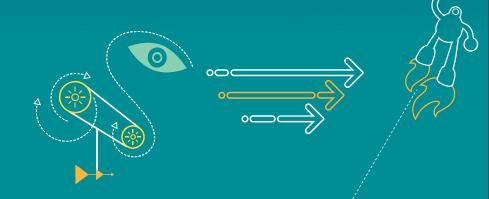
高通MSM8976功耗温升优化技术期刊 -20151228

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Checklist

- Power Consumption Data Document/Link
- Power Measurement Checklist
- Power Debug Guide
- CR/Patches Checklist
- Tips

Checklist --- Power Consumption Data

External Document

- MSM8976_LA_Current_Consumption_Data
 - Document #: 80-NT667-7
 - You can find detailed power break down data in this document
- Power Data for MSM8976.LA.1.0-00350-STD.PROD
 - Document #: 80-P1718-8
 - You can find power data for this release
- Power Data for MSM8976.LA.1.0.1_00060_STD
 - Document #: 80-P2778-4
 - You can find power data for this release
- Power_Consumption_Measurement_MSM_Android_MDM_Devices
 - Document #: 80-N6837-1
 - You can find test procedure guide for this release

Checklist --- Power Measurement

- Use perf_defconfig instead defconfig
 - Remove "Debug" features
 - Double check if "CORESIGHT" config is removed
 - Double check if "CONFIG_MSM_DEBUG_LAR_UNLOCK" config is removed
- Disable UART console
 - Especially for smart panel
- Remove unnecessary debug log with high frequency
- Remove on-device logging tools
- Read Certicom ID from device
 - adb shell /system/bin/r 0xA0128
 - This is to make sure TT part is used for power measurement. For comparison purpose with RCM data only since TT part is used on RCM.

Checklist --- Power Debug

- Power Debug Guide with Simplified Chinese
 - Document #: 80-P0955-1SC
 - There is detail guide on how to debug almost all cases like RBSC, MP3, MP4, camera etc. Just need to follow step by step
- Power Debug Guide with English
 - Document #: 80-P0955-1
- Camera Power Debug Guide
 - Document #: 80-NP961-1
- PerfLock API Overview
 - Document #: 80-NT384-1
- Multimedia Power Debugging Case
 - Document #: 80-NT616-1
- QUALCOMM ONDEVICE POWER DASHBOARD TEST GUIDE
 - Document #: 80-P1818-1EC
- LA Power Optimization
 - Document #: 80-NA157-246
- MSM89x6_System_Power_Overview
 - Document #: 80-NU154-9

Checklist --- CR/Patches

N -- No Impact

- means Side Effect + means Good Impact

| CR | Fix | Patches | Perf | Power | Stability | Comment |
|--------|---|---------|------|-------|-----------|---------|
| 924779 | Can not sleep for LTE standby | | Z | + | N | |
| 949222 | Add 550Mhz power level, this helps in both performance and power. | | + | + | N | |
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Checklist --- CR/Patches (improve Performance/Power)

N -- No Impact

- means Side Effect

+ means Good Impact

| CR | Fix | Patch | Perf | Power | Stability | Comment |
|------------------|---|-------|------|-------|-----------|---------|
| 881194 | Scheduler : Load balancing improvement. | | + | - | N | |
| | 8976 QOS patches – GPU and Wireless | | + | 1 | N | |
| 928243 931349 | Riptide Whitelist patches | | + | 1 | Z | |
| 942601 944709 | GPU DCVS changes | | + | 1 | N | |
| 943361 | Ramp Governor and Scheduler aggressively Increase Launch boost 1.5GHz - > 1.8GHz Set min DDR Floor (BIMC Clk) to 192MHz | | + | ı | N | |

Checklist --- Tips (1)

RBSC

use IR camera to scan board's hot spot if RBSC current is high