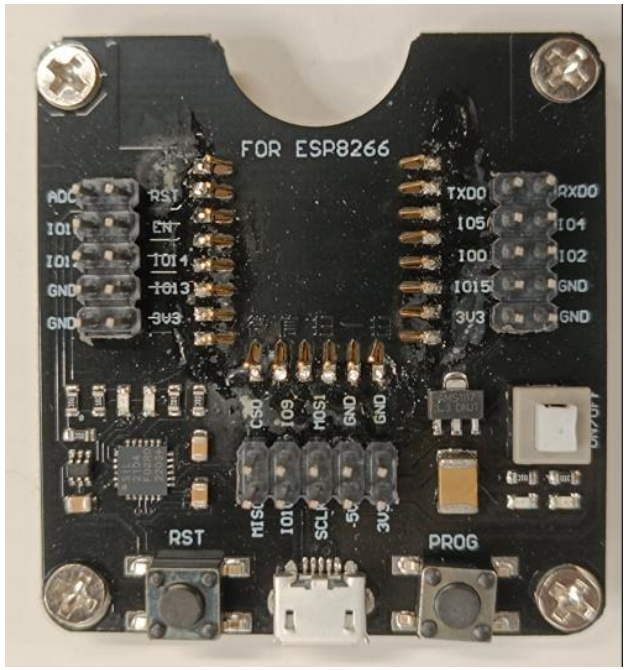
ESP32C Flashing, Provisioning and Line Test with C3 Flasher

Pre-Requisites

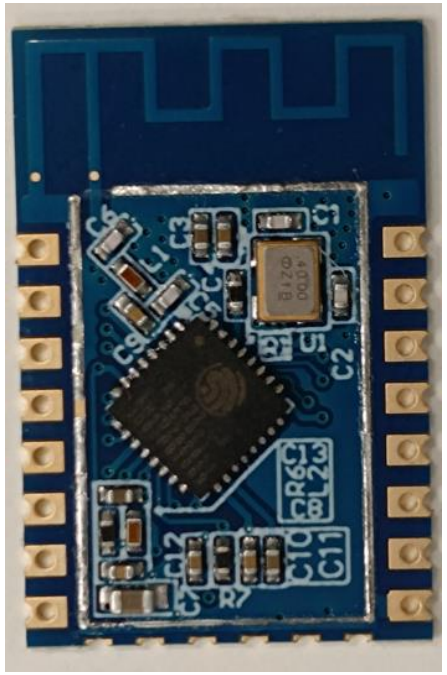
- ❑ C3 Flasher
- ❑ ESP32C Hardware
- ❑ Flashing and Provisioning Tool – Windows Software
- ❑ Line Testing using AC Simulator
- ❑ AC Simulator for Commission then RAC
- ❑ Type B USB Cable
- ❑ FTDI Chip
- ❑ Mini USB A Cable
- ❑ Jumper Cables

Pre-Requisites

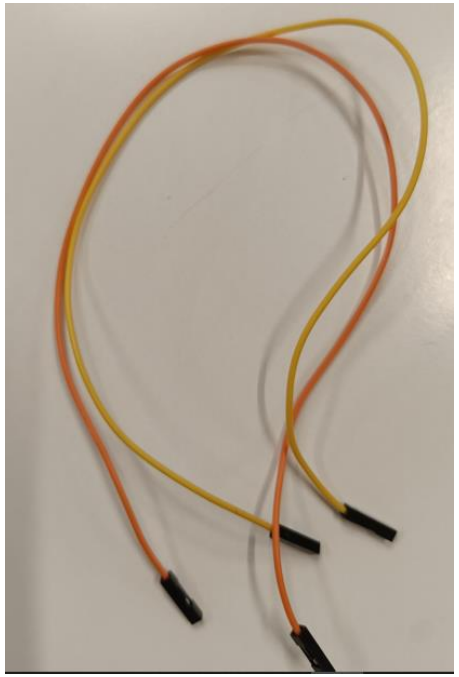
C3 Flasher



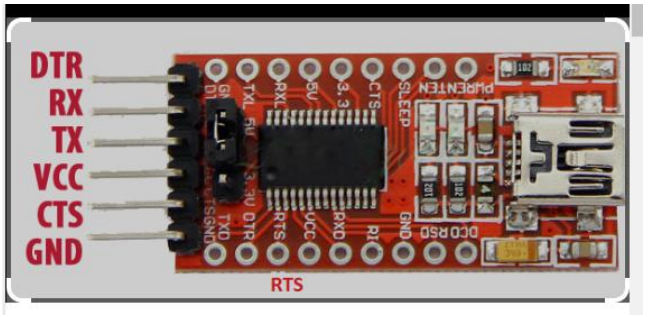
ESP32C



Jumper Cable



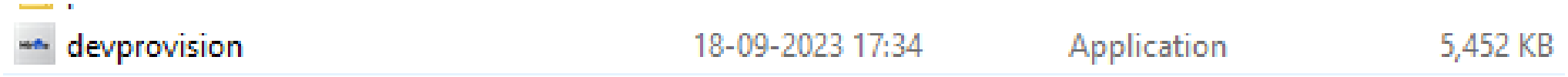
FTDI



Flashing and Provisioning Tool – Windows Software

- Please install OpenSSL and Set Environmental Path as per attached instructions file

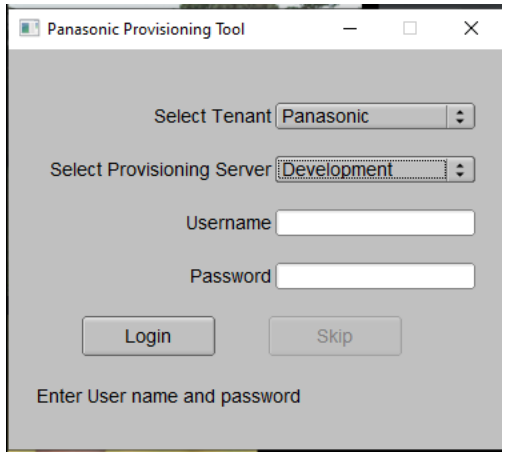
- Open Tool from given folder – Shown as per below



- Select Tenant and Environment

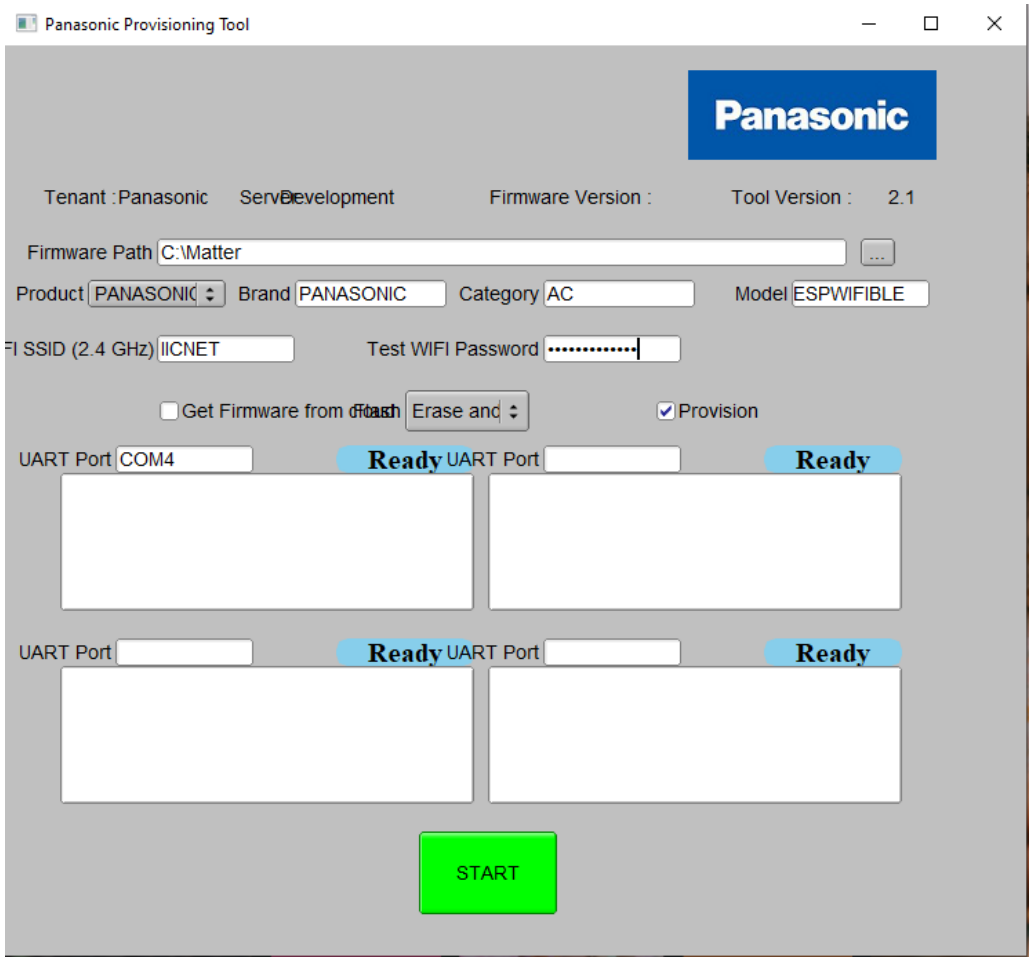
Enter below username and password

- **Username -**
- **Password :-**



Flashing and Provisioning Tool – Windows Software

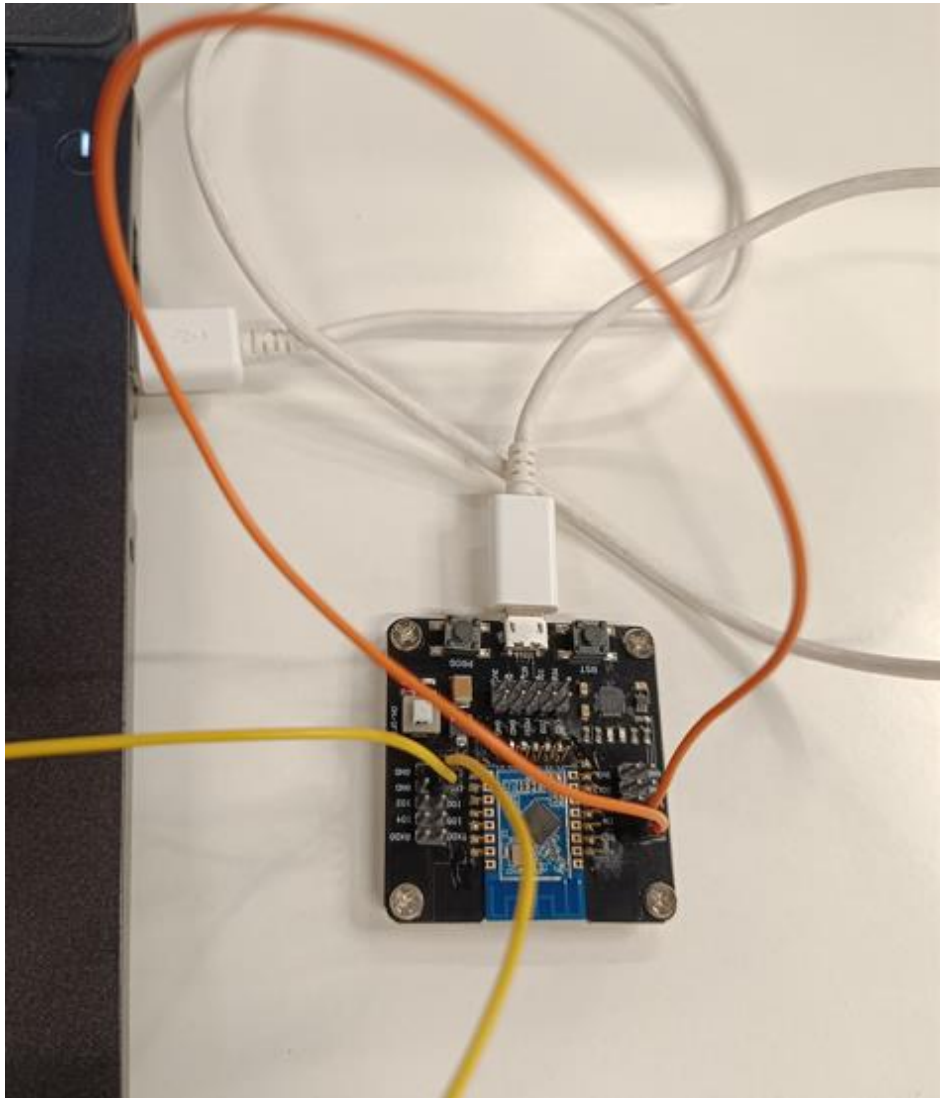
- Copy firmware in folder as per given example without space
  C:\Matter
- Select Product AC
- Input SSID and Password [2.4 GHz]
- Input UART Port [Get it from Device Manager]



Flashing and Provisioning Tool – Windows Software

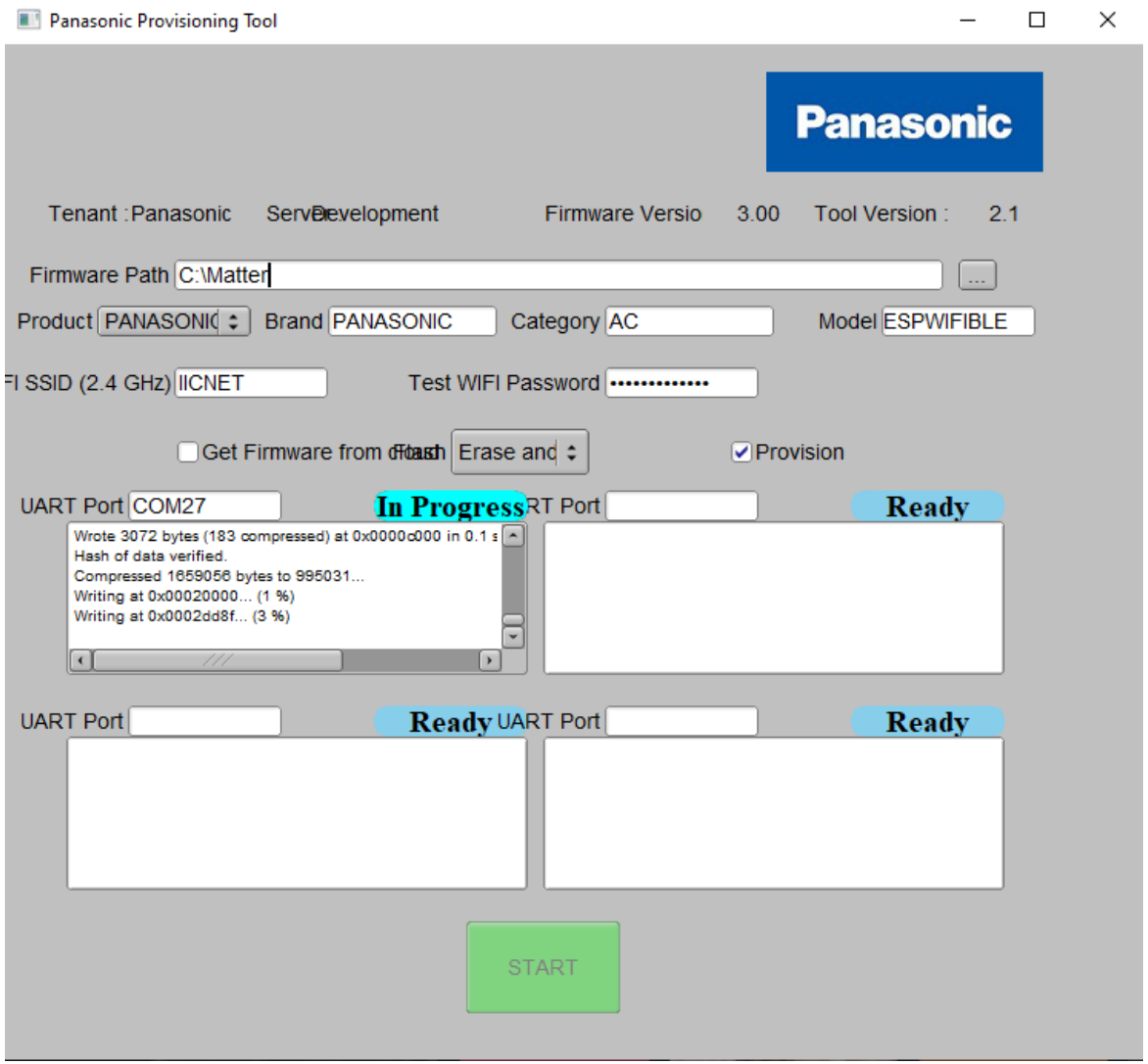
- Connect Jumper wires on Flasher as per show below picture
- Connection 1 : RST – EN
- Connection 2 : 3V3 – IO15
- Place ESP32C Module on C3 Flasher as per Shown in picture
- Connect C3 Flasher with USB Port on laptop
- Search Port in Device Manager and Enter

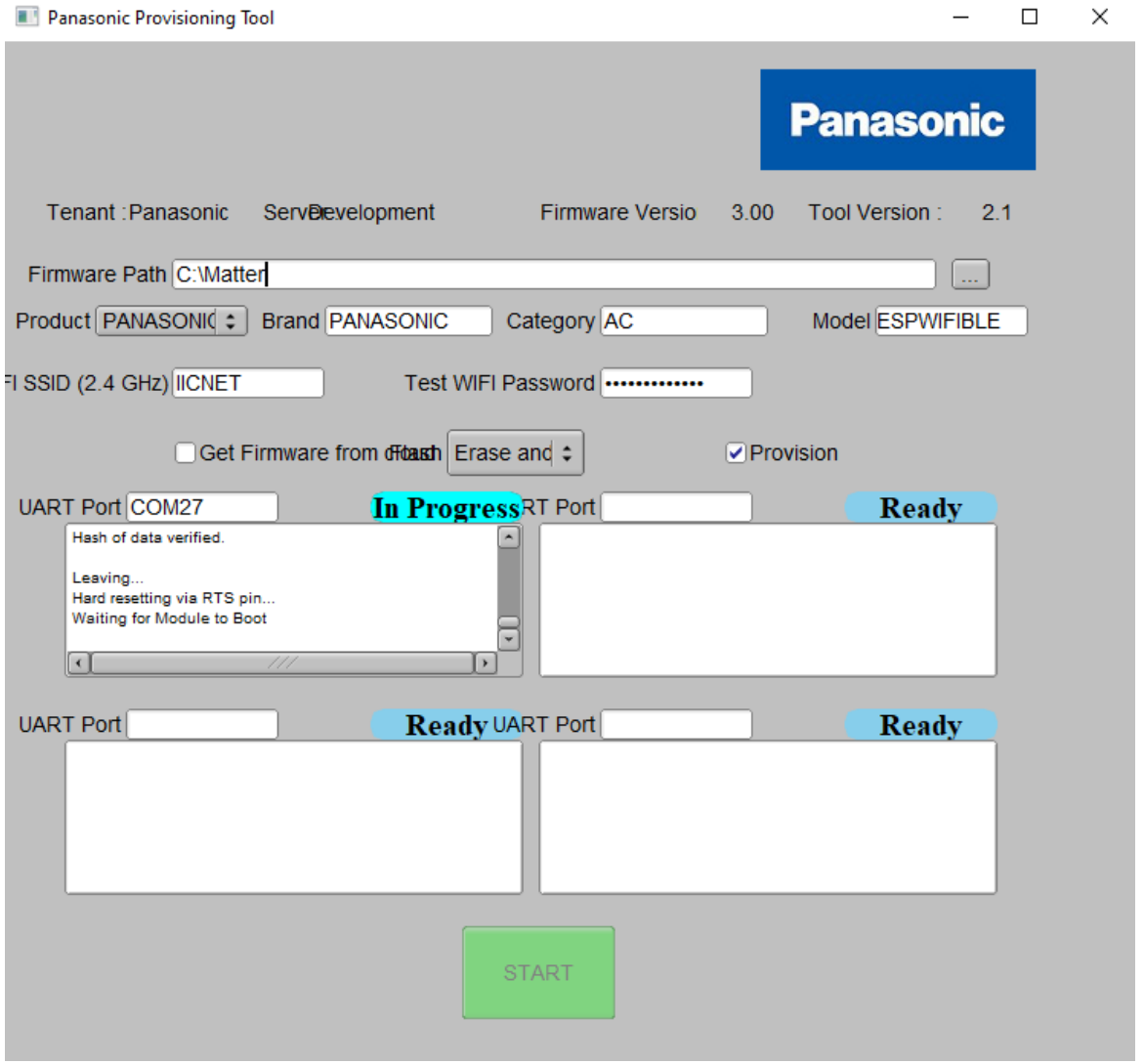
Same COM port in Panasonic Provisioning Tool



Flashing and Provisioning Tool – Windows Software

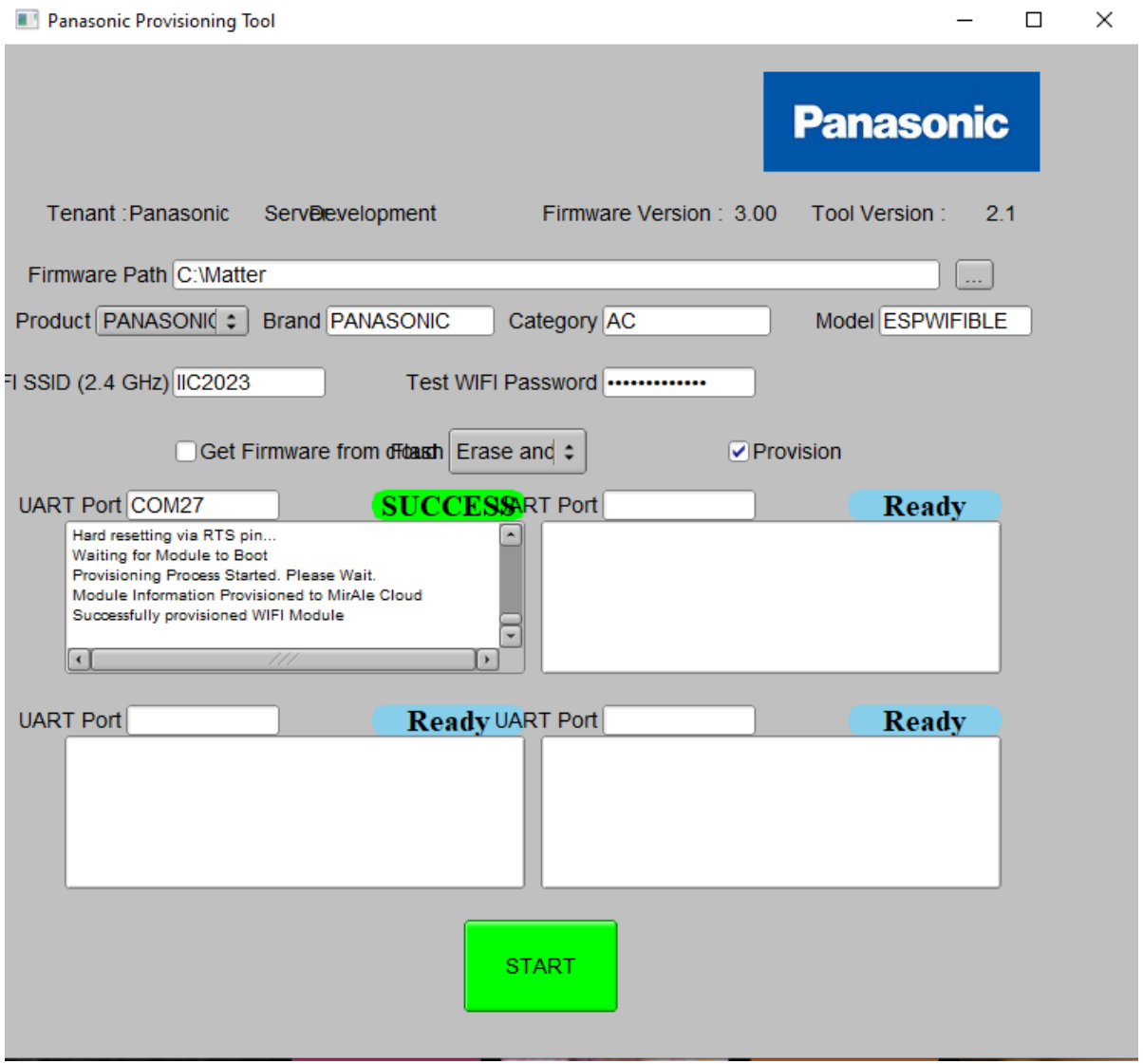
- Flashing progress





Flashing and Provisioning Tool – Windows Software

- Provision Pass



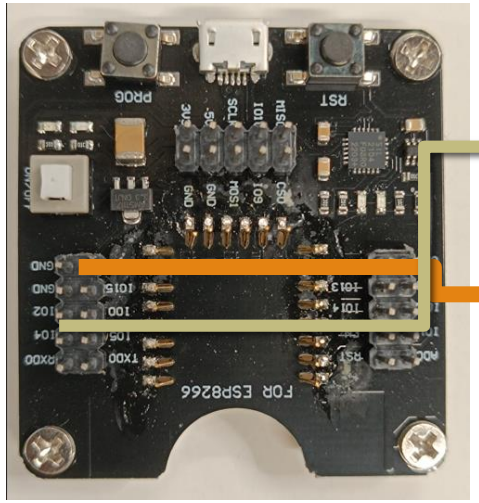
Line Test – Using AC Simulator

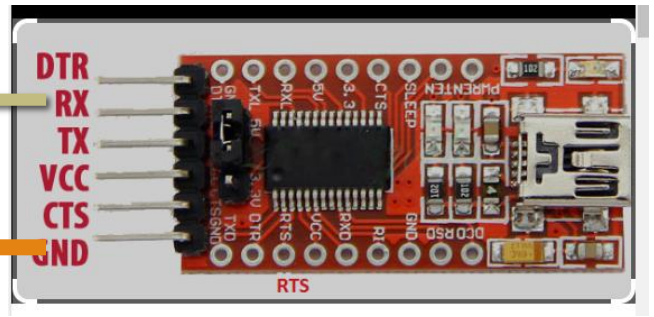
- Precondition – User must have Python installed in System
- Open AC Simulator Tool and Input COM Port e.g. COM27 [Shown in Device Manager]

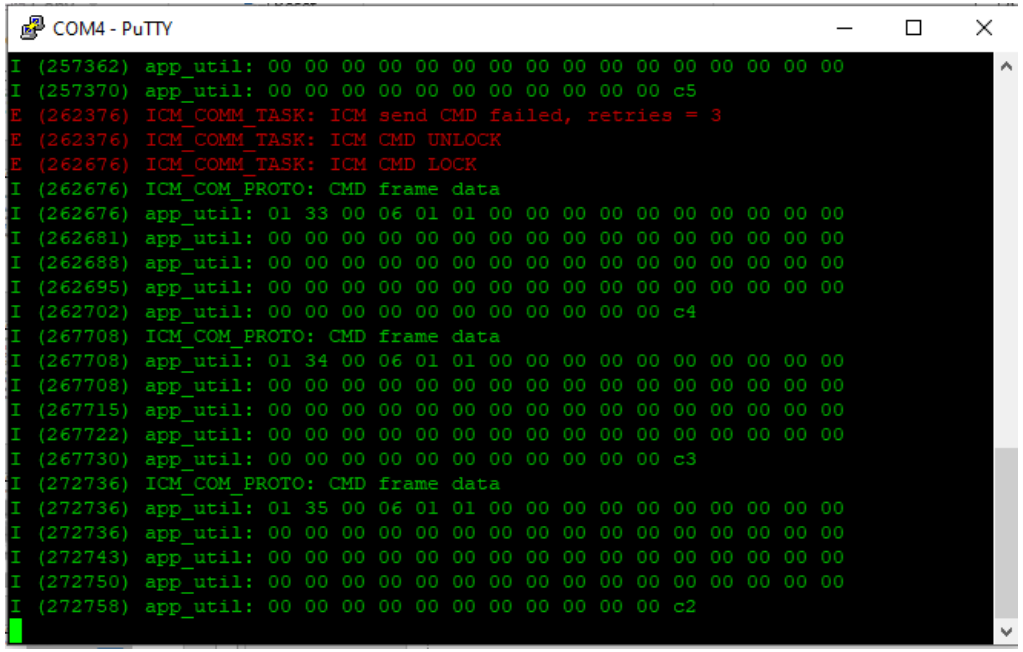
Name	Date modified	Type	Size
ac_sim_1.7	27-09-2023 16:02	Python File	42 KB

- Install Putty or Hercules to capture UART Logs for progress on line Test
- For Capture logs connect GND pin from C3 Flasher

To GND pin of FTDI and IO2 pin from C3 Flasher to RX pin of FTDI

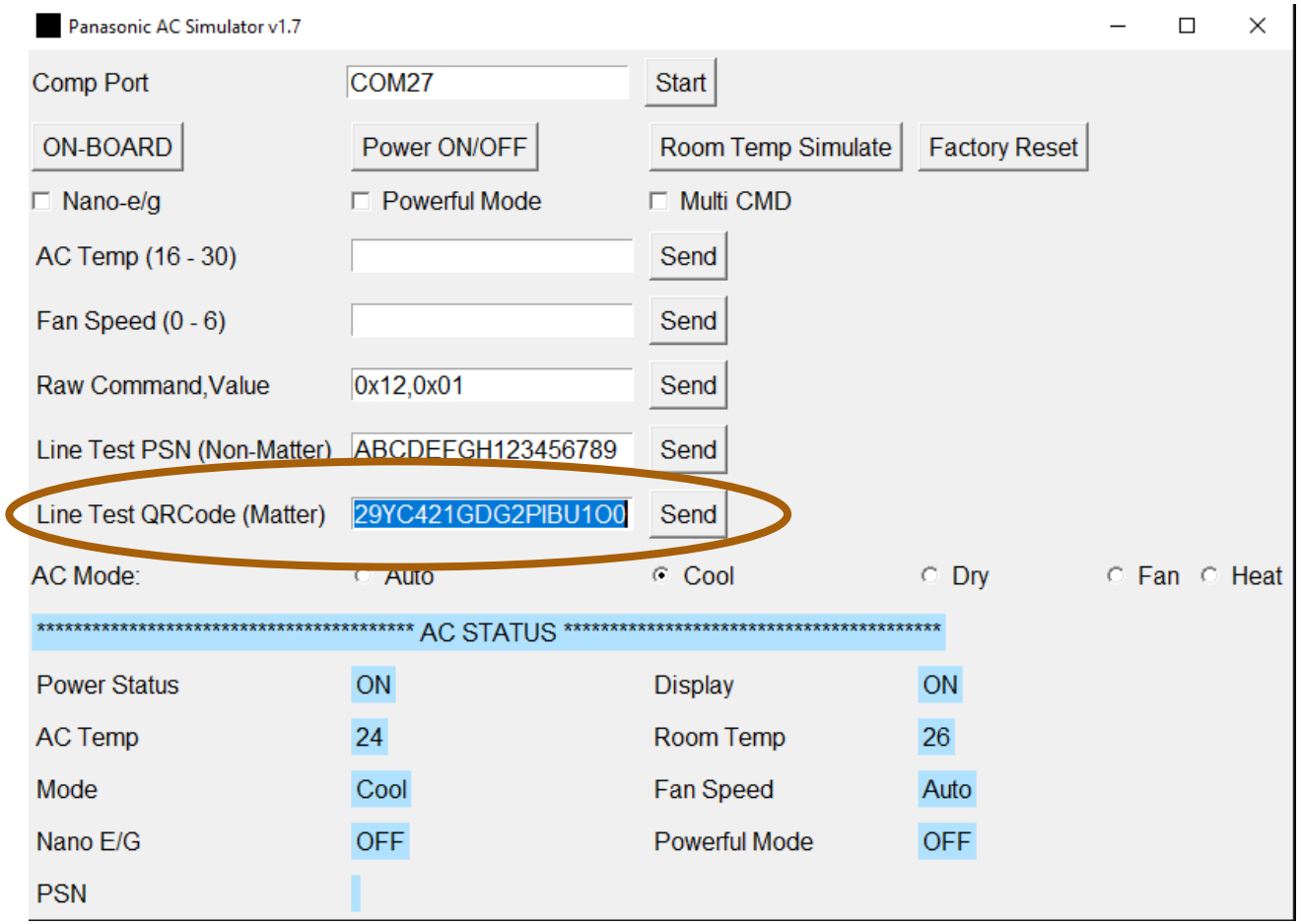






Line Test – Using AC Simulator

- Open AC Simulator Tool and Input COM Port e.g. COM27 [Shown in Device Manager}
- Update QR code string field by given QR code e.g.
  MT:A3L90Q1Y00XZ.52AE4P0OUYH0O9ZR1S2QC29YC421GDG2PIBU1O0
- Click on 'Send' button next to QR code.



Line Test – Using AC Simulator

- Check Putty Log with logs prints . If it shows then Line Test Pass

```
D (482299) nvs: nvs_open_from_partition chip-factory 1[0m
D (482304) nvs: nvs_set_str product-name CS-CU-HU18AKYF[0m
[0;32mI (482310) chip[DL]: NVS set: chip-factory/product-name = "CS-CU-HU18AKYF"[0m
D (482317) nvs: nvs_close 80[0m
D (482320) CHIP[DL]: matter_mfg_write_nvs_data:nvs_type=17[0m
D (482326) nvs: nvs_open_from_partition chip-factory 1[0m
D (482331) nvs: nvs_set_str mfg-date 20230921IN[0m
[0;32mI (482336) chip[DL]: NVS set: chip-factory/mfg-date = "20230921IN"[0m
D (482342) nvs: nvs_close 81[0m
[0;32mI (482445) LINE_TEST: [0;33mlinetest_parse_http_respose, EXIT heap sz: 97764[0
D (482445) event: no handlers have been registered for event ESP_HTTP_CLIENT_EVENT:6 p
D (482454) event: no handlers have been registered for event ESP_HTTP_CLIENT_EVENT:6 p
[0;32mI (482462) LINE_TEST: LT API Success[0m
```