



Tips, Tricks, and Tribulations

2025 BSIDES KNOXVILLE BADGE

ESP32-S3

- 2.4GHz Wi-Fi
- BLE5
- AI Acceleration
- Micro Python
- Arduino IDE



<https://www.espressif.com/en/products/socs/esp32-s3>



ESPRESSIF

Screen One



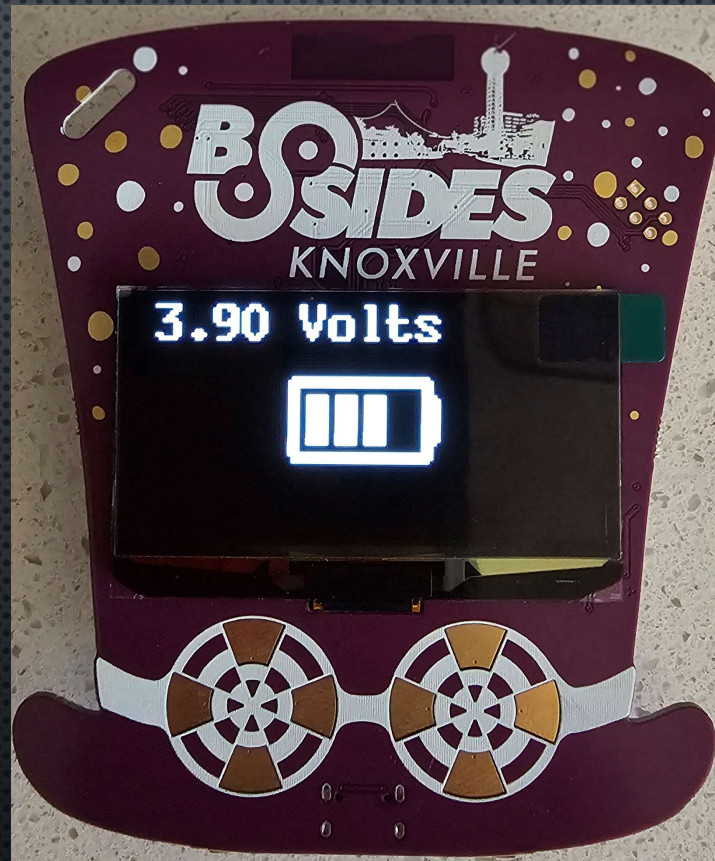
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Screen Two



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Screen Three



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Screen Four



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How Do I talk to it?

- CH340 Driver
- USB Type-C Cable
- Putty or Arduino IDE



```
*****
*****Menu Commands*****
*****
[name:<type your name here>]
[ssid:<WiFi Name>]
[pw:<WiFi Password>]
[timeout:<screen time out in seconds>] 0 = OFF
[reboot] Reboots Badge
[reset] Clears saved data
[scroll] changes the scrolling speed (lower number is faster)
[debug] turns on debug
[timezone] Chnages time zone EST, CST, MNT, PST
[cutoff] changes BT dB sensitivity. (0 to -99)
*****
*****
*****
█
```



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Resources

- Espressif - <https://www.espressif.com/en>
- WHC - <https://www.wch-ic.com/>
- Arduino - <https://www.arduino.cc/>
- Micro-Python - <https://micropython.org/>
- Putty - <https://www.putty.org/>