

[Platform]:

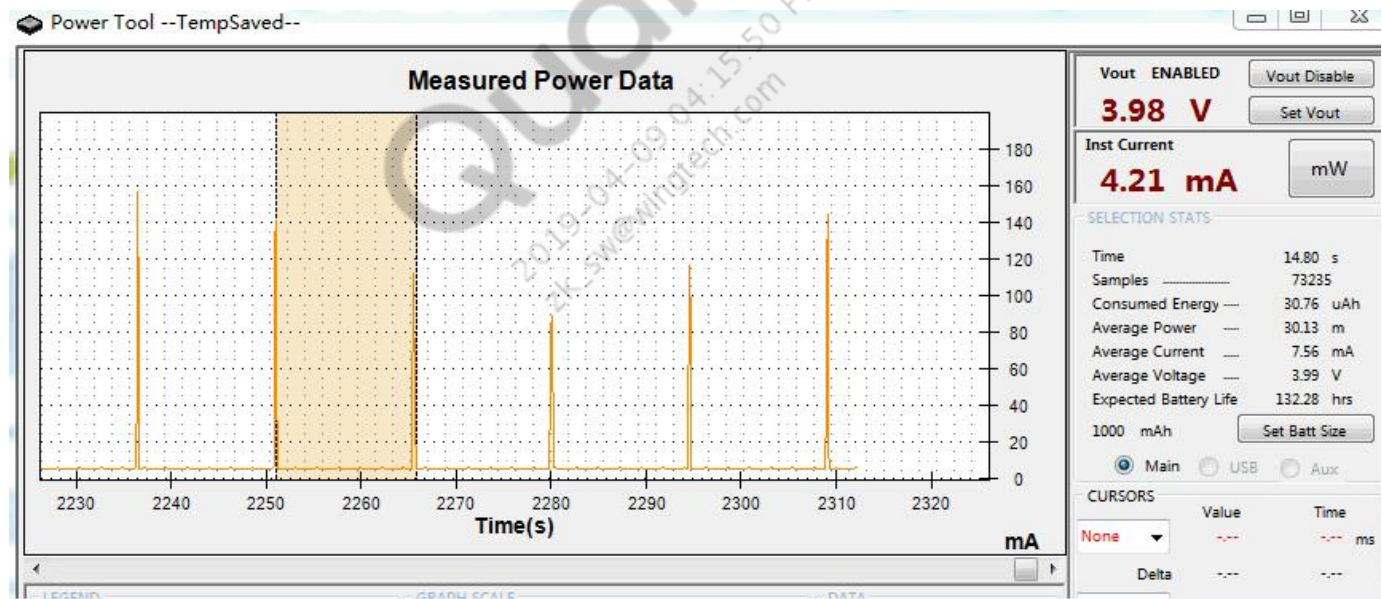
SDM660

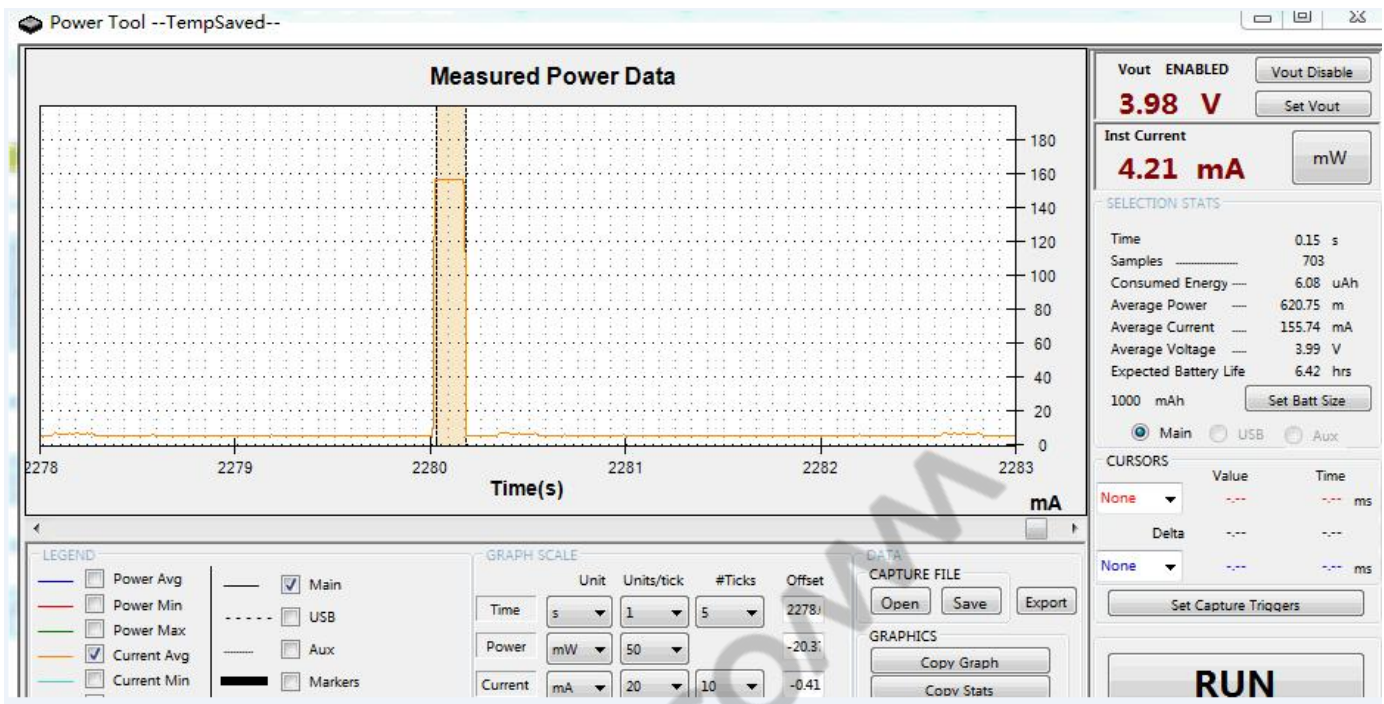
[Issue Description]:

As below plot shows, device sometimes occur 150mA current pulse every 15sec during system sleep, this will increase the sleep mode power consumption.

What is it and why? This is FG ESR pulse generated by PMIC for estimating the ESR value, and normally it should be triggered at least every 376sec, but one thing is required, the ESR estimation need to be successfully done, if no, then FG will trigger another pulse again, which we can see from the below plot that ESR is failed to be estimated at every pulse.

Currently we find issue happens when customer doesn't follow QCOM FG/CHARGER reference design, and the issue is related to the specific chips(confirmed by chip swap test).





[Solution]:

To avoid such issue, we can increase the ESR pulse interval by below configuration in FG driver.

```
--qcom,fg-esr-timer-asleep = <256 256>;
```

```
++qcom,fg-esr-timer-asleep = <160 256>;
```