TCCXXXX
BATTERY DRIVER
USER GUIDE

TCCXXXX_BATTERY_DRIVER_USER_GUIDE

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Telechips

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Revision History

Date	Version	Description
2012-02-16	0.10	This document is a guide to the Battery Driver. Initial release
2014-03-28	0.20	Changed basic driver and methods.

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Contents

1 Battery Driver

- This guide shows how to adjust battery driver for actual device.

2 Battery Driver source

- Source name : android_battery.c, axp-sply.c, axp-*.h
- You can find driver source at /kernel/drivers/power/android_battery.c, /kernel/drivers/power/axp_power/*

3 Battery Percentage

- Battery driver source code includes an array which is used to detect current battery level based on ADC value. This value can be read by pmic chipset and given the data from specific register of the pmic.
  - Percentage : Current battery level with coulomb counter control of a PMIC.
    - Also, the user can change the calculation method from coulomb counter to ocv calculation.

4 Default Battery Capacity

- source /kernel/include/linux/power/axp-cfg.h
  - BATCAP value represents the battery's basic capacity(mAh).

5 Default gauge-control method

- The default method is Coulomb Counter method.
- If a user wants to change the method to ocv calculation,
  - make menuconfig
  - Device Drivers → Power supply class support → AXP Series Charger drivers →
  - In AXP calculate type, Check 'ocv' tag.

6 Change the Rtc Alarm Wake-up Time

- source /kernel/drivers/power/android_battery.c
- The value SLOW_POLL, FAST_POLL represents a polling time suspend, resume situation.
- Default value is 60 seconds and 10 minutes each.

You can change this value according to device.