

T-Impulse-Plus_V1.0 Power Consumption Test Log

Date: 20250825 LastEditTime: 20250825

Test board: T-Impulse-Plus_V1.0 (2025-6-18)

Software name: original_test.ino Testing organization: LILYGO Laboratory

1. Test Environment Description

1.1 测试环境

1.1 Test environment

| Test Tools | Sampling speed | Test Methodology | Input voltage | Test environment temperature | |
|------------|----------------|-------------------------------|---------------|------------------------------|--|
| BLU939 | 100000 times/s | Battery Interface Measurement | +4.0V | 25°C/77°F | |

1.2 测试的器件型号

1.2 Test device model

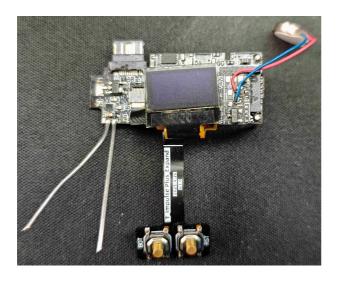
| Test device | MCU | Screen | GPS | Lora | Flash | IMU | Power |
|---------------------|----------|---------------|----------|--------------|---------------|----------|----------|
| Corresponding model | nRF52840 | oled(ssd1306) | MIA-M10Q | S68F(SX1262) | ZD25WQ32CEIGR | ICM20948 | SGM41562 |

2. Modification Instructions

- 2.1 拆除GPS位置的备用电池 2.1 Remove the backup battery for the GPS location



3. Test Physical Object Image

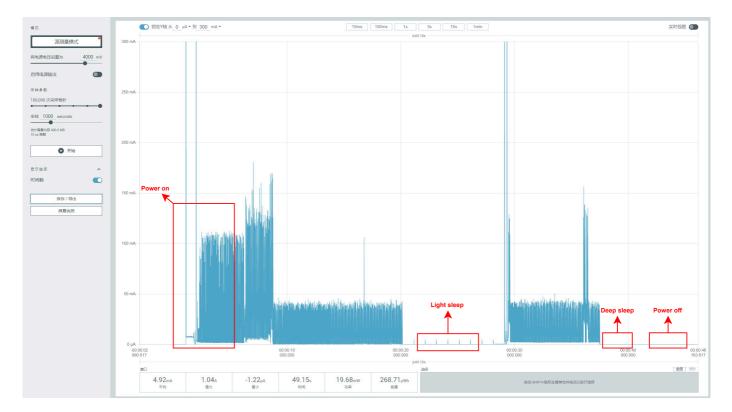






4. Power consumption testing

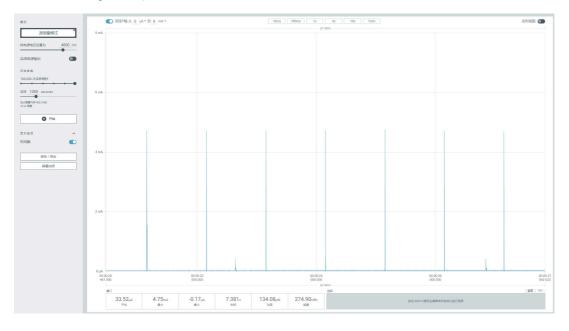
- 4.1 总电流变化测试图如下 4.1 The test chart depicting the variation of total current is as follows.



4.2 Current Test Status Diagram:

| MCU | Power | GPS | Screen | Lora | Flash | IMU |
|--------------------------|-------|-----|--------|------|-------|-----|
| System ON Light Sleep | ON | OFF | OFF | OFF | Sleep | OFF |

Test result: average 33.52 µA

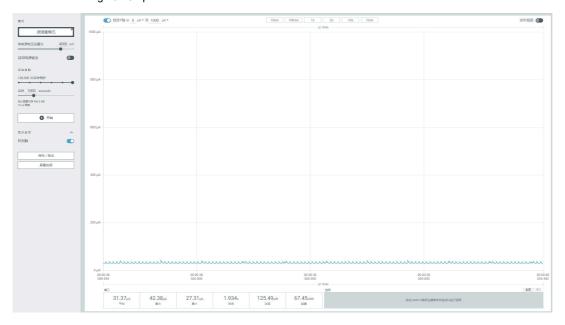




4.3 Current Test Status Diagram:

| | MCU | Power | GPS | Screen | Lora | Flash | IMU |
|-----|-----------------------|-------|-----|--------|------|-------|-----|
| 1 - | ystem ON eep Sleep | ON | OFF | OFF | OFF | Sleep | OFF |

Test result: average 31.37 µA



4.3 Current Test Status Diagram:

| MCU | Power | GPS | Screen | Lora | Flash | IMU |
|-----|-------|-----|--------|------|-------|-----|
| OFF | OFF | OFF | OFF | OFF | OFF | OFF |

Test result: average 0.77 µA

