T-Display-S3-Pro-MVSRBoard_V1.1 Power Consumption Test Log

Date: 20241210
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Test board: T-Display-S3-Pro-MVSRBoard_V1.1 （202411181741）
Software name: Deep_Sleep_Wake_Up.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	RTC	Power amplifier	Microphone	Power 3.3V
Corresponding model	ESP32S3	PCF85063	MAX98357AETE+T	MP34DT05TR-A	RT9080

2. Modification Instructions

2.1 拆除RTC位置的备用电池，并且不接屏幕
2.1 Remove the backup battery at the RTC location and do not connect the screen.
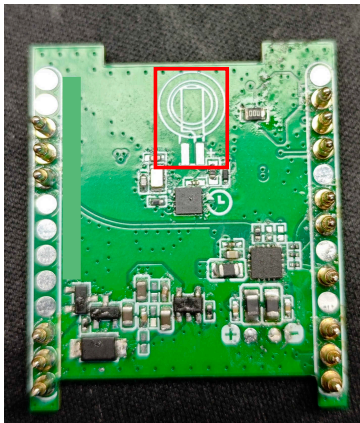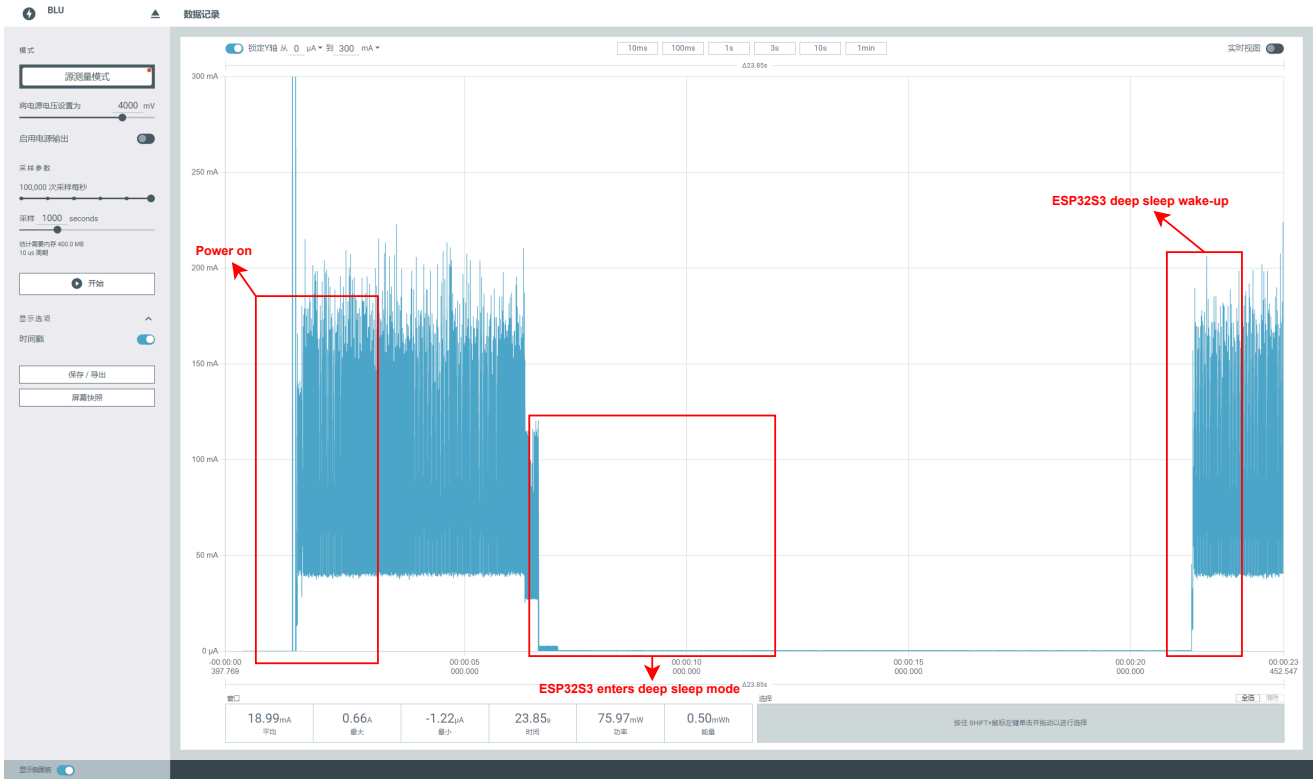

3. Test Physical Object Image
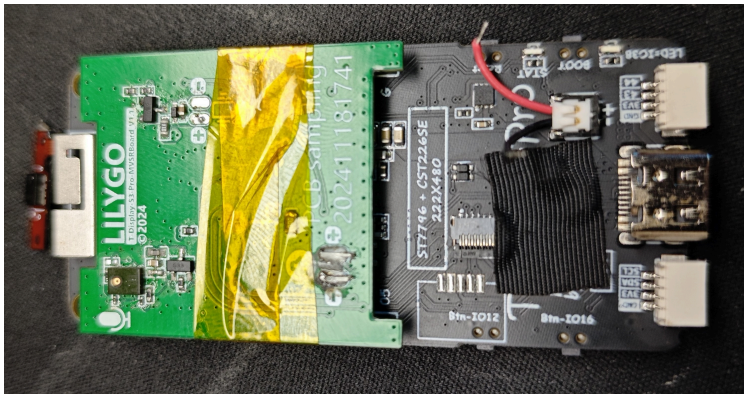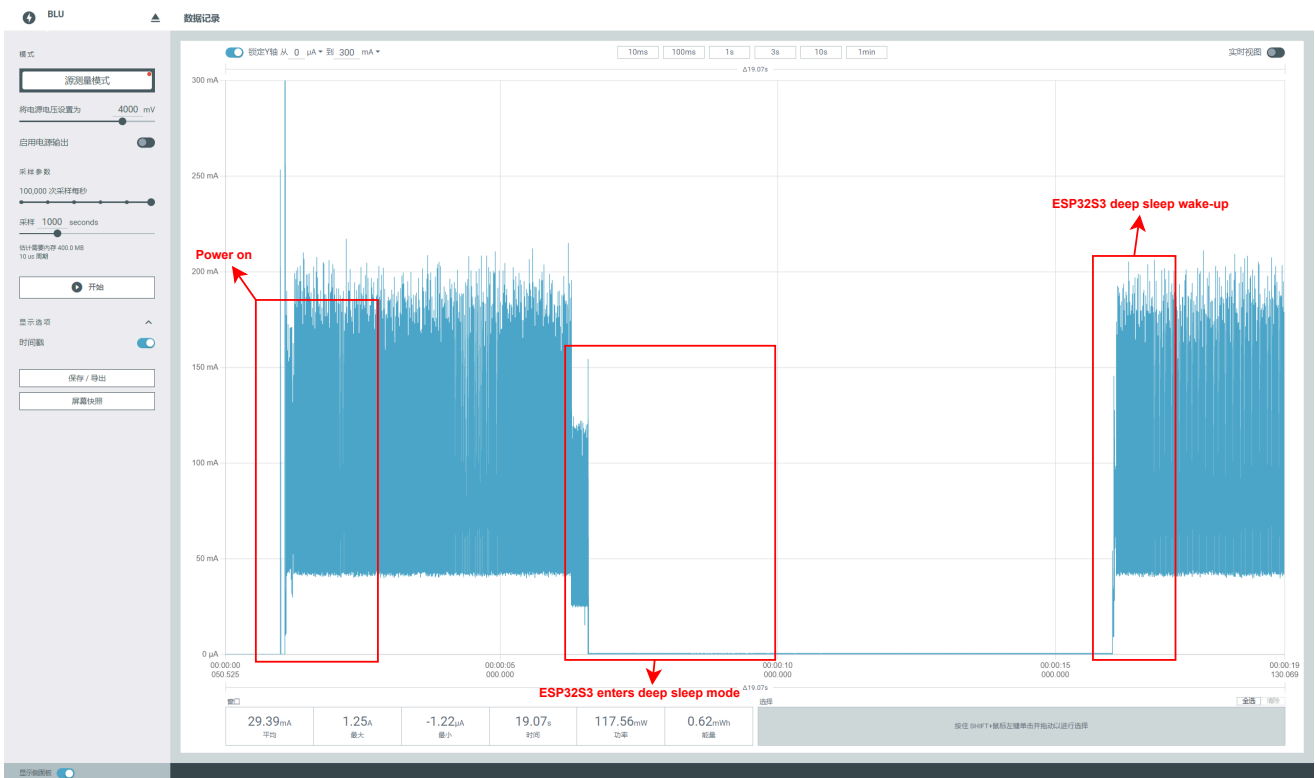
4. Power consumption testing

4.1 T-Display-S3-Pro主板+T-Display-S3-Pro-MVSRBoard背板总电流变化测试图如下
4.1 The total current change test diagram for the T-Display-S3-Pro motherboard + T-Display-S3-Pro-MVSRBoard backplane is as follows.

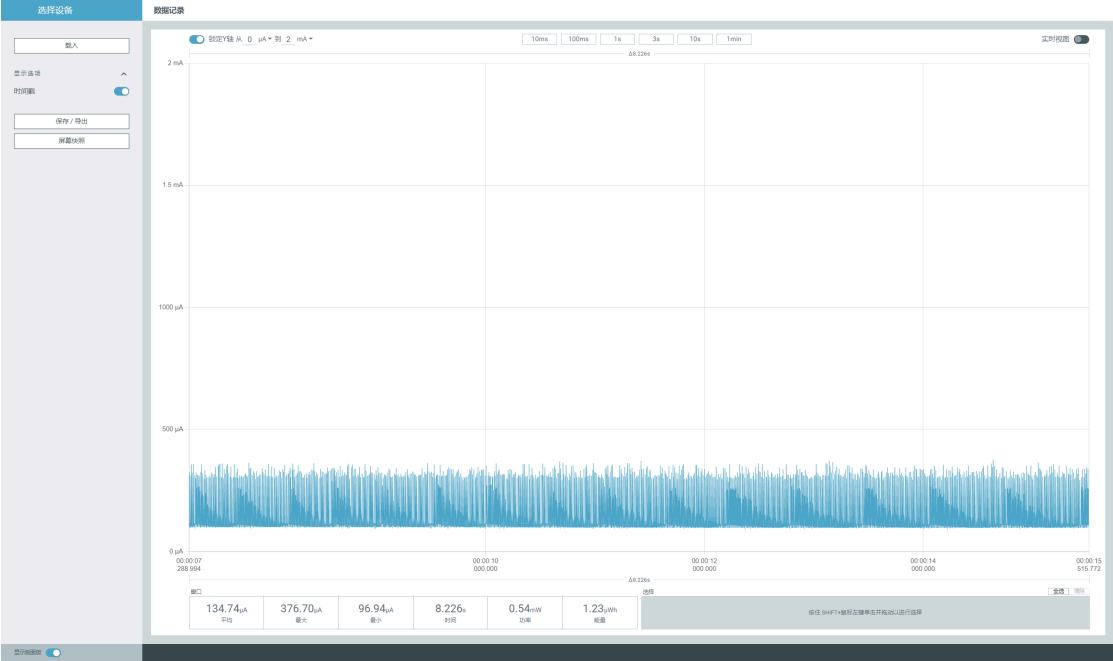
4.2 T-Display-S3-Pro主板总电流变化测试图如下
4.2 The total current change test diagram for the T-Display-S3-Pro motherboard is as follows.

4.3 T-Display-S3-Pro motherboard + T-Display-S3-Pro-MVSRBoard backplane Current Test Status Diagram:

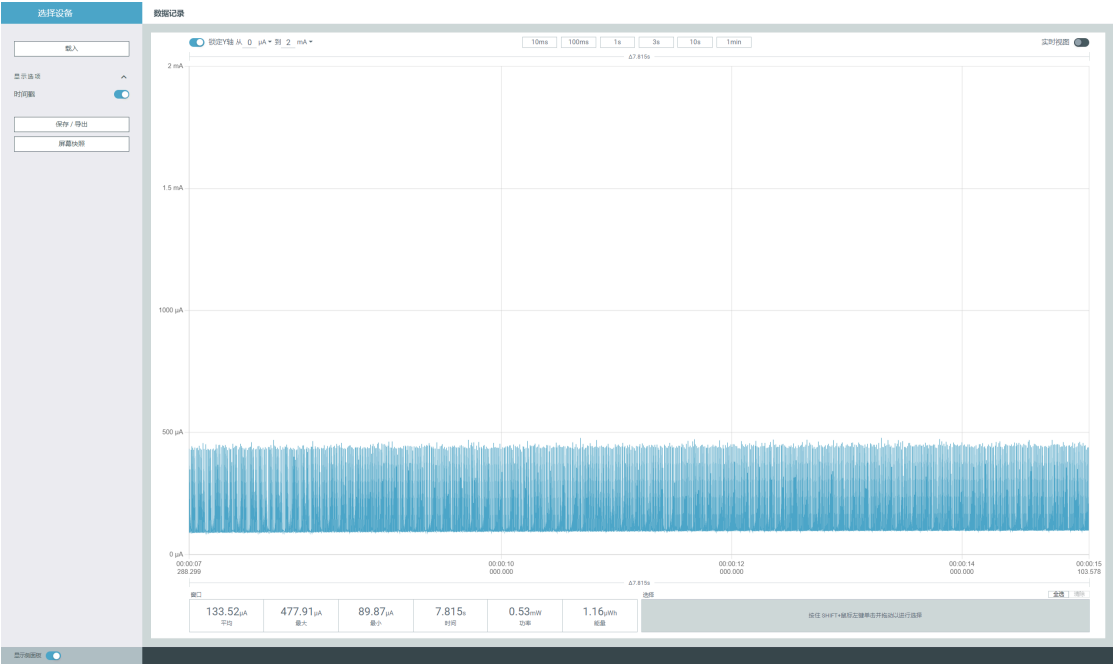| ESP32S3	Power 3.3V	RTC	Power amplifier	Microphone
Deep Sleep	**OFF**	**OFF**	**OFF**	**OFF**

Test result: average 134.74 μA

T-Display-S3-Pro motherboard Current Test Status Diagram:

ESP32S3	Power 3.3V	RTC	Power amplifier	Microphone
Deep Sleep	NULL	NULL	NULL	NULL

Test result: average 133.52 μA

The actual power consumption of the T-Display-S3-Pro-MVSRBoard backplane is: 134.74 - 133.52 = 1.22 μA