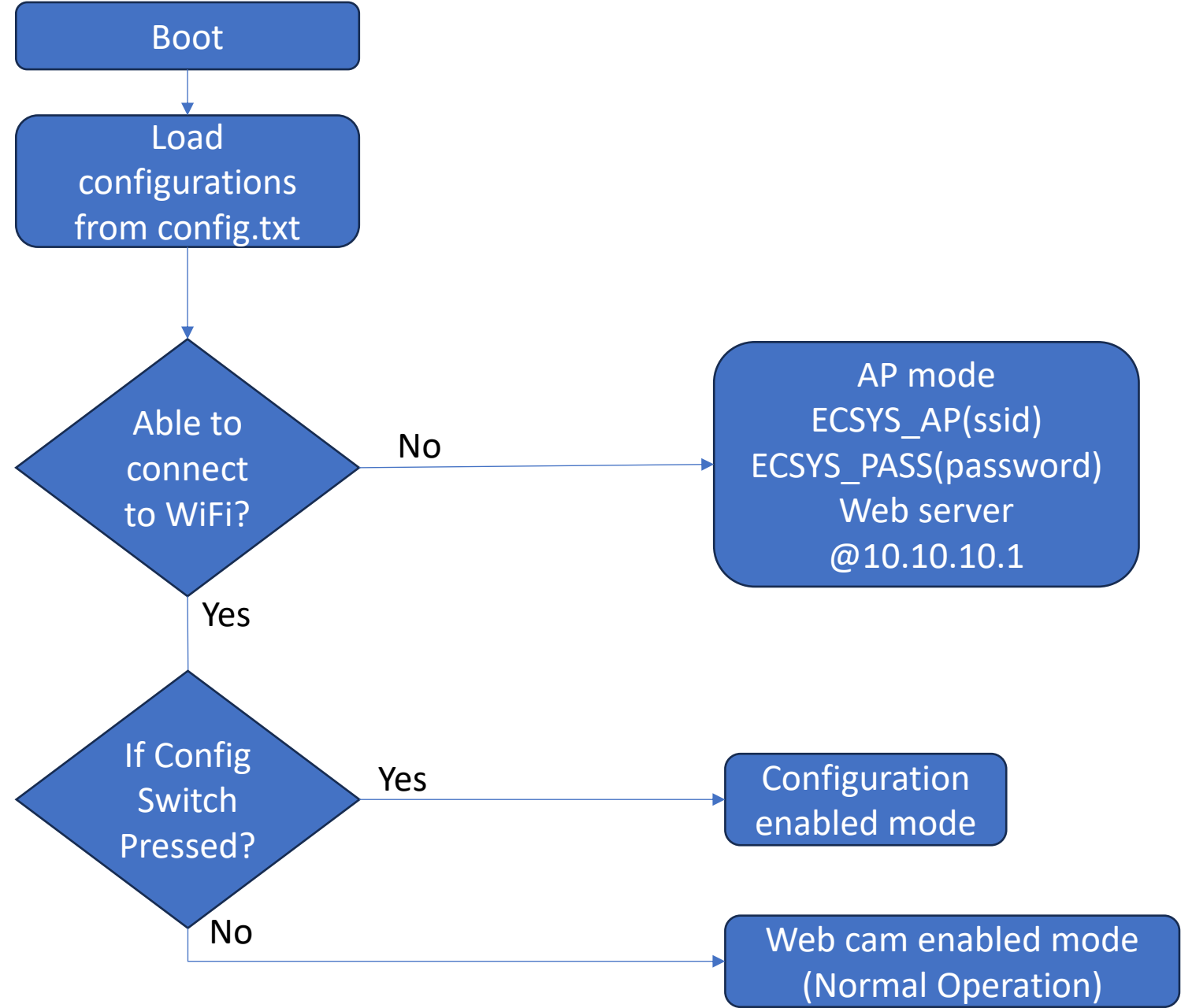
No

Able to  
connect  
to WiFi?

Yes

LED White = OFF  
LED Colour =  
BLINK upon  
receiving KEEP  
ALIVE packets

When WiFi Alarm unable to connect to preconfigured Wifi LAN network it will enter into AP mode. In this mode user can connect using default username and password and enter credentials for new available WiFi network



# Screen Shots









Region Of Interest (ROI)  
This area is processed  
for image processing to  
detect any motions

## ECSYS Configuration[233 Bytes]

### Sample Configuration

```
ssid = sarath_nivas_EXT #wifi ssid
pass = land1234 #wifi password
jpeg = 100 #jpeg image quality 0 - 100
beacon = 15 #beacon time out 1-255 seconds
mouse = 3 #mouse level sensitivity L=0,L+R=1,L+R+M=2,L+R+M+S=3,L+R+M+S+movement=4
key = espkey #secret shared between wifi alarm and ecsys
mdini = 16,24 #start time 0-23, duration 0 -24 in hrs, 0 = disable
mdth = 1024 #motion detection threshold 1 - 2^32
mdroi = 40,40,560,400 #x,y,w,h on 640x480 ROI for motion detection
mdalrm = yes # if yes alarm will ring on motion detection
tz = UTC-5:30 #setting timezone for India
ts = 2025,02,20,10,30 #if NTP fails this year,month,date,hour,minute will be time at bootup
sdcard = yes #enable = yes [MAKE SURE SDCARD IS INSERTED FOR SYSTEM BOOT UP if enabled]
led = yes #enable = yes else disabled blinking led
msg = 1234567890 #user specific message
```

```
ssid = sarath_nivas_EXT
pass = land1234
jpeg = 100
beacon = 15
mouse = 3
key = espkey
mdini = 16,24
mdth = 1024
mdroi = 40,40,560,400
mdalrm = no
tz = UTC-5:30
ts = 2025,02,20,10,30
sdcard = yes
led = yes
msg = 1234567890
```

-  BLUE SLOW BLINKING – System bootup
-  WHITE SLOW BLINKING with LCD NO SCROLL– System running , showing WiFi = STA or AP , SD = Y/N, IP address Y/N (If Y NTP is synced and N means configured time is used), Current time, “NOT CONNECTED”
-  GREEN SLOW BLINKING – System connected to alarm unit with LCD – scrolling left showing “SYSTEM ACTIVE” and user message.
-  YELLOW Slow blinking Press user switch to enter into configuration mode. LCD will display Configuration Mode
-  ORANGE Slow blinking. LCD will display Remote Monitoring WEB
-  ALARM LCD will display and Scroll “System Active” and User message