Qualcomm
TECHNOLOGIES, INC

MSM8916 Linux Android Current Consumption Data

80-NK807-7 F

September 2, 2014

Submit technical questions at:
https://support.cdmatech.com/

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Revision history

Revision	Date	Description
A	Mar 2014	Initial release
B	Mar 2014	Updated Section 2.3, Tables 1-2, 3-1, and 4-1, and Figure 4-1; added Figure 4-2
C	Apr 2014	Updated Section 2.3 and Updated Table 3-1
D	Jun 2014	Updated Table 4-1 and Updated Section 4.3
E	Aug 2014	Added Section 1.8.1 and Section 1.8.2
F	Sep 2014	Updated Sections 2.3 and 4.3

Note: This document was previously distributed with DCN 80-NK801-1.

1 Introduction

1.1 Purpose

This document provides current consumption data for MSM8916 devices with AMSS 8916 software. The consumption is highly dependent on software optimization.

This document is intended for engineers who are currently using or are planning to use MSM8916 devices and/or AMSS 8916 software.

1.2 Expectations

1.2.1 Device variation

The current consumption measurements recorded in this document are not expected to match the current consumption measurements of a customer design. They are also not expected to exactly match the current consumption measurements of another CDP of identical part numbers loaded with identical software.

Variations in measurement when compared to the customer device are caused by the CDP using different components than the customer design, e.g., memory ICs, display ICs, peripheral ICs, etc. Potential variations in measurement when compared to an identical CDP loaded with identical software are caused by normal silicon process variations in both the Qualcomm Technologies, Inc. (QTI) and non-QTI components and power supply tolerances. Any differences in measurement technique, equipment, or temperature also cause variations. Other factors, e.g., floating CMOS inputs or taking measurements at maximum Tx power, can affect both the reliability and repeatability of current consumption measurements.

The targets and measurements contained herein are typical values measured on a single CDP in a lab bench environment (room temperature). They are provided as a relative reference point, not as an absolute goal to attain.

1.2.2 Test case selection

The test cases selected for measurement in this document are intended to provide a wide range of coverage. Although the specific conditions a customer needs may not appear in this list, generally there is a test case or combination of test cases that is close enough to the customer requirement to be used for a baseline comparison.

1.3 Customer platform power optimization

Customer platform power optimization is best started with comparisons to the QTI platform under one or more baseline test conditions given in this document. When the customer platform and CDP8916 platform are compared and optimized in this known test case, the differences between baseline and required test cases can be measured on the customer platform and analyzed with QTI for optimization, if necessary.

Power optimization of a customer platform is an iterative process. The process involves:

- Identifying power consumption differences between a customer platform and QTI platform in similar test conditions
- Determining the source of those differences; these could be test conditions, hardware configuration differences, software control differences, etc.
- Deciding whether the source is an error that must be corrected, or is intentional
- Correcting errors that are identified
- Repeating until all differences are corrected or determined to be intentional

As customers update their hardware platform or integrate new software releases from QTI, power consumption may change, triggering additional power optimization. It is important to understand that during the software development process, current consumption for some test cases may increase, as power improvement features may need to be delayed to a later release to meet stability requirements. Figure 1-1 is an example of customer power consumption vs CDP power consumption.

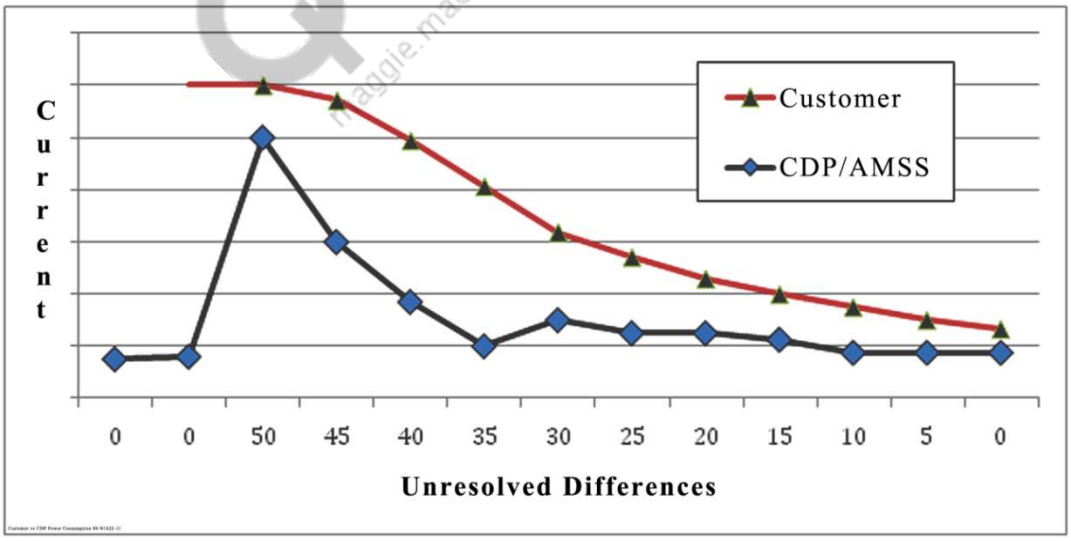

Figure 1-1 Representation of customer vs CDP power consumption

When discussing power optimization with QTI, try to provide as much information as possible, including:

- Specific test conditions
- Available history of power measurements for these test conditions
- Goals for power optimization
- Recent hardware or software changes that may have affected power consumption
- Power consumption breakdown per voltage rail, if possible

1.4 Publication timeline for power measurement data

This document will be updated approximately monthly with the latest available current consumption goals and battery-level measurements. Following the Feature Complete (FC) software release, key power rail breakdowns will be included as they become available. Measurement of these power rail breakdowns depend upon customer requests for specific test cases and software releases. Table 1-1 lists the publication timeline for current consumption data.

Table 1-1 Timeline for publishing current consumption data

Information provided	Guidelines for availability
Target current consumption for commercial software release	Available at the time of hardware engineering samples
Battery-level measured values for Table 3-1 test cases	Available for FC software release and for major software release thereafter; these measurements can also be found within the software release notes
Key power rail breakdowns for Table 3-1 test cases	Provided on an as-requested basis for FC and later software releases; submit requests at https://support.cdmatech.com

1.5 Note regarding GPIO configuration

To minimize current consumption, the user must configure any and all unused GPIOs in one of two ways:

- As outputs in their logic low state
- As inputs with their internal pull-downs enabled

In addition, any GPIO pin configured as an input that is normally driven by a peripheral device, i.e., Bluetooth (BT), WLAN, NFC, etc., must be programmed with an internal pull-down when the corresponding peripheral signal is set to its high impedance state. The GPIO should then be reprogrammed to remove the pull-down when the peripheral signal is taken out of its high impedance state.

These steps are required to prevent unwanted oscillation or high current leakage on the device's pins. For additional information, see [Q3].

1.6 Conventions

Function declarations, function names, type declarations, and code samples appear in a different font, e.g., `#include`.

Shading indicates content that has been added or changed in this revision of the document.

1.7 References

Reference documents are listed in Table 1-2. Reference documents that are no longer applicable are deleted from this table; therefore, reference numbers may not be sequential.

Table 1-2 Reference documents and standards

Ref.	Document	
Qualcomm Technologies		
Q1	*Application Note: Software Glossary for Customers*	CL93-V3077-1
Q2	*MSM8916 Device Specification (Preliminary Information)*	80-NK807-1
Q3	*Configuration of Input Pins During Device Sleep*	80-VN499-7
Q4	*30 fps at HD 1080p H.264 20 Mbps AAC+ 96 kbps 44 kHz Stereo (Qtc88) Clip for Multimedia Power Measurement*	MH80-VR010-8
Q5	*MP3 at 44.1 kHz 128 kbps Stereo Clip for Power Measurements*	MH80-VR010-5
Q6	*30 fps at HD 720p H.264 10 Mbps AAC+ 96 kbps 44.1 kHz Stereo (Qtc77) Clip for Multimedia Power Measurement*	MH80-VR010-7
Q7	*Video: 720p 1280x720 30 fps H.264 HP 2.13 Mbps, AAC+ Stereo 44.1 kHz 128 Kbps (YouTube720p)*	MH80-VR010-11
Q8	*EXE, PowerLift 3D Linux Android Graphics Tool Release 5.2.00*	HK11-NC876-1
Q9	*EXE, iBench V.4.6.01 for Linux Android-Enabled Devices*	72-N7696-1

1.8 Technical assistance

For assistance or clarification on information in this document, submit a case to QTI at https://support.cdmatech.com/.

If you do not have access to the CDMATech Support Service website, register for access or send email to support.cdmatech@qti.qualcomm.com.

1.8.1 Submitting core modem power consumption measurement requests

To submit a request for a power measurement not currently found in this document, open a Wireless Device Support Case at https://support.cdmatech.com. The following information must be included in the case:

- Correct chipset, AMSS build ID, and Operating System (OS)
- Initial problem type – Software
- Problem area 1 – BSP/HLOS
- Problem area 2 – Power (BSP/HLOS)
- Problem area 3 – Customer-appropriate selection
- Problem Description field – Include Battery Level or Breakdown and Test Case

Priority is given to standard test cases, as listed in Table 3-1, and can typically be provided within one week. Requests for nonstandard test conditions are evaluated on a case-by-case basis.

1.8.2 Submitting multimedia power consumption measurement requests

To submit a request for a multimedia power measurement not currently found in this document, open a Wireless Device Support Case at https://support.cdmatech.com. The following information must be included in the case:

- Correct chipset, AMSS software build ID, and OS
- Initial problem type – Software
- Problem area 1 – Multimedia
- Problem area 2 – Power
- Problem area 3 – Customer-appropriate selection
- Problem Description field – Include battery level or breakdown and test case

Priority is given to standard test cases, as listed in Table 3-1, and the measurement can typically be provided within one week. Requests for nonstandard test conditions are evaluated on a case-by-case basis.

1.9 Acronyms

For definitions of terms and abbreviations, see [Q1].

2 Test Setup

2.1 Devices used for testing

The following hardware and software configurations are used for the measurements:

- MSM8916 and PM8916 devices installed on the specially configured CDP8916 Resistive Current Measurement (RCM) evaluation platform for power measurement purposes only; the memory configuration is interleaved 1 GB (2x512 MB) LPDDR3.
- Various MSM8916 software releases as defined throughout this document, with the current consumption data being presented.
- Display resolution used is 720p DSI (1280x768).
- All current consumption measurement is performed using the QTI Kratos power measurement system on the CDP-RCM (or RCM) platform.

Table 2-1 lists the chipset's device revisions used on the CDP8916 power measurement platform for each set of tests. Throughout this document, the phrase *MSM8916 chipset* means this particular combination of devices.

Table 2-1 Chipset ICs tested

QTI IC	PRR code*
MSM8916	Not applicable
PM8916	Not applicable
*Because measured values are not available at the time of this document release, PRR codes are not applicable.	

2.2 Air interface test equipment

Chipset current consumption is measured with the MSM8916 platform configured for an air interface operating in a specific mode. The tested modes are defined in Chapter 3. The test equipment used to emulate the air interface is:

- Most CDMA measurements – Agilent 8960 Wireless Communications test set
- Most LTE measurements – Anritsu MT8820C
- Most WCDMA measurements – Agilent 8960 or the Anritsu MT8820C Radio Communication Analyzer
- Most GSM measurements – Agilent 8960 or Anritsu MT8820C

2.3 Power tree

NOTE: Numerous changes were made in this section.

The power tree describes the usage of PM8916 along with MSM8916.

The power tree is split into subsections as shown in Figure 2-1 through Figure 2-4.

Each power rail is allocated one RCM channel number. For example, in Figure 2-1, channel 1 is allocated to SMPS1 and channel 2 is allocated to SMPS2.

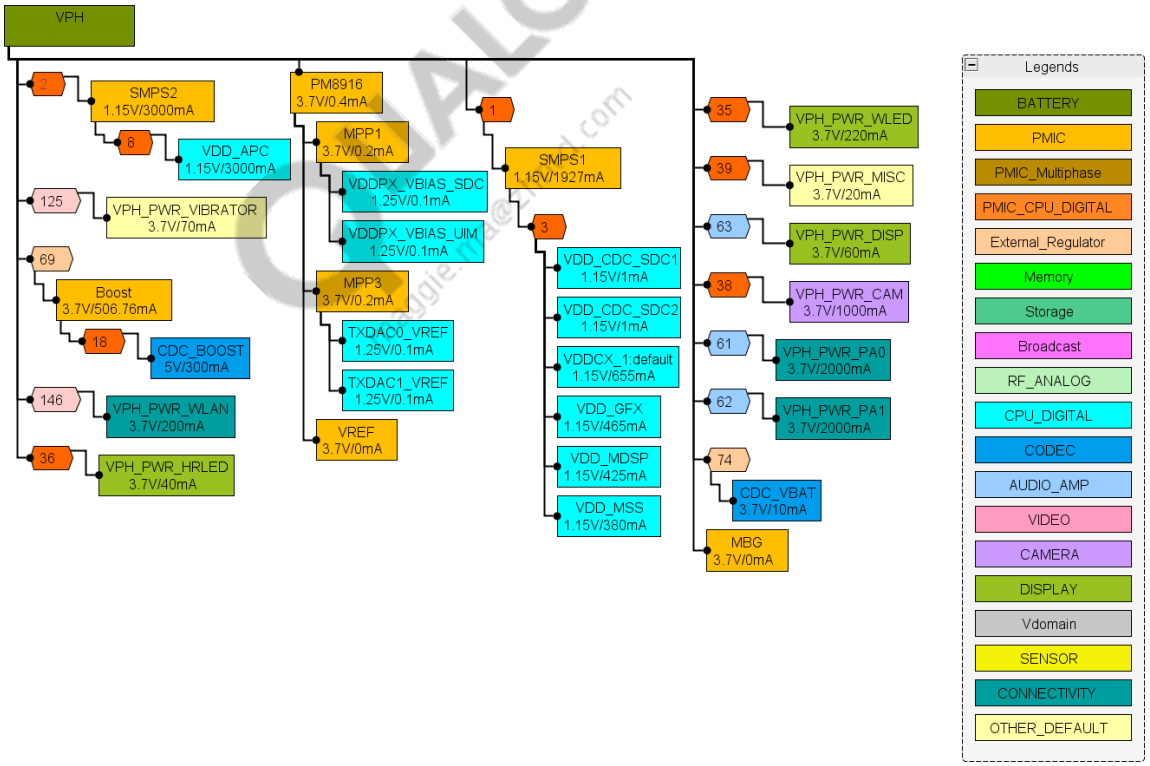

Figure 2-1 MSM™ digital and PMIC and external load branches

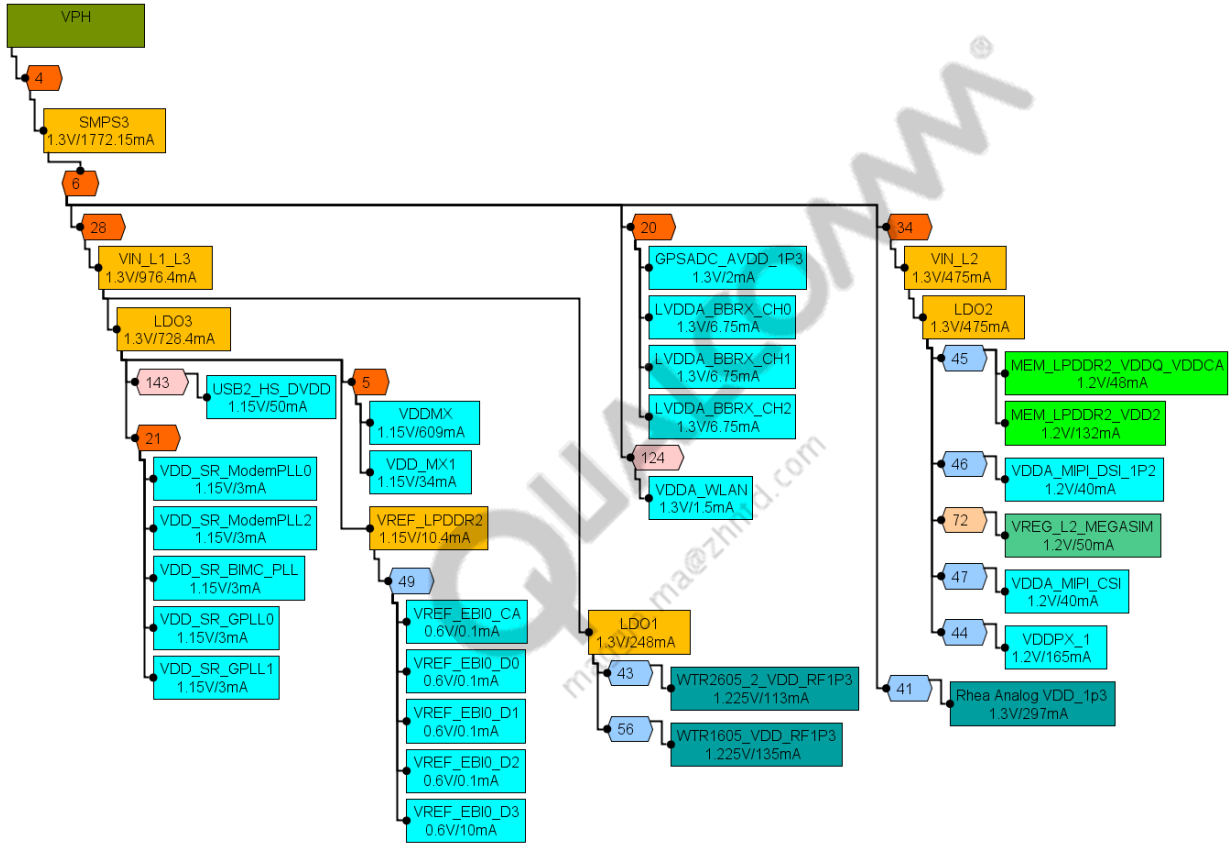

Figure 2-2 MSM digital, memory, and connectivity branches

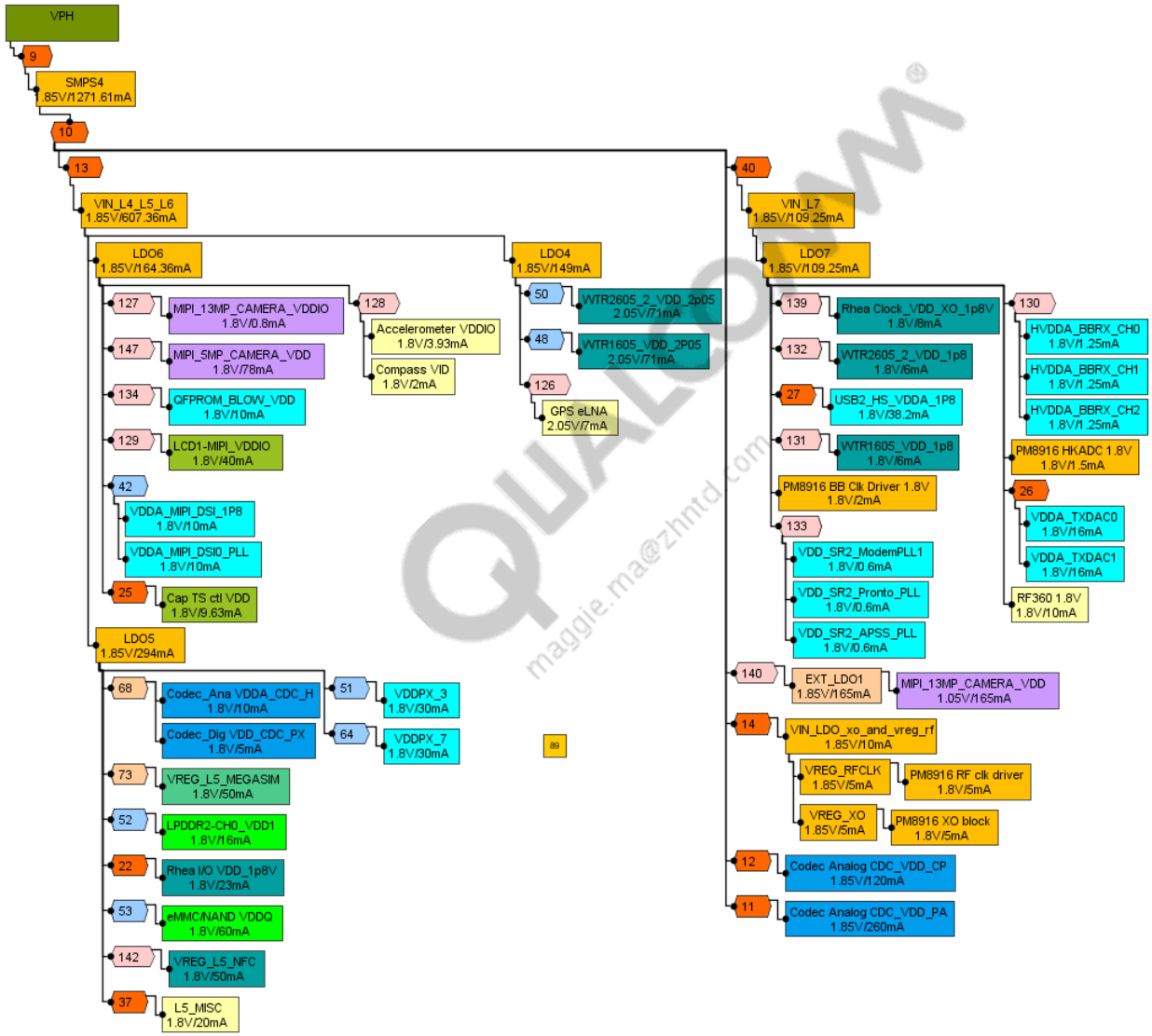

Figure 2-3 MSM digital, PMIC, codec, display, and connectivity branches

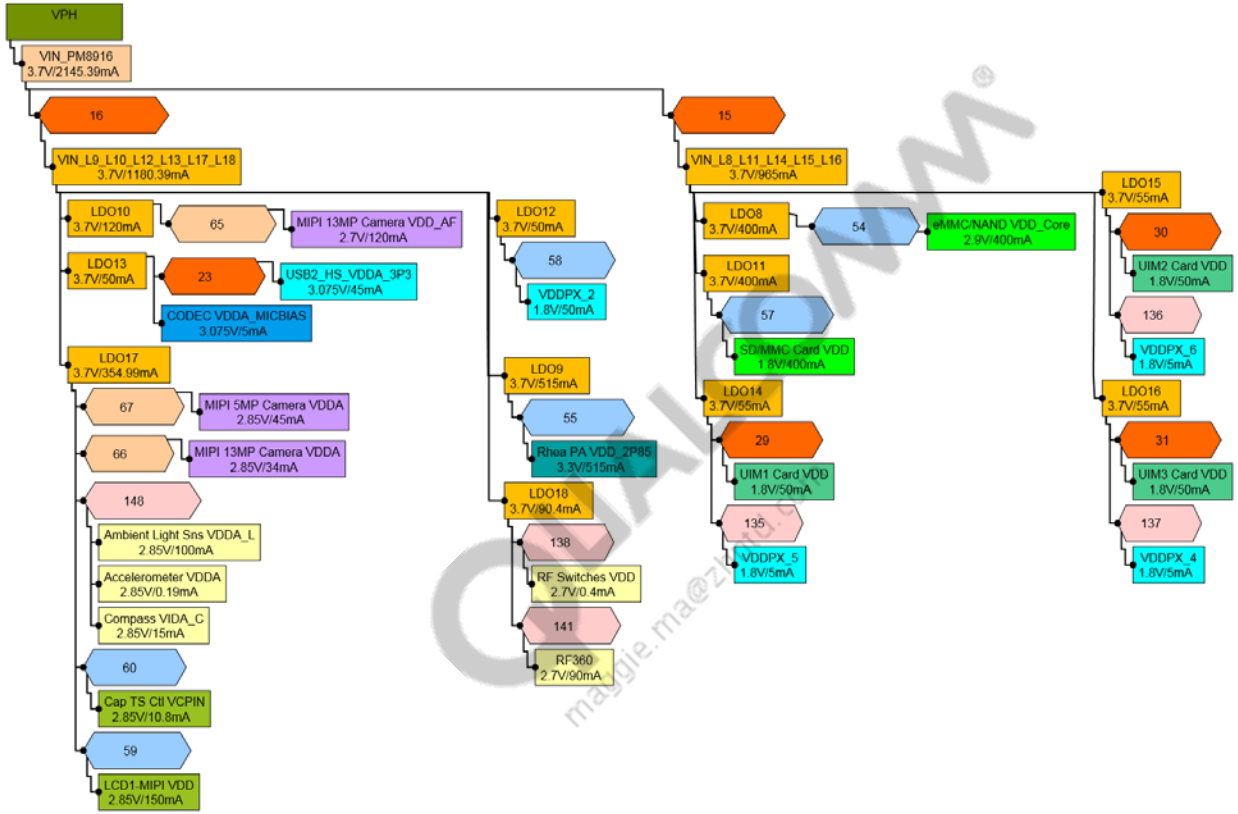

Figure 2-4 UIM, SDCC, camera, and sensors branches

3 Test Definitions

Definitions of test conditions, i.e., air interface configuration, multimedia, display activity, lighting status, etc., for the current consumption tests are listed in Table 3-1.

Table 3-1 Test definitions

Test case	Code	Operating band	Definition
Sleep (Airplane mode, rock bottom)	AIR1	—	Airplane mode selected through UI; if no UI support, configure modem in Low Power mode with no wakeups for paging processing; backlight and display off
WCDMA standby 2.56 sec	WS1	IMT	WCDMA idle, stationary A, Discontinuous Receive (DRX) 2.56 sec, RxAGC at phone ~ -50 dBm, duration 64 sec; Sintrasearch (intrafrequency) and Sintersearch (interfrequency) CPICH E_c/I_0 < -10 dB; backlight and display off
WCDMA talk + 0 dBm, IMT	WT1	IMT	WCDMA AMR voice, muted, empty frames on UL and DL, total Tx 0 dBm, RxAGC at phone ~ -50 dBm, IMT, no Receive Diversity (RxD); backlight and display off
CDMA QPCH standby 5.12 sec	CS2	Cell	CDMA QPCH Standby mode, SCI = 2 (5.12 sec), RxAGC at phone ~ -50 dBm, single sector, no neighbors; cell band; backlight and display off
EV-DO standby 5.12 sec	DS3	—	EV-DO (5.12 sec) only Standby mode; Rx AGC ~-50 dBm, single sector, no neighbors; cell band, duration 64 sec; backlight and display off
CDMA talk + 0 dBm, cell band	CT1	Cell	CDMA-only mode, muted, empty frames on UL and DL, total Tx = 0 dBm, RxAGC at phone ~ -50 dBm, EVRC RC3 full rate, no headset, cell band; backlight and display off
GSM standby 1.18 sec	GS1	PGSM	GPRS standby, MFRM5 [1.17 sec], RxAGC at phone ~ -50 dBm, PGSM, no neighbor, duration 59 sec; backlight and display off
GSM talk 5 dBm, no Discontinuous Transmit (DTX), PGSM	GT1	PGSM	GSM full-rate voice, muted, DTX off, empty frames on UL and DL, total Tx = 5 dBm, RxAGC at phone ~ -50 dBm, PGSM, 100% voice activity; backlight and display off
TD-SCDMA standby 1.28 sec	TCS1	Band 34	TD-SCDMA idle, stationary A, DRX 1.28 sec, Rx power level -50 dBm at phone antenna connector, test duration 64 sec; Sintrasearch (intrafrequency) and Sintersearch (interfrequency) CPICH E_c/I_0 is approximately -15 dB; backlight and display off
TD-SCDMA talk 0 dBm, B34	TCT1	Band 34	TD-SCDMA voice, muted, empty frames on UL and DL, total Tx 0 dBm, Rx power level -50 dBm at phone antenna connector, IMT [B1]; backlight and display off

Test case	Code	Operating band	Definition
HSDPA DL 7.2 Mbps + 0 dBm, IMT (RxD/no RxD)	HS22E/ HS21E	IMT	HSDPA embedded, data socket-initiated through the UI, DL 7.2 Mbps, FTP, Tx = +0 dBm, no USB, RxD on/RxD off
DC HSDPA DL 42 Mbps + 0 dBm, IMT (No RxD)	HS62E	IMT	HSPA + Cat 24 data socket-initiated through UI, dual carrier [42 Mbps], UDP, 64 QAM, RxD on, IMT band
EV-DO DL 3.1 Mbps + 0 dBm, CEL	DD1	Cell	EV-DO data DL at 3.1 Mbps, Tx 0 dBm, RxD enabled, cell band with USB; backlight and display off
LTE standby 2.56 sec	LS1	Band 13	LTE Standby mode, DRx = 2.56 sec, RxAGC at phone ~ -50 dBm, no neighbors, duration 64 sec; backlight and display off
LTE Cat 3 (68/23 Mbps, + 0 dBm, B13)	LTE1E	Band 13	LTE Data Cat 3, 2 x 2 MIMO, RB 50, MCS 28, 64 QAM, CP normal; PCFICH 3 sym, DCI 1A, Type 0, PHICH 1/6, Tx 0 dBm, DL spectrum bandwidth 10 MHz; backlight and display off; embedded
LTE Cat 4 (150/50 Mbps, 0 dBm, B7)	LTE7E	Band 7	LTE Data Cat 4, 2x2 MIMO, RB 100, MCS 28, 64 QAM, CP normal; PCFICH 3sym,DCI 1A, Type 0, PHICH 1/6, Tx 0 dBm, DL spectrum bandwidth 20 MHz; backlight and display off; embedded
DSDS/DSDA GSM + GSM – 0.47 sec + 0.47 sec	GGS2	—	GSM Slot1 – MFRM=4 [0.47 sec], Rx AGC ~ -50 dBm GSM Slot2 – MFRM=2 [0.47 sec], Rx AGC ~ -50 dBm GSM band = PGSM backlight and display off
DSDS/DSDA WCDMA + GSM – 0.64 sec + 0.47 sec	WGS3	—	WCDMA band = IMT (B1); GSM band = PGSM; WCDMA Slot1 – DRX = 0.64 sec, Rx AGC ~ -50 dBm, GSM Slot2 – MFRM = 2 [0.47 sec], Rx AGC ~ -50 dBm Sintrasearch (intrafrequency) and Sintersearch (interfrequency) CPICH E_c/I_o < -10 dB; backlight and display off
SVLTE (LTE Cat 2 DL 50 Mbps [0 dBm] + 1x talk), embedded	L2CT1E	B13	LTE Data Socket DL Cat 2 – 2x2 MIMO, RB 50, MCS 28, 64 QAM, CP normal; PCFICH 3 sym, DCI 1A, Type 0, PHICH 1/6, Tx = 0 dBm, RxAGC at phone ~ -50 dBm, 10 MHz bandwidth + CDMA Active mode, muted, empty frames on UL and DL, total Tx = 0 dBm, RxAGC at phone ~ -50 dBm, EVRC RC3 full rate, no headset, cell band; backlight and display off
SGLTE (LTE TDD (20 MHz, cfg1) + GSM voice)	—	—	This information will be provided in a future revision of this document.
TD-LTE (1.28 sec) + GSM (0.47 sec) standby	LSGS1	—	LTE TDD Standby mode, DRX = 2.56 sec, ULDL1, SSF#7, B40, Rx power level -50 dBm at phone antenna connector, measurement duration 64 sec, no neighbor cells; backlight and display off + EPRE = -50 dBm/kHz GPRS standby, DRX [0.47 sec], RxAGC at phone ~ -50 dBm, PGSM, no neighbor, duration 64 sec; backlight and display off

Test case	Code	Operating band	Definition
TD-SCDMA (0.64 sec) + GSM (0.47 sec) standby	TCSGS1	—	TD-SCDMA idle, stationary A, DRX 0.64 sec, Rx power level -50 dBm at phone antenna connector, test duration 64 sec; CPICH E_c/I_0 is approximately -15 dB; backlight and display off + EPRE = -50 dBm/kHz + GPRS standby, DRX [0.47 sec], RxAGC at phone ~ -50 dBm, PGSM, no neighbor, duration 64 sec; backlight and display off
GPS 1 Hz Trk (DPO) with WCDMA standby	GPS2	IMT	GPS standalone 1 Hz tracking (DPO); GPS standalone 1 Hz tracking in strong signal conditions; backlight and display off
GNSS 1 Hz Trk high sensitivity with WCDMA standby	GNSS1	IMT	GLONASS standalone 1 Hz tracking high sensitivity; backlight and display off
MP3 playback 128 kbps TM	AU4A	—	MP3 at 44.1 kHz 128 kbps stereo; see [Q5]
Listen (SVA)	AU30A	—	Listen keyword detection using 16 KHz mono signal, with 40% silence, 40% stationary noise and 20% speech, with total length of ~1 min
HEVC 720p decode, 30fps	—	—	30 fps at HD 720p H.265 software solution 10 Mbps AAC + 96 kbps 44.1 kHz stereo
Video decode (H.264 720p, 30 fps)	QTC77A	—	30 fps at HD 720p H.264 10 Mbps AAC + 96 kbps 44.1 kHz stereo; see [Q6]
Video decode H.264 30 fps 1080p, 20 Mbps	QTC88A	—	30 fps at HD 1080p 20 Mbps AAC+ 96 kbps 44 kHz stereo; see [Q4]
H.264 1080p encode, 30 fps	QMC31A	—	Test scenario 1. System in Airplane mode 2. Attach the camera sensor (only for XPM) 3. Default Display brightness 4. Auto brightness feature disabled if applicable 5. All camera settings to default 6. Via the camera app, set encode to Normal Power Encode 7. fps set at the default value of 30
H.264 1080p decode, 30 fps over WFD	WFD01A	—	Test scenario 1. Display On 2. Turn Wi-Fi on on the source device 3. Keep the Sink device ready 4. Run the WFD session with sink device, PIP + 1080p decode
Graphics (3D UI full-screen resolution 30 fps [PowerLift]); comp. bypass	QGC23A	—	EXE, PowerLift 3D OpenGL ES Graphics Benchmark tool V.4.6.01 for Linux Android-enabled devices; see [Q8]

Test case	Code	Operating band	Definition
3D Gfx Egypt 60 fps	QGC24A	—	Test scenario 1. Airplane mode 2. Display on 3. Full screen mode of the platform, fps (full speed, capped by platform Vsync) **Note:** It is expected that every platform will yield differing power results. These results are a function of LCD intensity, serial interface, display resolution of the screen, and fps.
Static image display	LCD04A	—	Static image display, at full-screen resolution, at Vsync
Accelerometer 10 Hz background processing	SNS5A	—	Test scenario 1. Disable screen auto-rotate 2. Airplane mode 3. Disable GPS 4. Allow screen timeout when charging 5. Set screen timeout = 1 min 6. Power cycle the DUT 7. Verify screen is off during test
Accelerometer 15 Hz active processing	SNS4A	—	Airplane mode, display on, 15 Hz running using Qsensor test app
Bluetooth (page scan + sniff) with WCDMA standby	BT2	IMT	Bluetooth headset bonded, connected, and UE accepting other Bluetooth connection requests; Bluetooth sniff cycle 1.28 sec and page scan cycle of 1.28 sec; backlight and display off
WLAN DTIM1 with WCDMA standby	WLS1	IMT	Test scenario 1. Turn on Airplane mode 2. In the config file, Listen Interval = 100 ms and BET is enabled 3. Turn on Wi-Fi and connect to the AP 4. Turn off the display **Note**: Measurement should be in a shielded environment.
Browser over Wi-Fi	WB1A	Wi-Fi	Loading and rendering of low-complexity webpage (no JavaScript, no Flash), reload every 40 sec (see the video in [Q9])
Video streaming over Wi-Fi	VS6A	Wi-Fi	Video streaming over Wi-Fi (720p 2.3 Mbps)

Note: All test codes ending in A were performed in Airplane mode.

1

4 Chipset Current Consumption

4.1 Commercial software release target values – Top-level

Commercial software release target values are predictions of the current consumption for the first commercial-quality software release for an OS. These targets *will not be updated* after the commercial software is released.

Commercial software release target values for operational modes defined in Table 3-1 are listed in Table 4-1. These values reflect optimized hardware and software configurations. These values are normalized to a 3.7 V supply voltage.

The power ranges shown below are the projected power distribution across approximately 50 to 95% of the device population. Devices that fall outside this range are to be expected; therefore, RMA decisions must not be based on the results of power measurements described in this document. (Legitimate candidates for power consumption RMAs require devices that violate the maximum power specifications provided in [Q2].)

NOTE: The 28 nm manufacturing process variation across parts and foundries leads to a power distribution. The exact shape and median of this distribution is expected to vary over time with the 28 nm process maturity across foundries.

Table 4-1 Commercial software release top-level current consumption targets

Category	Test case	Code	MSM8916 2x512 MB LP-DDR3s 720P display WTR1605 power estimate (mA)	MSM8916 2x512 MB LP-DDR3s 720P display WTR4905 power estimate (mA)
Modem	Airplane	AIR1	1.6 to 1.7	1.6 to 1.7
	WCDMA standby 2.56 sec	WS1	1.9 to 2.03	1.9 to 2.03
	WCDMA talk + 0 dBm, IMT	WT1	105 to 108	103 to 106
	CDMA QPCH standby 5.12 sec	CS2	2.1 to 2.23	2.1 to 2.23
	EVDO standby 5.12 sec	DS3	2.1 to 2.23	2.1 to 2.23
	CDMA talk + 0 dBm, cell band	CT1	105 to 108	103 to 106
	GSM standby 1.18 sec	GS1	2.0 to 2.12	2.0 to 2.12
	GSM talk + 5 dBm, no DTx, PGSM	GT1	75 to 78	75 to 78
	TD-SCDMA standby 1.28 sec	TCS1	2.2 to 2.33	2.2 to 2.33
	TD-SCDMA talk + 0 dBm	TCT1	73 to 76	73 to 76

Category	Test case	Code	MSM8916 2x512 MB LP-DDR3s 720P display WTR1605 power estimate (mA)	MSM8916 2x512 MB LP-DDR3s 720P display WTR4905 power estimate (mA)
	HSDPA DL 7.2 Mbps + 0 dBm, IMT (RxD)	HS22E/ HS21E	169 to 175	157 to 163
	DC HSDPA DL 42 Mbps + 0 dBm, IMT (No RxD)	HS61E	181 to 187	179 to 185
	EV-DO DL 3.1 Mbps + 0 dBm, cell	DD1E	163 to 169	161 to 167
	LTE standby 2.56 sec	LS1	2.2 to 2.35	2.2 to 2.35
	LTE Cat 3 (68/23 Mbps, 0 dBm, B13)	LTE1E	283 to 289	258 to 264
	LTE Cat 4 (150/50 Mbps, 0 dBm, B7)	LTE7E	443 to 449	411 to 417
	DSDS/DSDA GSM + GSM – 0.47 sec + 0.47 sec	GGS2	3.9 to 4.2	3.8 to 4.1
	DSDS/DSDA WCDMA + GSM – 0.64 sec + 0.47 sec	WGS3	4.1 to 4.4	3.9 to 4.2
	SVLTE Cat 2 (50 Mbps, +0 dBm, B13) and 1X Voice	L2CT1E	357 to 363	337 to 343
	SGLTE (LTE TDD (20 MHz, cfg1) + GSM voice)	LDEGT1	422 to 428	402 to 408
	TD-LTE standby (1.28 sec) + GSM standby (0.47 sec)	LSGS1	4.0 to 4.26	3.9 to 4.16
	TD-SCDMA standby (0.64 sec) + GSM standby (0.47 sec)	TCSGS1	3.9 to 4.2	3.9 to 4.2
GPS	GPS 1 Hz Trk (dynamic power optimization)	GPS2	11 to 12	10 to 11
	GNSS 1 Hz Trk (Global Navigation Satellite System)	GNSS1	46 to 49	43 to 46
Multimedia	MP3 playback 128 kbps (Tunnel mode – DSP audio codec)	AU4A	22 to 24.5	22 to 24.5
	Listen (SVA)	—	13	13
	HEVC 720p decode, 30 fps	—	307 to 320	307 to 320
	H.264 720p decode, 30 fps	QTC77A	110 to 115	110 to 115
	H.264 1080p decode, 30 fps	QTC88A	140 to 145	140 to 145
	H.264 1080p decode, 30 fps over WFD	WFD01A	252	—
	H.264 1080p encode, 30 fps	QMC31A	295 to 305	295 to 305
	3D UI 30 fps (Graphic, PowerLift)	QGC23A	122 to 127	122 to 127
	3D Gfx Egypt, 60 fps	QGC24A	295 to 304	295 to 304
	Static image display	LCD04A	47 to 48.5	47 to 48.5

Category	Test case	Code	MSM8916 2x512 MB LP-DDR3s 720P display WTR1605 power estimate (mA)	MSM8916 2x512 MB LP-DDR3s 720P display WTR4905 power estimate (mA)
Sensors	Accelerometer background processing at 10 Hz	SNS5A	6.6 (5) to 7.15 (5.45)	6.6 (5) to 7.15 (5.45)
	Accelerometer active processing at 15 Hz	SNS4A	54.5 (7.5) to 56 (8.17)	54.5 (7.5) to 56 (8.17)
Connectivity	Bluetooth sniff/scan on WCDMA standby; 0.7 mA is the power penalty of Bluetooth in addition to WCDMA standby	BT2	3 (1.1) to 3.2 (1.2)	3 (1.1) to 3.2 (1.2)
	WLAN DTIM1 on WCDMA standby	WLS1	3.6 (1.7) to 3.8(1.8)	3.6 (1.7) to 3.8(1.8)
NetApps	Browser over Wi-Fi	WB1A	63 to 65	63 to 65
	Video streaming 720p over Wi-Fi	VS6A	153 to 158	153 to 158

4.2 Measured values – Top level

Battery level measured numbers are published along with the build release notes.

MSM8916 release notes DCN#80-NM886-x.

4.3 Breakdown measurements per regulator values

NOTE: Numerous changes were made in this section.

This section lists breakdown data for the modem use cases based on the CS release (1030.2).

Table 4-2 Rock bottom sleep

RCM channel	Regulator	Voltage (V)	I (mA)
3	S1_OUTPUT [CX, MSS, GFX, MDSP, CDC, SMPS, S1]	0.53	1.38
8	S2_OUTPUT [APC, SMPS, S2]	0.00	0.00
20	LV_BBRX [SMPS, S3]	1.25	0.00
41	Rhea_ANA_1P3 [SMPS, S3]	1.25	0.01
124	WLAN [SMPS, S3]	1.25	0.00
43	WTR2605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	0.00	0.00
56	WTR1605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	0.00	0.00
49	LPDDR2_EBIO [LDO, L3, SUB SMPS, S3]	0.66	0.01
21	MODEM_BIMC_PLL [LDO, L3, SUB SMPS, S3]	0.66	0.00
5	MX [LDO, L3, SUB SMPS, S3]	0.66	0.29
143	HS_USB2_1P15 [LDO, L3, SUB SMPS, S3]	0.66	0.00
45	LPDDR2 [LDO, L2, SUB SMPS, S3]	1.22	0.78

RCM channel	Regulator	Voltage (V)	I (mA)
44	PX1 [LDO, L2, SUB SMPS, S3]	1.22	0.00
46	MIPI_DSI_1P2 [LDO, L2, SUB SMPS, S3]	1.22	0.00
47	MIPI_CSI_1P2 [LDO, L2, SUB SMPS, S3]	1.22	0.00
48	WTR1605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	0.39	0.00
50	WTR2605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	0.39	0.00
126	GPS_eLNA [LDO, L4, SUB SMPS, S4]	0.39	0.00
68	CDC_ANA_DIG [LDO, L5, SUB SMPS, S4]	1.80	0.00
22	Rhea I/O [LDO, L5, SUB SMPS, S4]	1.80	0.00
37	LDO5_MISC [LDO, L5, SUB SMPS, S4]	1.80	0.07
51	PX3 [LDO, L5, SUB SMPS, S4]	1.80	0.18
52	LPDDR2_CH0 [LDO, L5, SUB SMPS, S4]	1.80	0.29
53	eMMC_1P8 [LDO, L5, SUB SMPS, S4]	1.80	0.08
64	PX7 [LDO, L5, SUB SMPS, S4]	1.80	0.00
142	NFC [LDO, L5, SUB SMPS, S4]	1.80	0.00
42	MIPI_DSI_1P8 and PLL [LDO, L6, SUB SMPS, S4]	1.65	0.00
128	ACMTR+CMPSS DIG [LDO, L6, SUB SMPS, S4]	1.65	0.00
25	Cap TS_1P8 [LDO, L6, SUB SMPS, S4]	1.65	0.01
127	MIPI_CAM_8MP_1P8 [LDO, L6, SUB SMPS, S4]	1.65	0.00
129	LCD1_MIPI [LDO, L6, SUB SMPS, S4]	1.65	0.00
134	QFPROM [LDO, L6, SUB SMPS, S4]	1.65	0.00
147	VGA_CAM_1P8 [LDO, L6, SUB SMPS, S4]	1.65	0.00
130	HV_BBRX [LDO, L7, SUB SMPS, S4]	1.83	0.00
133	SR_PLL [LDO, L7, SUB SMPS, S4]	1.83	0.00
26	TXDAC0_1 [LDO, L7, SUB SMPS, S4]	1.83	0.00
27	HS_USB_1P8 [LDO, L7, SUB SMPS, S4]	1.83	0.01
131	WTR1605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.83	0.01
132	WTR2605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.83	0.00
139	Rhea_CLK_XO [LDO, L7, SUB SMPS, S4]	1.83	0.00
14	RF_CLK + PM8916_XO_Block [SMPS, S4]	1.84	0.00
11	CDC_PA [SMPS, S4]	1.84	0.00
12	CDC_CP [SMPS, S4]	1.84	0.00
140	S4_CAM [SMPS, S4]	1.84	0.00
55	Rhea_PA_2P85 [LDO, L9]	0.11	0.00
65	MIPI_CAM_13MP [LDO, L10]	0.00	0.00
58	PX2 [LDO, L12]	0.00	0.00
23	HS_USB2_3P3 [LDO, L13]	0.00	0.00
148	ACCMTR/compass/AMBT light ANA [LDO, L17]	0.00	0.00
59	LCD1_MIPI [LDO, L17]	0.00	0.00
60	Cap TS_2P85 [LDO, L17]	0.00	0.00
66	MIPI-8MP_2P85 [LDO, L17]	0.00	0.00
67	VGA_CAM_2P85 [LDO, L17]	0.00	0.00

RCM channel	Regulator	Voltage (V)	I (mA)
138	RF_SW [LDO, L17]	0.00	0.00
141	RF360 [LDO, L18]	0.17	0.00
54	eMMC_2P9 [LDO, L8]	0.00	0.00
57	SD/MMC_1P8 [LDO, L11]	0.00	0.00
29	UIM1 [LDO, L14]	0.00	0.00
135	PX5 [LDO, L14]	0.00	0.00
30	UIM2 [LDO, L15]	0.00	0.00
136	PX6 [LDO, L15]	0.00	0.00
31	UIM3 [LDO, L16]	0.00	0.00
137	PX4 [LDO, L16]	0.00	0.00
69	CDC_BOOST_OUTPUT	3.71	0.01
35	PWR_WLED	3.71	0.01
36	PWR_HRLED	3.71	0.01
38	PWR_CAM_3P7	3.71	0.05
39	PWR_MISC	3.71	0.01
61	GSM_PA1	3.71	0.16
62	GSM_PA2	3.71	0.04
63	PWR_DISP	3.71	0.01
125	PWR_VIBRATOR	3.71	0.00
146	PWR_WLAN	3.71	0.02
	Battery (measured)	3.71	1.45

1 **Table 4-3 WCDMA standby 2.56 sec**

RCM channel	Regulator	WCDMA sleep		WCDMA awake	
		Voltage (V)	I (mA)	Voltage (V)	I (mA)
3	S1_OUTPUT [CX, MSS, GFX, MDSP, CDC, SMPS, S1]	0.53	1.28	0.91	70.02
8	S2_OUTPUT [APC, SMPS, S2]	0.00	0.00	0.00	0.00
20	LV_BBRX [SMPS, S3]	1.25	0.00	1.27	0.53
41	Rhea_ANA_1P3 [SMPS, S3]	1.25	0.05	1.27	0.00
124	WLAN [SMPS, S3]	1.25	0.00	1.27	0.00
43	WTR2605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	0.00	0.00	0.83	0.21
56	WTR1605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	0.00	0.00	0.83	3.51
49	LPDDR2_EBIO [LDO, L3, SUB SMPS, S3]	0.66	0.01	1.13	0.35
21	MODEM_BIMC_PLL [LDO, L3, SUB SMPS, S3]	0.66	0.00	1.13	0.54
5	MX [LDO, L3, SUB SMPS, S3]	0.66	0.30	1.12	7.46

RCM channel	Regulator	WCDMA sleep		WCDMA awake	
		Voltage (V)	I (mA)	Voltage (V)	I (mA)
143	HS_USB2_1P15 [LDO, L3, SUB SMPS, S3]	0.66	0.00	1.13	0.03
45	LPDDR2 [LDO, L2, SUB SMPS, S3]	1.22	0.76	1.22	11.43
44	PX1 [LDO, L2, SUB SMPS, S3]	1.22	0.00	1.22	5.84
46	MIPI_DSI_1P2 [LDO, L2, SUB SMPS, S3]	1.22	0.00	1.22	0.00
47	MIPI_CSI_1p2 [LDO, L2, SUB SMPS, S3]	1.22	0.00	1.22	0.11
48	WTR1605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	1.85	0.00	1.98	0.99
50	WTR2605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	1.85	0.00	1.98	0.00
126	GPS_eLNA [LDO, L4, SUB SMPS, S4]	1.85	0.00	1.98	0.00
68	CDC_ANA_DIG [LDO, L5, SUB SMPS, S4]	1.80	0.00	1.80	0.00
22	Rhea I/O [LDO, L5, SUB SMPS, S4]	1.80	0.00	1.80	0.00
37	LDO5_MISC [LDO, L5, SUB SMPS, S4]	1.80	0.05	1.80	0.05
51	PX3 [LDO, L5, SUB SMPS, S4]	1.80	0.19	1.80	0.56
52	LPDDR2_CH0 [LDO, L5, SUB SMPS, S4]	1.80	0.29	1.80	1.04
53	eMMC_1P8 [LDO, L5, SUB SMPS, S4]	1.80	0.07	1.80	0.07
64	PX7 [LDO, L5, SUB SMPS, S4]	1.80	0.01	1.80	0.00
142	NFC [LDO, L5, SUB SMPS, S4]	1.80	0.00	1.80	0.00
42	MIPI_DSI_1P8 and PLL [LDO, L6, SUB SMPS, S4]	1.66	0.00	1.71	0.00
128	ACMTR+CMPSS DIG [LDO, L6, SUB SMPS, S4]	1.66	0.00	1.71	0.00
25	Cap TS_1P8 [LDO, L6, SUB SMPS, S4]	1.66	0.01	1.71	0.01
127	MIPI_CAM_8MP_1P8 [LDO, L6, SUB SMPS, S4]	1.66	0.00	1.71	0.00
129	LCD1_MIPI [LDO, L6, SUB SMPS, S4]	1.66	0.00	1.71	0.00
134	QFPROM [LDO, L6, SUB SMPS, S4]	1.66	0.00	1.71	0.00
147	VGA_CAM_1P8 [LDO, L6, SUB SMPS, S4]	1.66	0.00	1.71	0.00
130	HV_BBRX [LDO, L7, SUB SMPS, S4]	1.83	0.00	1.82	0.06
133	SR_PLL [LDO, L7, SUB SMPS, S4]	1.83	0.00	1.82	0.69
26	TXDAC0_1 [LDO, L7, SUB SMPS, S4]	1.83	0.00	1.82	0.09
27	HS_USB_1P8 [LDO, L7, SUB SMPS, S4]	1.83	0.01	1.82	0.01
131	WTR1605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.83	0.01	1.82	0.21
132	WTR2605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.83	0.00	1.82	0.01
139	Rhea_CLK_XO [LDO, L7, SUB SMPS, S4]	1.83	0.00	1.82	0.00
14	RF_CLK + PM8916_XO_Block [SMPS, S4]	1.84	0.00	2.08	2.72
11	CDC_PA [SMPS, S4]	1.84	0.00	2.09	0.10
12	CDC_CP [SMPS, S4]	1.84	0.02	2.09	0.00
140	S4_CAM [SMPS, S4]	1.84	0.00	2.09	0.04

RCM channel	Regulator	WCDMA sleep		WCDMA awake	
		Voltage (V)	I (mA)	Voltage (V)	I (mA)
55	Rhea_PA_2P85 [LDO, L9]	0.08	0.00	0.08	0.00
65	MIPI_CAM_13MP [LDO, L10]	0.00	0.00	0.00	0.00
58	PX2 [LDO, L12]	0.00	0.00	0.00	0.00
23	HS_USB2_3P3 [LDO, L13]	0.00	0.00	0.00	0.00
148	ACCMTR/compass/AMBT light ANA [LDO, L17]	0.00	0.00	0.00	0.00
59	LCD1_MIPI [LDO, L17]	0.00	0.00	0.00	0.00
60	Cap TS_2P85 [LDO, L17]	0.00	0.00	0.00	0.00
66	MIPI-8MP_2P85 [LDO, L17]	0.00	0.00	0.00	0.00
67	VGA_CAM_2P85 [LDO, L17]	0.00	0.00	0.00	0.01
138	RF_SW [LDO, L17]	0.00	0.00	0.00	0.00
141	RF360 [LDO, L18]	0.17	0.00	1.99	1.14
54	eMMC_2P9 [LDO, L8]	0.00	0.00	0.00	0.00
57	SD/MMC_1P8 [LDO, L11]	0.00	0.00	0.00	0.05
29	UIM1 [LDO, L14]	1.80	0.02	1.80	0.02
135	PX5 [LDO, L14]	1.80	0.00	1.80	0.00
30	UIM2 [LDO, L15]	0.00	0.00	0.00	0.00
136	PX6 [LDO, L15]	0.00	0.00	0.00	0.00
31	UIM3 [LDO, L16]	0.00	0.00	0.00	0.00
137	PX4 [LDO, L16]	0.00	0.00	0.00	0.00
69	CDC_BOOST_OUTPUT	3.71	0.02	3.71	0.00
35	PWR_WLED	3.71	0.01	3.71	0.05
36	PWR_HRLED	3.71	0.01	3.71	0.02
38	PWR_CAM_3P7	3.71	0.06	3.71	0.00
39	PWR_MISC	3.71	0.01	3.71	0.00
61	GSM_PA1	3.71	0.13	3.71	0.06
62	GSM_PA2	3.71	0.10	3.71	0.62
63	PWR_DISP	3.71	0.01	3.71	0.00
125	PWR_VIBRATOR	3.71	0.00	3.71	0.00
146	PWR_WLAN	3.71	0.02	3.71	0.01
	Battery (measured)	3.71	1.51	3.71	39.66

Table 4-4 WCDMA talk + 0 dBm, IMT

RCM channel	Regulator	Voltage (V)	I (mA)
3	S1_OUTPUT [CX, MSS, GFX, MDSP, CDC, SMPS, S1]	0.95	92.23
8	S2_OUTPUT [APC, SMPS, S2]	0.00	0.00
20	LV_BBRX [SMPS, S3]	1.28	1.48
41	Rhea_ANA_1P3 [SMPS, S3]	1.28	0.02
124	WLAN [SMPS, S3]	1.28	0.00
43	WTR2605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	1.25	0.00
56	WTR1605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	1.24	49.86
49	LPDDR2_EBIO [LDO, L3, SUB SMPS, S3]	1.17	0.54
21	MODEM_BIMC_PLL [LDO, L3, SUB SMPS, S3]	1.17	1.25
5	MX [LDO, L3, SUB SMPS, S3]	1.17	12.63
143	HS_USB2_1P15 [LDO, L3, SUB SMPS, S3]	1.17	0.05
45	LPDDR2 [LDO, L2, SUB SMPS, S3]	1.22	9.64
44	PX1 [LDO, L2, SUB SMPS, S3]	1.22	3.27
46	MIPI_DSI_1P2 [LDO, L2, SUB SMPS, S3]	1.22	0.01
47	MIPI_CSI_1p2 [LDO, L2, SUB SMPS, S3]	1.22	0.00
48	WTR1605_RF2_2P05 [LDO, L4,SUB SMPS, S4]	2.04	22.32
50	WTR2605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	2.04	0.00
126	GPS_eLNA [LDO, L4, SUB SMPS, S4]	2.04	0.00
68	CDC_ANA_DIG [LDO, L5, SUB SMPS, S4]	1.80	0.52
22	Rhea I/O [LDO, L5, SUB SMPS, S4]	1.80	0.00
37	LDO5_MISC [LDO, L5, SUB SMPS, S4]	1.80	0.05
51	PX3 [LDO, L5, SUB SMPS, S4]	1.80	2.57
52	LPDDR2_CH0 [LDO, L5, SUB SMPS, S4]	1.80	0.96
53	eMMC_1P8 [LDO, L5, SUB SMPS, S4]	1.80	0.07
64	PX7 [LDO, L5, SUB SMPS, S4]	1.80	0.00
142	NFC [LDO, L5, SUB SMPS, S4]	1.80	0.00
42	MIPI_DSI_1P8 and PLL [LDO, L6, SUB SMPS, S4]	1.27	0.00
128	ACMTR+CMPSS DIG [LDO, L6, SUB SMPS, S4]	1.27	0.00
25	Cap TS_1P8 [LDO, L6, SUB SMPS, S4]	1.27	0.00
127	MIPI_CAM_8MP_1P8 [LDO, L6, SUB SMPS, S4]	1.27	0.00
129	LCD1_MIPI [LDO, L6, SUB SMPS, S4]	1.27	0.00
134	QFPROM [LDO, L6, SUB SMPS, S4]	1.27	0.00
147	VGA_CAM_1P8 [LDO, L6, SUB SMPS, S4]	1.27	0.00
130	HV_BBRX [LDO, L7, SUB SMPS, S4]	1.82	0.17
133	SR_PLL [LDO, L7, SUB SMPS, S4]	1.82	1.27
26	TXDAC0_1 [LDO, L7, SUB SMPS, S4]	1.82	3.68
27	HS_USB_1P8 [LDO, L7, SUB SMPS, S4]	1.82	0.00
131	WTR1605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.82	1.07
132	WTR2605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.82	0.00
139	Rhea_CLK_XO [LDO, L7, SUB SMPS, S4]	1.82	0.00

RCM channel	Regulator	Voltage (V)	I (mA)
14	RF_CLK + PM8916_XO_Block [SMPS, S4]	2.13	3.42
11	CDC_PA [SMPS, S4]	2.14	0.00
12	CDC_CP [SMPS, S4]	2.14	0.00
140	S4_CAM [SMPS, S4]	2.14	0.00
55	Rhea_PA_2P85 [LDO, L9]	0.11	-0.03
65	MIPI_CAM_13MP [LDO, L10]	0.00	0.00
58	PX2 [LDO, L12]	0.00	0.00
23	HS_USB2_3P3 [LDO, L13]	3.11	0.01
148	ACCMTR/compass/AMBT light ANA [LDO, L17]	0.00	0.00
59	LCD1_MIPI [LDO, L17]	0.00	0.00
60	Cap TS_2P85 [LDO, L17]	0.00	0.00
66	MIPI-8MP_2P85 [LDO, L17]	0.00	0.00
67	VGA_CAM_2P85 [LDO, L17]	0.00	0.00
138	RF_SW [LDO, L17]	0.00	0.00
141	RF360 [LDO, L18]	2.69	2.55
54	eMMC_2P9 [LDO, L8]	0.00	0.00
57	SD/MMC_1P8 [LDO, L11]	0.00	0.00
29	UIM1 [LDO, L14]	1.80	0.02
135	PX5 [LDO, L14]	1.80	0.00
30	UIM2 [LDO, L15]	0.00	0.00
136	PX6 [LDO, L15]	0.00	0.00
31	UIM3 [LDO, L16]	0.00	0.00
137	PX4 [LDO, L16]	0.00	0.00
69	CDC_BOOST_OUTPUT	3.71	0.93
35	PWR_WLED	3.71	0.01
36	PWR_HRLED	3.71	0.00
38	PWR_CAM_3P7	3.71	0.03
39	PWR_MISC	3.71	0.01
61	GSM_PA1	3.71	9.69
62	GSM_PA2	3.71	0.00
63	PWR_DISP	3.71	0.01
125	PWR_VIBRATOR	3.71	0.00
146	PWR_WLAN	3.71	0.01
	Battery (measured)	3.71	102.42

Table 4-5 CDMA QPCH standby 5.12 sec

RCM channel	Regulator	CDMA sleep		CDMA awake	
		Voltage (V)	I (mA)	Voltage (V)	I (mA)
3	S1_OUTPUT [CX, MSS, GFX, MDSP, CDC, SMPS, S1]	0.53	1.47	0.92	49.13
8	S2_OUTPUT [APC, SMPS, S2]	0.00	0.00	0.00	0.00
20	LV_BBRX [SMPS, S3]	1.25	0.00	1.27	1.34
41	Rhea_ANA_1P3 [SMPS, S3]	1.25	0.02	1.27	0.00
124	WLAN [SMPS, S3]	1.25	0.00	1.27	0.00
43	WTR2605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	0.00	0.00	0.92	0.18
56	WTR1605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	0.00	0.00	0.92	8.44
49	LPDDR2_EBIO [LDO, L3, SUB SMPS, S3]	0.66	0.01	1.14	0.31
21	MODEM_BIMC_PLL [LDO, L3, SUB SMPS, S3]	0.66	0.00	1.14	0.57
5	MX [LDO, L3, SUB SMPS, S3]	0.66	0.35	1.14	7.14
143	HS_USB2_1P15 [LDO, L3, SUB SMPS, S3]	0.66	0.00	1.14	0.05
45	LPDDR2 [LDO, L2, SUB SMPS, S3]	1.22	0.80	1.22	7.45
44	PX1 [LDO, L2, SUB SMPS, S3]	1.22	0.01	1.22	3.00
46	MIPI_DSI_1P2 [LDO, L2, SUB SMPS, S3]	1.22	0.01	1.22	0.05
47	MIPI_CSI_1p2 [LDO, L2, SUB SMPS, S3]	1.22	0.00	1.22	0.00
48	WTR1605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	1.75	0.01	1.98	3.15
50	WTR2605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	1.75	0.00	1.98	0.00
126	GPS_eLNA [LDO, L4, SUB SMPS, S4]	1.75	0.00	1.98	0.00
68	CDC_ANA_DIG [LDO, L5, SUB SMPS, S4]	1.80	0.00	1.80	-0.01
22	Rhea I/O [LDO, L5, SUB SMPS, S4]	1.80	0.00	1.80	0.00
37	LDO5_MISC [LDO, L5, SUB SMPS, S4]	1.80	0.05	1.80	0.09
51	PX3 [LDO, L5, SUB SMPS, S4]	1.80	0.19	1.80	0.51
52	LPDDR2_CH0 [LDO, L5, SUB SMPS, S4]	1.80	0.30	1.80	0.70
53	eMMC_1P8 [LDO, L5, SUB SMPS, S4]	1.80	0.08	1.80	0.04
64	PX7 [LDO, L5, SUB SMPS, S4]	1.80	0.00	1.80	0.00
142	NFC [LDO, L5, SUB SMPS, S4]	1.80	0.00	1.80	0.00
42	MIPI_DSI_1P8 and PLL [LDO, L6, SUB SMPS, S4]	1.65	0.00	1.71	0.00
128	ACMTR+CMPSS DIG [LDO, L6, SUB SMPS, S4]	1.65	0.00	1.71	0.00
25	Cap TS_1P8 [LDO, L6, SUB SMPS, S4]	1.65	0.01	1.71	0.00
127	MIPI_CAM_8MP_1P8 [LDO, L6, SUB SMPS, S4]	1.65	0.00	1.71	0.00
129	LCD1_MIPI [LDO, L6, SUB SMPS, S4]	1.65	0.00	1.71	0.00

RCM channel	Regulator	CDMA sleep		CDMA awake	
		Voltage (V)	I (mA)	Voltage (V)	I (mA)
134	QFPROM [LDO, L6, SUB SMPS, S4]	1.65	0.00	1.71	0.00
147	VGA_CAM_1P8 [LDO, L6, SUB SMPS, S4]	1.65	0.00	1.71	0.00
130	HV_BBRX [LDO, L7, SUB SMPS, S4]	1.83	0.00	1.82	0.16
133	SR_PLL [LDO, L7, SUB SMPS, S4]	1.83	0.00	1.82	0.83
26	TXDAC0_1 [LDO, L7, SUB SMPS, S4]	1.83	0.00	1.82	0.09
27	HS_USB_1P8 [LDO, L7, SUB SMPS, S4]	1.83	0.01	1.82	0.01
131	WTR1605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.83	0.01	1.82	0.21
132	WTR2605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.83	0.00	1.82	0.00
139	Rhea_CLK_XO [LDO, L7, SUB SMPS, S4]	1.83	0.00	1.82	0.00
14	RF_CLK + PM8916_XO_Block [SMPS, S4]	1.84	0.00	2.10	2.85
11	CDC_PA [SMPS, S4]	1.84	0.00	2.10	0.03
12	CDC_CP [SMPS, S4]	1.84	0.00	2.10	0.00
140	S4_CAM [SMPS, S4]	1.84	0.00	2.10	0.00
55	Rhea_PA_2P85 [LDO, L9]	0.14	0.00	0.16	0.03
65	MIPI_CAM_13MP [LDO, L10]	0.00	0.00	0.00	0.00
58	PX2 [LDO, L12]	0.00	0.00	0.00	0.00
23	HS_USB2_3P3 [LDO, L13]	0.00	0.00	0.00	0.00
148	ACCMTR/compass/AMBT light ANA [LDO, L17]	0.00	0.00	0.00	0.00
59	LCD1_MIPI [LDO, L17]	0.00	0.00	0.00	0.00
60	Cap TS_2P85 [LDO, L17]	0.00	0.00	0.00	0.00
66	MIPI-8MP_2P85 [LDO, L17]	0.00	0.00	0.00	0.00
67	VGA_CAM_2P85 [LDO, L17]	0.00	0.00	0.00	0.01
138	RF_SW [LDO, L17]	0.00	0.00	0.00	0.00
141	RF360 [LDO, L18]	0.17	0.00	2.16	1.17
54	eMMC_2P9 [LDO, L8]	0.00	0.01	0.00	0.04
57	SD/MMC_1P8 [LDO, L11]	0.00	0.00	0.00	0.00
29	UIM1 [LDO, L14]	1.80	0.02	1.80	0.15
135	PX5 [LDO, L14]	1.80	0.00	1.80	0.02
30	UIM2 [LDO, L15]	0.00	0.00	0.00	0.00
136	PX6 [LDO, L15]	0.00	0.00	0.00	0.00
31	UIM3 [LDO, L16]	0.00	0.00	0.00	0.00
137	PX4 [LDO, L16]	0.00	0.00	0.00	0.00
69	CDC_BOOST_OUTPUT	3.71	0.02	3.71	0.00
35	PWR_WLED	3.71	0.01	3.71	0.02
36	PWR_HRLED	3.71	0.01	3.71	0.00
38	PWR_CAM_3P7	3.71	0.08	3.71	0.11

RCM channel	Regulator	CDMA sleep		CDMA awake	
		Voltage (V)	I (mA)	Voltage (V)	I (mA)
39	PWR_MISC	3.71	0.01	3.71	0.01
61	GSM_PA1	3.71	0.11	3.71	0.36
62	GSM_PA2	3.71	0.03	3.71	0.00
63	PWR_DISP	3.71	0.00	3.71	0.00
125	PWR_VIBRATOR	3.71	0.00	3.71	0.00
146	PWR_WLAN	3.71	0.02	3.71	0.00
	Battery (measured)	3.71	1.51	3.71	39.39

1 **Table 4-6 EV-DO standby 5.12 sec**

RCM channel	Regulator	EV-DO sleep		EV-DO awake	
		Voltage (V)	I (mA)	Voltage (V)	I (mA)
3	S1_OUTPUT [CX, MSS, GFX, MDSP, CDC, SMPS, S1]	0.53	1.18	0.93	61.59
8	S2_OUTPUT [APC, SMPS, S2]	0.00	0.06	0.00	0.21
20	LV_BBRX [SMPS, S3]	1.25	0.00	1.27	1.44
41	Rhea_ANA_1P3 [SMPS, S3]	1.25	0.01	1.27	0.00
124	WLAN [SMPS, S3]	1.25	0.00	1.27	0.00
43	WTR2605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	0.00	0.00	1.00	0.00
56	WTR1605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	0.00	0.00	1.00	13.14
49	LPDDR2_EBIO [LDO, L3, SUB SMPS, S3]	0.66	0.01	1.15	0.34
21	MODEM_BIMC_PLL [LDO, L3, SUB SMPS, S3]	0.66	0.00	1.15	0.55
5	MX [LDO, L3, SUB SMPS, S3]	0.66	0.37	1.15	7.65
143	HS_USB2_1P15 [LDO, L3, SUB SMPS, S3]	0.66	0.00	1.15	0.05
45	LPDDR2 [LDO, L2, SUB SMPS, S3]	1.22	0.78	1.22	7.19
44	PX1 [LDO, L2, SUB SMPS, S3]	1.22	0.00	1.22	4.25
46	MIPI_DSI_1P2 [LDO, L2, SUB SMPS, S3]	1.22	0.01	1.22	0.01
47	MIPI_CSI_1p2 [LDO, L2, SUB SMPS, S3]	1.22	0.00	1.22	0.00
48	WTR1605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	1.75	0.00	2.00	6.12
50	WTR2605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	1.75	0.00	2.00	0.00
126	GPS_eLNA [LDO, L4, SUB SMPS, S4]	1.75	0.00	2.00	0.00
68	CDC_ANA_DIG [LDO, L5, SUB SMPS, S4]	1.80	0.00	1.80	0.00
22	Rhea I/O [LDO, L5, SUB SMPS, S4]	1.80	0.00	1.80	0.00
37	LDO5_MISC [LDO, L5, SUB SMPS, S4]	1.80	0.05	1.80	0.06

RCM channel	Regulator	EV-DO sleep		EV-DO awake	
		Voltage (V)	I (mA)	Voltage (V)	I (mA)
51	PX3 [LDO, L5, SUB SMPS, S4]	1.80	0.19	1.80	0.50
52	LPDDR2_CH0 [LDO, L5, SUB SMPS, S4]	1.80	0.30	1.80	0.81
53	eMMC_1P8 [LDO, L5, SUB SMPS, S4]	1.80	0.08	1.80	0.07
64	PX7 [LDO, L5, SUB SMPS, S4]	1.80	0.00	1.80	0.01
142	NFC [LDO, L5, SUB SMPS, S4]	1.80	0.00	1.80	0.00
42	MIPI_DSI_1P8 and PLL [LDO, L6, SUB SMPS, S4]	1.65	0.00	1.70	0.00
128	ACMTR+CMPSS DIG [LDO, L6, SUB SMPS, S4]	1.65	0.00	1.70	0.00
25	Cap TS_1P8 [LDO, L6, SUB SMPS, S4]	1.65	0.01	1.70	0.01
127	MIPI_CAM_8MP_1P8 [LDO, L6, SUB SMPS, S4]	1.65	0.00	1.70	0.00
129	LCD1_MIPI [LDO, L6, SUB SMPS, S4]	1.65	0.00	1.70	0.00
134	QFPROM [LDO, L6, SUB SMPS, S4]	1.65	0.00	1.70	0.01
147	VGA_CAM_1P8 [LDO, L6, SUB SMPS, S4]	1.65	0.00	1.70	0.00
130	HV_BBRX [LDO, L7, SUB SMPS, S4]	1.83	0.00	1.82	0.19
133	SR_PLL [LDO, L7, SUB SMPS, S4]	1.83	0.00	1.82	0.92
26	TXDAC0_1 [LDO, L7, SUB SMPS, S4]	1.83	0.00	1.82	0.09
27	HS_USB_1P8 [LDO, L7, SUB SMPS, S4]	1.83	0.01	1.82	0.01
131	WTR1605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.83	0.01	1.82	0.27
132	WTR2605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.83	0.00	1.82	0.00
139	Rhea_CLK_XO [LDO, L7, SUB SMPS, S4]	1.83	0.00	1.82	0.00
14	RF_CLK + PM8916_XO_Block [SMPS, S4]	1.84	0.00	2.11	2.74
11	CDC_PA [SMPS, S4]	1.84	0.01	2.11	0.00
12	CDC_CP [SMPS, S4]	1.84	0.01	2.11	0.05
140	S4_CAM [SMPS, S4]	1.84	0.00	2.11	0.00
55	Rhea_PA_2P85 [LDO, L9]	0.09	0.00	0.10	0.00
65	MIPI_CAM_13MP [LDO, L10]	0.00	0.00	0.00	0.01
58	PX2 [LDO, L12]	0.00	0.00	0.00	0.01
23	HS_USB2_3P3 [LDO, L13]	0.00	0.00	0.00	0.00
148	ACCMTR/compass/AMBT light ANA [LDO, L17]	0.00	0.00	0.00	0.00
59	LCD1_MIPI [LDO, L17]	0.00	0.00	0.00	0.00
60	Cap TS_2P85 [LDO, L17]	0.00	0.00	0.00	0.00
66	MIPI-8MP_2P85 [LDO, L17]	0.00	0.00	0.00	0.00
67	VGA_CAM_2P85 [LDO, L17]	0.00	0.00	0.00	0.00
138	RF_SW [LDO, L17]	0.00	0.00	0.00	0.00
141	RF360 [LDO, L18]	0.17	0.00	2.30	1.09

RCM channel	Regulator	EV-DO sleep		EV-DO awake	
		Voltage (V)	I (mA)	Voltage (V)	I (mA)
54	eMMC_2P9 [LDO, L8]	0.00	0.01	0.00	0.01
57	SD/MMC_1P8 [LDO, L11]	0.00	-0.02	0.00	0.00
29	UIM1 [LDO, L14]	1.80	0.03	1.80	0.02
135	PX5 [LDO, L14]	1.80	0.00	1.80	0.00
30	UIM2 [LDO, L15]	0.00	0.00	0.00	0.00
136	PX6 [LDO, L15]	0.00	0.00	0.00	0.00
31	UIM3 [LDO, L16]	0.00	0.00	0.00	0.01
137	PX4 [LDO, L16]	0.00	0.00	0.00	0.00
69	CDC_BOOST_OUTPUT	3.71	0.01	3.71	0.00
35	PWR_WLED	3.71	0.02	3.71	0.06
36	PWR_HRLED	3.71	0.01	3.71	0.01
38	PWR_CAM_3P7	3.71	0.10	3.71	0.00
39	PWR_MISC	3.71	0.01	3.71	0.03
61	GSM_PA1	3.71	0.14	3.71	0.00
62	GSM_PA2	3.71	0.02	3.71	0.00
63	PWR_DISP	3.71	0.01	3.71	0.01
125	PWR_VIBRATOR	3.71	0.00	3.71	0.00
146	PWR_WLAN	3.71	0.02	3.71	0.04
	Battery (measured)	3.71	1.50	3.71	46.10

1 **Table 4-7 CDMA talk + 0 dBm**

RCM channel	Regulator	Voltage (V)	I (mA)
3	S1_OUTPUT [CX, MSS, GFX, MDSP, CDC, SMPS, S1]	0.95	75.29
8	S2_OUTPUT [APC, SMPS, S2]	0.00	0.00
20	LV_BBRX [SMPS, S3]	1.27	3.88
41	Rhea_ANA_1P3 [SMPS, S3]	1.28	0.01
124	WLAN [SMPS, S3]	1.28	0.00
43	WTR2605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	1.25	0.00
56	WTR1605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	1.24	59.50
49	LPDDR2_EBIO [LDO, L3, SUB SMPS, S3]	1.17	0.42
21	MODEM_BIMC_PLL [LDO, L3, SUB SMPS, S3]	1.17	1.24
5	MX [LDO, L3, SUB SMPS, S3]	1.17	9.74
143	HS_USB2_1P15 [LDO, L3, SUB SMPS, S3]	1.17	0.04
45	LPDDR2 [LDO, L2, SUB SMPS, S3]	1.22	4.35
44	PX1 [LDO, L2, SUB SMPS, S3]	1.22	1.30
46	MIPI_DSI_1P2 [LDO, L2, SUB SMPS, S3]	1.22	0.01
47	MIPI_CSI_1p2 [LDO, L2, SUB SMPS, S3]	1.22	0.00

RCM channel	Regulator	Voltage (V)	I (mA)
48	WTR1605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	2.04	34.01
50	WTR2605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	2.04	0.00
126	GPS_eLNA [LDO, L4, SUB SMPS, S4]	2.04	0.00
68	CDC_ANA_DIG [LDO, L5, SUB SMPS, S4]	1.80	0.51
22	Rhea I/O [LDO, L5, SUB SMPS, S4]	1.80	0.00
37	LDO5_MISC [LDO, L5, SUB SMPS, S4]	1.80	0.05
51	PX3 [LDO, L5, SUB SMPS, S4]	1.80	2.45
52	LPDDR2_CH0 [LDO, L5, SUB SMPS, S4]	1.80	0.66
53	eMMC_1P8 [LDO, L5, SUB SMPS, S4]	1.80	0.07
64	PX7 [LDO, L5, SUB SMPS, S4]	1.80	0.00
142	NFC [LDO, L5, SUB SMPS, S4]	1.80	0.00
42	MIPI_DSI_1P8 & PLL [LDO, L6, SUB SMPS, S4]	1.33	0.00
128	ACMTR+CMPSS DIG [LDO, L6, SUB SMPS, S4]	1.33	0.00
25	Cap TS_1P8 [LDO, L6, SUB SMPS, S4]	1.33	0.01
127	MIPI_CAM_8MP_1P8 [LDO, L6, SUB SMPS, S4]	1.33	0.00
129	LCD1_MIPI [LDO, L6, SUB SMPS, S4]	1.33	0.00
134	QFPROM [LDO, L6, SUB SMPS, S4]	1.33	0.00
147	VGA_CAM_1P8 [LDO, L6, SUB SMPS, S4]	1.33	0.00
130	HV_BBRX [LDO, L7, SUB SMPS, S4]	1.82	0.48
133	SR_PLL [LDO, L7, SUB SMPS, S4]	1.82	1.27
26	TXDAC0_1 [LDO, L7, SUB SMPS, S4]	1.82	3.68
27	HS_USB_1P8 [LDO, L7, SUB SMPS, S4]	1.82	0.00
131	WTR1605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.82	1.44
132	WTR2605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.82	0.00
139	Rhea_CLK_XO [LDO, L7, SUB SMPS, S4]	1.82	0.00
14	RF_CLK + PM8916_XO_Block [SMPS, S4]	2.13	3.42
11	CDC_PA [SMPS, S4]	2.14	0.00
12	CDC_CP [SMPS, S4]	2.14	0.01
140	S4_CAM [SMPS, S4]	2.14	0.00
55	Rhea_PA_2P85 [LDO, L9]	0.08	0.00
65	MIPI_CAM_13MP [LDO, L10]	0.00	0.00
58	PX2 [LDO, L12]	0.00	0.00
23	HS_USB2_3P3 [LDO, L13]	3.11	0.01
148	ACCMTR / Compass/AMBT light ANA [LDO, L17]	0.00	0.00
59	LCD1_MIPI [LDO, L17]	0.00	0.00
60	Cap TS_2P85 [LDO, L17]	0.00	0.00
66	MIPI-8MP_2P85 [LDO, L17]	0.00	0.00
67	VGA_CAM_2P85 [LDO, L17]	0.00	0.00
138	RF_SW [LDO, L17]	0.00	0.00
141	RF360 [LDO, L18]	2.69	2.77
54	eMMC_2P9 [LDO, L8]	0.00	0.01

RCM channel	Regulator	Voltage (V)	I (mA)
57	SD/MMC_1P8 [LDO, L11]	0.00	0.00
29	UIM1 [LDO, L14]	1.80	0.02
135	PX5 [LDO, L14]	1.80	0.00
30	UIM2 [LDO, L15]	0.00	0.00
136	PX6 [LDO,L15]	0.00	0.00
31	UIM3 [LDO, L16]	0.00	0.00
137	PX4 [LDO, L16]	0.00	0.00
69	CDC_BOOST_OUTPUT	3.71	0.92
35	PWR_WLED	3.71	0.01
36	PWR_HRLED	3.71	0.01
38	PWR_CAM_3P7	3.71	0.07
39	PWR_MISC	3.71	0.01
61	GSM_PA1	3.71	7.73
62	GSM_PA2	3.71	0.00
63	PWR_DISP	3.71	0.00
125	PWR_VIBRATOR	3.71	0.00
146	PWR_WLAN	3.71	0.02
	Battery (measured)	3.71	103.93

1 **Table 4-8 GSM standby 1.18 sec**

RCM channel	Regulator	GSM sleep		GSM awake	
		Voltage (V)	I (mA)	Voltage (V)	I (mA)
3	S1_OUTPUT [CX, MSS, GFX, MDSP, CDC, SMPS, S1]	0.53	1.07	0.92	64.24
8	S2_OUTPUT [APC, SMPS, S2]	0.00	0.00	0.00	0.00
20	LV_BBRX [SMPS, S3]	1.25	0.00	1.27	0.44
41	Rhea_ANA_1P3 [SMPS, S3]	1.25	0.00	1.27	0.00
124	WLAN [SMPS, S3]	1.25	0.00	1.27	0.02
43	WTR2605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	0.00	0.00	0.81	0.00
56	WTR1605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	0.00	0.00	0.80	3.58
49	LPDDR2_EBIO [LDO, L3, SUB SMPS, S3]	0.66	0.01	1.14	0.29
21	MODEM_BIMC_PLL [LDO, L3, SUB SMPS, S3]	0.66	0.00	1.14	0.55
5	MX [LDO, L3, SUB SMPS, S3]	0.66	0.28	1.14	6.39
143	HS_USB2_1P15 [LDO, L3, SUB SMPS, S3]	0.66	0.00	1.14	0.05
45	LPDDR2 [LDO, L2, SUB SMPS, S3]	1.22	0.78	1.22	8.32
44	PX1 [LDO, L2, SUB SMPS, S3]	1.22	0.00	1.22	4.85
46	MIPI_DSI_1P2 [LDO, L2, SUB SMPS, S3]	1.22	0.01	1.22	0.00

RCM channel	Regulator	GSM sleep		GSM awake	
		Voltage (V)	I (mA)	Voltage (V)	I (mA)
47	MIPI_CSI_1p2 [LDO, L2, SUB SMPS, S3]	1.22	0.00	1.22	0.00
48	WTR1605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	0.42	0.00	1.69	2.31
50	WTR2605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	0.42	0.00	1.69	0.00
126	GPS_eLNA [LDO, L4, SUB SMPS, S4]	0.42	0.00	1.69	0.00
68	CDC_ANA_DIG [LDO, L5, SUB SMPS, S4]	1.80	0.00	1.80	0.00
22	Rhea I/O [LDO, L5, SUB SMPS, S4]	1.80	0.00	1.80	0.00
37	LDO5_MISC [LDO, L5, SUB SMPS, S4]	1.80	0.04	1.80	0.00
51	PX3 [LDO, L5, SUB SMPS, S4]	1.80	0.19	1.80	0.60
52	LPDDR2_CH0 [LDO, L5, SUB SMPS, S4]	1.80	0.30	1.80	0.76
53	eMMC_1P8 [LDO, L5, SUB SMPS, S4]	1.80	0.08	1.80	0.00
64	PX7 [LDO, L5, SUB SMPS, S4]	1.80	0.00	1.80	0.00
142	NFC [LDO, L5, SUB SMPS, S4]	1.80	0.00	1.80	0.00
42	MIPI_DSI_1P8 and PLL [LDO, L6, SUB SMPS, S4]	1.65	0.00	1.71	0.00
128	ACMTR+CMPSS DIG [LDO, L6, SUB SMPS, S4]	1.65	0.00	1.71	0.00
25	Cap TS_1P8 [LDO, L6, SUB SMPS, S4]	1.65	0.01	1.71	0.01
127	MIPI_CAM_8MP_1P8 [LDO, L6, SUB SMPS, S4]	1.65	0.00	1.71	0.00
129	LCD1_MIPI [LDO, L6, SUB SMPS, S4]	1.65	0.00	1.71	0.00
134	QFPROM [LDO, L6, SUB SMPS, S4]	1.65	0.00	1.71	0.00
147	VGA_CAM_1P8 [LDO, L6, SUB SMPS, S4]	1.65	0.00	1.71	0.01
130	HV_BBRX [LDO, L7, SUB SMPS, S4]	1.83	0.00	1.82	0.06
133	SR_PLL [LDO, L7, SUB SMPS, S4]	1.83	0.00	1.82	0.64
26	TXDAC0_1 [LDO, L7, SUB SMPS, S4]	1.83	0.00	1.82	0.07
27	HS_USB_1P8 [LDO, L7, SUB SMPS, S4]	1.83	0.01	1.82	0.00
131	WTR1605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.83	0.01	1.82	0.19
132	WTR2605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.83	0.00	1.82	0.00
139	Rhea_CLK_XO [LDO, L7, SUB SMPS, S4]	1.83	0.00	2.09	2.19
14	RF_CLK + PM8916_XO_Block [SMPS, S4]	1.84	0.00	2.09	0.00
11	CDC_PA [SMPS, S4]	1.84	0.00	2.09	0.00
12	CDC_CP [SMPS, S4]	1.84	0.00	2.09	0.07
140	S4_CAM [SMPS, S4]	1.84	0.00	2.09	2.19
55	Rhea_PA_2P85 [LDO, L9]	0.09	0.00	0.09	0.00
65	MIPI_CAM_13MP [LDO, L10]	0.00	0.00	0.00	0.00
58	PX2 [LDO, L12]	0.00	0.00	0.00	0.01
23	HS_USB2_3P3 [LDO, L13]	0.00	0.00	0.00	0.00
148	ACCMTR/Compass/AMBT light ANA [LDO, L17]	0.00	0.00	0.00	0.00

RCM channel	Regulator	GSM sleep		GSM awake	
		Voltage (V)	I (mA)	Voltage (V)	I (mA)
59	LCD1_MIPI [LDO, L17]	0.00	0.00	0.00	0.02
60	Cap TS_2P85 [LDO, L17]	0.00	0.00	0.00	0.00
66	MIPI-8MP_2P85 [LDO, L17]	0.00	0.00	0.00	0.00
67	VGA_CAM_2P85 [LDO, L17]	0.00	0.00	0.00	0.01
138	RF_SW [LDO, L17]	0.00	0.00	0.00	0.00
141	RF360 [LDO, L18]	0.17	0.00	1.96	0.89
54	eMMC_2P9 [LDO, L8]	0.00	0.01	0.00	0.00
57	SD/MMC_1P8 [LDO, L11]	0.00	0.00	0.00	0.00
29	UIM1 [LDO, L14]	1.80	0.02	1.80	0.03
135	PX5 [LDO, L14]	1.80	0.00	1.80	0.00
30	UIM2 [LDO, L15]	0.00	0.00	0.00	0.00
136	PX6 [LDO, L15]	0.00	0.00	0.00	0.00
31	UIM3 [LDO, L16]	0.00	0.00	0.00	0.00
137	PX4 [LDO, L16]	0.00	0.00	0.00	0.00
69	CDC_BOOST_OUTPUT	3.71	0.02	3.71	0.25
35	PWR_WLED	3.71	0.01	3.71	0.01
36	PWR_HRLED	3.71	0.00	3.71	0.01
38	PWR_CAM_3P7	3.71	0.02	3.71	0.11
39	PWR_MISC	3.71	0.01	3.71	0.00
61	GSM_PA1	3.71	0.20	3.71	0.00
62	GSM_PA2	3.71	0.08	3.71	0.35
63	PWR_DISP	3.71	0.01	3.71	0.00
125	PWR_VIBRATOR	3.71	0.00	3.71	0.01
146	PWR_WLAN	3.71	0.02	3.71	0.00
	Battery (measured)	3.71	1.60	3.71	33.67

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Table 4-9 GSM talk + 5 dBm, no DTx, PGSM

RCM channel	Regulator	Voltage (V)	I (mA)
3	S1_OUTPUT [CX, MSS, GFX, MDSP, CDC, SMPS, S1]	0.95	69.90
8	S2_OUTPUT [APC, SMPS, S2]	0.00	0.00
20	LV_BBRX [SMPS, S3]	1.27	2.54
41	Rhea_ANA_1P3 [SMPS, S3]	1.28	0.00
124	WLAN [SMPS, S3]	1.28	0.00
43	WTR2605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	1.25	0.00
56	WTR1605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	1.25	9.24
49	LPDDR2_EBIO [LDO, L3, SUB SMPS, S3]	1.17	0.40

RCM channel	Regulator	Voltage (V)	I (mA)
21	MODEM_BIMC_PLL [LDO, L3, SUB SMPS, S3]	1.17	1.24
5	MX [LDO, L3, SUB SMPS, S3]	1.17	9.29
143	HS_USB2_1P15 [LDO, L3, SUB SMPS, S3]	1.17	0.05
45	LPDDR2 [LDO, L2, SUB SMPS, S3]	1.22	7.70
44	PX1 [LDO, L2, SUB SMPS, S3]	1.22	3.03
46	MIPI_DSI_1P2 [LDO, L2, SUB SMPS, S3]	1.22	0.00
47	MIPI_CSI_1p2 [LDO, L2, SUB SMPS, S3]	1.22	0.00
48	WTR1605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	2.04	12.63
50	WTR2605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	2.04	0.00
126	GPS_eLNA [LDO, L4, SUB SMPS, S4]	2.04	0.00
68	CDC_ANA_DIG [LDO, L5, SUB SMPS, S4]	1.80	0.52
22	Rhea I/O [LDO, L5, SUB SMPS, S4]	1.80	0.00
37	LDO5_MISC [LDO, L5, SUB SMPS, S4]	1.80	0.05
51	PX3 [LDO, L5, SUB SMPS, S4]	1.80	2.47
52	LPDDR2_CH0 [LDO, L5, SUB SMPS, S4]	1.80	0.84
53	eMMC_1P8 [LDO, L5, SUB SMPS, S4]	1.80	0.07
64	PX7 [LDO, L5, SUB SMPS, S4]	1.80	0.00
142	NFC [LDO, L5, SUB SMPS, S4]	1.80	0.00
42	MIPI_DSI_1P8 and PLL [LDO, L6, SUB SMPS, S4]	1.64	0.00
128	ACMTR+CMPSS DIG [LDO, L6, SUB SMPS, S4]	1.64	0.00
25	Cap TS_1P8 [LDO, L6, SUB SMPS, S4]	1.64	0.00
127	MIPI_CAM_8MP_1P8 [LDO, L6, SUB SMPS, S4]	1.64	0.00
129	LCD1_MIPI [LDO, L6, SUB SMPS, S4]	1.64	0.00
134	QFPROM [LDO, L6, SUB SMPS, S4]	1.64	0.00
147	VGA_CAM_1P8 [LDO, L6, SUB SMPS, S4]	1.64	0.00
130	HV_BBRX [LDO, L7, SUB SMPS, S4]	1.82	0.31
133	SR_PLL [LDO, L7, SUB SMPS, S4]	1.82	1.27
26	TXDAC0_1 [LDO, L7, SUB SMPS, S4]	1.82	0.65
27	HS_USB_1P8 [LDO, L7, SUB SMPS, S4]	1.82	0.00
131	WTR1605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.82	1.26
132	WTR2605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.82	0.00
139	Rhea_CLK_XO [LDO, L7, SUB SMPS, S4]	1.82	0.00
14	RF_CLK + PM8916_XO_Block [SMPS, S4]	2.13	3.43
11	CDC_PA [SMPS, S4]	2.14	0.00
12	CDC_CP [SMPS, S4]	2.14	0.00
140	S4_CAM [SMPS, S4]	2.14	0.01
55	Rhea_PA_2P85 [LDO, L9]	0.11	0.00
65	MIPI_CAM_13MP [LDO, L10]	0.00	0.00
58	PX2 [LDO, L12]	0.00	0.00
23	HS_USB2_3P3 [LDO, L13]	3.11	0.01
148	ACCMTR/Compass/AMBT light ANA [LDO, L17]	0.00	0.00

RCM channel	Regulator	Voltage (V)	I (mA)
59	LCD1_MIPI [LDO, L17]	0.00	0.00
60	Cap TS_2P85 [LDO, L17]	0.00	0.00
66	MIPI-8MP_2P85 [LDO, L17]	0.00	0.00
67	VGA_CAM_2P85 [LDO, L17]	0.00	0.00
138	RF_SW [LDO, L17]	0.00	0.00
141	RF360 [LDO, L18]	2.69	2.39
54	eMMC_2P9 [LDO, L8]	0.00	0.00
57	SD/MMC_1P8 [LDO, L11]	0.00	0.00
29	UIM1 [LDO, L14]	1.80	0.02
135	PX5 [LDO, L14]	1.80	0.00
30	UIM2 [LDO, L15]	0.00	0.00
136	PX6 [LDO, L15]	0.00	0.00
31	UIM3 [LDO, L16]	0.00	0.00
137	PX4 [LDO, L16]	0.00	0.00
69	CDC_BOOST_OUTPUT	3.71	0.94
35	PWR_WLED	3.71	0.01
36	PWR_HRLED	3.71	0.00
38	PWR_CAM_3P7	3.71	0.02
39	PWR_MISC	3.71	0.01
61	GSM_PA1	3.71	13.38
62	GSM_PA2	3.71	0.05
63	PWR_DISP	3.71	0.00
125	PWR_VIBRATOR	3.71	0.00
146	PWR_WLAN	3.71	0.01
	Battery (measured)	3.71	73.41

1 **Table 4-10 TD-SCDMA standby 1.28 sec**

RCM channel	Regulator	TD_SCDMA sleep		TD_SCDMA awake	
		Voltage (V)	I (mA)	Voltage (V)	I (mA)
3	S1_OUTPUT [CX, MSS, GFX, MDSP, CDC, SMPS, S1]	0.53	1.37	0.92	61.06
8	S2_OUTPUT [APC, SMPS, S2]	0.00	0.00	0.00	0.00
20	LV_BBRX [SMPS, S3]	1.25	0.00	1.27	0.74
41	Rhea_ANA_1P3 [SMPS, S3]	1.25	0.00	0.83	0.00
124	WLAN [SMPS, S3]	1.25	0.00	0.83	1.63
43	WTR2605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	0.00	0.00	1.14	0.32
56	WTR1605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	0.00	0.00	1.14	0.56
49	LPDDR2_EBIO [LDO, L3, SUB SMPS, S3]	0.66	0.01	1.14	6.77

RCM channel	Regulator	TD_SCDMA sleep		TD_SCDMA awake	
		Voltage (V)	I (mA)	Voltage (V)	I (mA)
21	MODEM_BIMC_PLL [LDO, L3, SUB SMPS, S3]	0.66	0.00	1.14	0.05
5	MX [LDO, L3, SUB SMPS, S3]	0.66	0.30	0.83	0.00
143	HS_USB2_1P15 [LDO, L3, SUB SMPS, S3]	0.66	0.00	0.83	1.63
45	LPDDR2 [LDO, L2, SUB SMPS, S3]	1.22	0.76	1.22	7.90
44	PX1 [LDO, L2, SUB SMPS, S3]	1.22	0.00	1.22	6.10
46	MIPI_DSI_1P2 [LDO, L2, SUB SMPS, S3]	1.22	0.01	1.22	0.00
47	MIPI_CSI_1p2 [LDO, L2, SUB SMPS, S3]	1.22	0.00	1.22	0.00
48	WTR1605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	0.66	0.00	1.75	1.56
50	WTR2605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	0.66	0.00	1.75	0.01
126	GPS_eLNA [LDO, L4, SUB SMPS, S4]	0.66	0.00	1.72	0.00
68	CDC_ANA_DIG [LDO, L5, SUB SMPS, S4]	1.80	0.00	1.80	0.01
22	Rhea I/O [LDO, L5, SUB SMPS, S4]	1.80	0.00	1.80	0.00
37	LDO5_MISC [LDO, L5, SUB SMPS, S4]	1.80	0.05	1.80	0.05
51	PX3 [LDO, L5, SUB SMPS, S4]	1.80	0.19	1.80	0.49
52	LPDDR2_CH0 [LDO, L5, SUB SMPS, S4]	1.80	0.30	1.80	0.87
53	eMMC_1P8 [LDO, L5, SUB SMPS, S4]	1.80	0.08	1.80	0.05
64	PX7 [LDO, L5, SUB SMPS, S4]	1.80	0.00	1.80	0.00
142	NFC [LDO, L5, SUB SMPS, S4]	1.80	0.00	1.80	0.01
42	MIPI_DSI_1P8 and PLL [LDO, L6, SUB SMPS, S4]	1.65	0.00	1.71	0.00
128	ACMTR+CMPSS DIG [LDO, L6, SUB SMPS, S4]	1.65	0.00	1.71	0.00
25	Cap TS_1P8 [LDO, L6, SUB SMPS, S4]	1.65	0.01	1.71	0.01
127	MIPI_CAM_8MP_1P8 [LDO, L6, SUB SMPS, S4]	1.65	0.00	1.71	0.00
129	LCD1_MIPI [LDO, L6, SUB SMPS, S4]	1.65	0.00	1.71	0.00
134	QFPROM [LDO, L6, SUB SMPS, S4]	1.65	0.00	1.71	0.00
147	VGA_CAM_1P8 [LDO, L6, SUB SMPS, S4]	1.65	0.00	1.71	0.00
130	HV_BBRX [LDO, L7, SUB SMPS, S4]	1.83	0.00	1.82	0.08
133	SR_PLL [LDO, L7, SUB SMPS, S4]	1.83	0.00	1.82	0.72
26	TXDAC0_1 [LDO, L7, SUB SMPS, S4]	1.83	0.00	1.82	0.07
27	HS_USB_1P8 [LDO, L7, SUB SMPS, S4]	1.83	0.01	1.82	0.01
131	WTR1605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.83	0.01	1.82	0.23
132	WTR2605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.83	0.00	1.82	0.00
139	Rhea_CLK_XO [LDO, L7, SUB SMPS, S4]	1.83	0.00	1.82	0.00
14	RF_CLK + PM8916_XO_Block [SMPS, S4]	1.84	0.00	2.09	2.30
11	CDC_PA [SMPS, S4]	1.84	0.00	2.09	0.00
12	CDC_CP [SMPS, S4]	1.84	0.00	2.09	0.00

RCM channel	Regulator	TD_SCDMA sleep		TD_SCDMA awake	
		Voltage (V)	I (mA)	Voltage (V)	I (mA)
140	S4_CAM [SMPS, S4]	1.84	0.01	2.09	0.00
55	Rhea_PA_2P85 [LDO, L9]	0.09	0.00	0.09	0.02
65	MIPI_CAM_13MP [LDO, L10]	0.00	0.00	0.00	0.00
58	PX2 [LDO, L12]	0.00	0.00	0.00	0.01
23	HS_USB2_3P3 [LDO, L13]	0.00	0.00	0.00	0.00
148	ACCMTR/Compass/AMBT light ANA [LDO, L17]	0.00	0.00	0.00	0.01
59	LCD1_MIPI [LDO, L17]	0.00	0.00	0.00	0.00
60	Cap TS_2P85 [LDO, L17]	0.00	0.00	0.00	0.02
66	MIPI-8MP_2P85 [LDO, L17]	0.00	0.00	0.00	0.00
67	VGA_CAM_2P85 [LDO, L17]	0.00	0.00	0.00	0.01
138	RF_SW [LDO, L17]	0.00	0.00	0.00	0.00
141	RF360 [LDO, L18]	0.17	0.00	1.99	0.98
54	eMMC_2P9 [LDO, L8]	0.00	0.00	0.00	0.00
57	SD/MMC_1P8 [LDO, L11]	0.00	0.00	0.00	0.00
29	UIM1 [LDO, L14]	1.80	0.02	1.80	0.03
135	PX5 [LDO, L14]	1.80	0.00	1.80	0.00
30	UIM2 [LDO, L15]	0.00	0.00	0.00	0.00
136	PX6 [LDO, L15]	0.00	0.00	0.00	0.00
31	UIM3 [LDO, L16]	0.00	0.00	0.00	0.00
137	PX4 [LDO, L16]	0.00	0.00	0.00	0.00
69	CDC_BOOST_OUTPUT	3.71	0.03	3.71	0.25
35	PWR_WLED	3.71	0.01	3.71	0.03
36	PWR_HRLED	3.71	0.00	3.71	0.00
38	PWR_CAM_3P7	3.71	0.03	3.71	0.00
39	PWR_MISC	3.71	0.01	3.71	0.00
61	GSM_PA1	3.71	0.10	3.71	0.11
62	GSM_PA2	3.71	0.04	3.71	0.43
63	PWR_DISP	3.71	0.00	3.71	0.00
125	PWR_VIBRATOR	3.71	0.00	3.71	0.00
146	PWR_WLAN	3.71	0.02	3.71	0.11
	Battery (measured)	3.71	1.46	3.71	35.23

Table 4-11 TD-SCDMA talk 1.28 sec

RCM channel	Regulator	Voltage (V)	I (mA)
3	S1_OUTPUT [CX, MSS, GFX, MDSP, CDC, SMPS, S1]	0.95	75.73
8	S2_OUTPUT [APC, SMPS, S2]	0.00	0.00
20	LV_BBRX [SMPS, S3]	1.27	3.88
41	Rhea_ANA_1P3 [SMPS, S3]	1.28	0.04
124	WLAN [SMPS, S3]	1.28	0.00
43	WTR2605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	1.25	0.00
56	WTR1605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	1.25	11.11
49	LPDDR2_EBIO [LDO, L3, SUB SMPS, S3]	1.17	0.48
21	MODEM_BIMC_PLL [LDO, L3, SUB SMPS, S3]	1.17	1.24
5	MX [LDO, L3, SUB SMPS,S3]	1.17	11.01
143	HS_USB2_1P15 [LDO, L3, SUB SMPS, S3]	1.17	0.05
45	LPDDR2 [LDO, L2, SUB SMPS, S3]	1.22	9.75
44	PX1 [LDO, L2, SUB SMPS, S3]	1.22	3.98
46	MIPI_DSI_1P2 [LDO, L2, SUB SMPS, S3]	1.22	0.00
47	MIPI_CSI_1p2 [LDO, L2, SUB SMPS, S3]	1.22	0.00
48	WTR1605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	2.04	10.44
50	WTR2605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	2.04	0.00
126	GPS_eLNA [LDO, L4, SUB SMPS, S4]	2.04	0.00
68	CDC_ANA_DIG [LDO, L5, SUB SMPS, S4]	1.80	0.51
22	Rhea I/O [LDO, L5, SUB SMPS, S4]	1.80	0.00
37	LDO5_MISC [LDO, L5, SUB SMPS, S4]	1.80	0.05
51	PX3 [LDO, L5, SUB SMPS, S4]	1.80	2.45
52	LPDDR2_CH0 [LDO, L5, SUB SMPS, S4]	1.80	0.91
53	eMMC_1P8 [LDO, L5, SUB SMPS, S4]	1.80	0.07
64	PX7 [LDO, L5, SUB SMPS, S4]	1.80	0.00
142	NFC [LDO, L5, SUB SMPS, S4]	1.80	0.00
42	MIPI_DSI_1P8 and PLL [LDO, L6, SUB SMPS, S4]	1.31	0.00
128	ACMTR+CMPSS DIG [LDO, L6, SUB SMPS, S4]	1.31	0.00
25	Cap TS_1P8 [LDO, L6, SUB SMPS, S4]	1.31	0.00
127	MIPI_CAM_8MP_1P8 [LDO, L6, SUB SMPS, S4]	1.31	0.00
129	LCD1_MIPI [LDO, L6, SUB SMPS, S4]	1.31	0.00
134	QFPROM [LDO, L6, SUB SMPS, S4]	1.31	0.00
147	VGA_CAM_1P8 [LDO, L6,SUB SMPS, S4]	1.31	0.00
130	HV_BBRX [LDO, L7, SUB SMPS, S4]	1.82	0.48
133	SR_PLL [LDO, L7, SUB SMPS, S4]	1.82	1.27
26	TXDAC0_1 [LDO, L7, SUB SMPS, S4]	1.82	1.54
27	HS_USB_1P8 [LDO, L7, SUB SMPS, S4]	1.82	0.00
131	WTR1605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.82	1.25
132	WTR2605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.82	0.00
139	Rhea_CLK_XO [LDO, L7, SUB SMPS, S4]	1.82	0.00

RCM channel	Regulator	Voltage (V)	I (mA)
14	RF_CLK + PM8916_XO_Block [SMPS, S4]	2.13	3.42
11	CDC_PA [SMPS, S4]	2.14	0.00
12	CDC_CP [SMPS, S4]	2.14	0.00
140	S4_CAM [SMPS, S4]	2.14	0.01
55	Rhea_PA_2P85 [LDO, L9]	0.11	0.00
65	MIPI_CAM_13MP [LDO, L10]	0.00	0.00
58	PX2 [LDO, L12]	0.00	0.00
23	HS_USB2_3P3 [LDO, L13]	3.11	0.01
148	ACCMTR/Compass/AMBT light ANA [LDO,L17]	0.00	0.00
59	LCD1_MIPI [LDO, L17]	0.00	0.00
60	Cap TS_2P85 [LDO, L17]	0.00	0.00
66	MIPI-8MP_2P85 [LDO, L17]	0.00	0.00
67	VGA_CAM_2P85 [LDO, L17]	0.00	0.00
138	RF_SW [LDO, L17]	0.00	0.00
141	RF360 [LDO, L18]	2.69	3.07
54	eMMC_2P9 [LDO, L8]	0.00	0.00
57	SD/MMC_1P8 [LDO, L11]	0.00	0.00
29	UIM1 [LDO, L14]	1.80	0.02
135	PX5 [LDO, L14]	1.80	0.00
30	UIM2 [LDO, L15]	0.00	0.00
136	PX6 [LDO, L15]	0.00	0.00
31	UIM3 [LDO, L16]	0.00	0.00
137	PX4 [LDO, L16]	0.00	0.00
69	CDC_BOOST_OUTPUT	3.71	0.93
35	PWR_WLED	3.71	0.01
36	PWR_HRLED	3.71	0.00
38	PWR_CAM_3P7	3.71	0.04
39	PWR_MISC	3.71	0.01
61	GSM_PA1	3.71	5.71
62	GSM_PA2	3.71	0.05
63	PWR_DISP	3.71	0.01
125	PWR_VIBRATOR	3.71	0.00
146	PWR_WLAN	3.71	0.02
	Battery (measured)	3.71	70.86

Table 4-11 HSDPA downlink 7.2 Mbps + 0 dBm, IMT (RxD)

RCM channel	Regulator	Voltage (V)	I (mA)
3	S1_OUTPUT [CX, MSS, GFX, MDSP, CDC, SMPS, S1]	1.05	145.74
8	S2_OUTPUT [APC, SMPS, S2]	1.08	42.51
20	LV_BBRX [SMPS, S3]	1.27	9.83
41	Rhea_ANA_1P3 [SMPS, S3]	1.27	0.00
124	WLAN [SMPS, S3]	1.27	0.00
43	WTR2605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	1.20	0.00
56	WTR1605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	1.18	100.97
49	LPDDR2_EBIO [LDO, L3, SUB SMPS, S3]	1.15	0.93
21	MODEM_BIMC_PLL [LDO, L3, SUB SMPS, S3]	1.15	0.69
5	MX [LDO, L3, SUB SMPS,S3]	1.15	19.01
143	HS_USB2_1P15 [LDO, L3, SUB SMPS, S3]	1.15	0.04
45	LPDDR2 [LDO, L2, SUB SMPS, S3]	1.20	14.59
44	PX1 [LDO, L2, SUB SMPS, S3]	1.20	6.50
46	MIPI_DSI_1P2 [LDO, L2, SUB SMPS, S3]	1.20	0.00
47	MIPI_CSI_1p2 [LDO, L2, SUB SMPS, S3]	1.20	0.00
48	WTR1605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	2.01	31.06
50	WTR2605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	2.02	0.00
126	GPS_eLNA [LDO, L4, SUB SMPS, S4]	2.02	0.00
68	CDC_ANA_DIG [LDO, L5, SUB SMPS, S4]	1.82	0.00
22	Rhea I/O [LDO, L5, SUB SMPS, S4]	1.82	0.00
37	LDO5_MISC [LDO, L5, SUB SMPS, S4]	1.82	0.10
51	PX3 [LDO, L5, SUB SMPS, S4]	1.82	0.94
52	LPDDR2_CH0 [LDO, L5, SUB SMPS, S4]	1.82	1.22
53	eMMC_1P8 [LDO, L5, SUB SMPS, S4]	1.82	0.35
64	PX7 [LDO, L5, SUB SMPS, S4]	1.82	0.07
142	NFC [LDO, L5, SUB SMPS, S4]	1.82	0.00
42	MIPI_DSI_1P8 and PLL [LDO, L6, SUB SMPS, S4]	1.22	0.00
128	ACMTR+CMPSS DIG [LDO, L6, SUB SMPS, S4]	1.22	0.00
25	Cap TS_1P8 [LDO, L6, SUB SMPS, S4]	1.22	0.01
127	MIPI_CAM_8MP_1P8 [LDO, L6, SUB SMPS, S4]	1.22	0.00
129	LCD1_MIPI [LDO, L6, SUB SMPS, S4]	1.22	0.00
134	QFPROM [LDO, L6, SUB SMPS, S4]	1.22	0.00
147	VGA_CAM_1P8 [LDO, L6,SUB SMPS, S4]	1.22	0.00
130	HV_BBRX [LDO, L7, SUB SMPS, S4]	1.79	1.12
133	SR_PLL [LDO, L7, SUB SMPS, S4]	1.79	1.23
26	TXDAC0_1 [LDO, L7, SUB SMPS, S4]	1.79	5.55
27	HS_USB_1P8 [LDO, L7, SUB SMPS, S4]	1.80	0.01
131	WTR1605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.79	1.35
132	WTR2605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.80	0.00
139	Rhea_CLK_XO [LDO, L7, SUB SMPS, S4]	1.80	0.00

RCM channel	Regulator	Voltage (V)	I (mA)
14	RF_CLK + PM8916_XO_Block [SMPS, S4]	2.13	3.38
11	CDC_PA [SMPS, S4]	2.14	0.00
12	CDC_CP [SMPS, S4]	2.14	0.01
140	S4_CAM [SMPS, S4]	2.14	0.00
55	Rhea_PA_2P85 [LDO, L9]	2.65	0.01
65	MIPI_CAM_13MP [LDO, L10]	0.00	0.00
58	PX2 [LDO, L12]	0.00	0.00
23	HS_USB2_3P3 [LDO, L13]	0.00	0.00
148	ACCMTR/Compass/AMBT light ANA [LDO,L17]	0.00	0.00
59	LCD1_MIPI [LDO, L17]	0.00	0.00
60	Cap TS_2P85 [LDO, L17]	0.00	0.00
66	MIPI-8MP_2P85 [LDO, L17]	0.00	0.00
67	VGA_CAM_2P85 [LDO, L17]	0.00	0.00
138	RF_SW [LDO, L17]	0.00	0.00
141	RF360 [LDO, L18]	2.69	2.62
54	eMMC_2P9 [LDO, L8]	2.90	0.64
57	SD/MMC_1P8 [LDO, L11]	0.00	0.00
29	UIM1 [LDO, L14]	1.79	0.06
135	PX5 [LDO, L14]	1.79	0.00
30	UIM2 [LDO, L15]	0.00	0.00
136	PX6 [LDO, L15]	0.00	0.00
31	UIM3 [LDO, L16]	0.00	0.00
137	PX4 [LDO, L16]	0.00	0.00
69	CDC_BOOST_OUTPUT	3.70	0.01
35	PWR_WLED	3.70	0.01
36	PWR_HRLED	3.70	0.01
38	PWR_CAM_3P7	3.70	0.08
39	PWR_MISC	3.70	0.01
61	GSM_PA1	3.70	10.45
62	GSM_PA2	3.70	0.10
63	PWR_DISP	3.70	0.01
125	PWR_VIBRATOR	3.70	0.00
146	PWR_WLAN	3.70	0.01
	Battery (measured)	3.71	170.93

Table 4-12 DC HSDPA downlink 42 Mbps + 0 dBm, IMT (No RxD)

RCM channel	Regulator	Voltage (V)	I (mA)
3	S1_OUTPUT [CX, MSS, GFX, MDSP, CDC, SMPS, S1]	1.06	175.55
8	S2_OUTPUT [APC, SMPS, S2]	1.08	59.12
20	LV_BBRX [SMPS, S3]	1.27	7.06
41	Rhea_ANA_1P3 [SMPS, S3]	1.27	0.02
124	WLAN [SMPS, S3]	1.27	0.00
43	WTR2605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	1.21	0.00
56	WTR1605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	1.19	66.96
49	LPDDR2_EBIO [LDO, L3, SUB SMPS, S3]	1.15	1.24
21	MODEM_BIMC_PLL [LDO, L3, SUB SMPS, S3]	1.15	0.63
5	MX [LDO, L3, SUB SMPS, S3]	1.15	25.34
143	HS_USB2_1P15 [LDO, L3, SUB SMPS, S3]	1.15	0.04
45	LPDDR2 [LDO, L2, SUB SMPS, S3]	1.20	20.06
44	PX1 [LDO, L2, SUB SMPS, S3]	1.20	8.86
46	MIPI_DSI_1P2 [LDO, L2, SUB SMPS, S3]	1.20	0.00
47	MIPI_CSI_1p2 [LDO, L2, SUB SMPS, S3]	1.20	0.00
48	WTR1605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	2.01	29.66
50	WTR2605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	2.02	0.00
126	GPS_eLNA [LDO, L4, SUB SMPS, S4]	2.02	0.00
68	CDC_ANA_DIG [LDO, L5, SUB SMPS, S4]	1.82	0.00
22	Rhea I/O [LDO, L5, SUB SMPS, S4]	1.82	0.00
37	LDO5_MISC [LDO, L5, SUB SMPS, S4]	1.82	0.07
51	PX3 [LDO, L5, SUB SMPS, S4]	1.82	0.59
52	LPDDR2_CH0 [LDO, L5, SUB SMPS, S4]	1.82	1.47
53	eMMC_1P8 [LDO, L5, SUB SMPS, S4]	1.82	0.15
64	PX7 [LDO, L5, SUB SMPS, S4]	1.82	0.02
142	NFC [LDO, L5, SUB SMPS, S4]	1.82	0.00
42	MIPI_DSI_1P8 and PLL [LDO, L6, SUB SMPS, S4]	1.80	0.00
128	ACMTR+CMPSS DIG [LDO, L6, SUB SMPS, S4]	1.80	0.00
25	Cap TS_1P8 [LDO, L6, SUB SMPS, S4]	1.80	0.72
127	MIPI_CAM_8MP_1P8 [LDO, L6, SUB SMPS, S4]	1.80	0.00
129	LCD1_MIPI [LDO, L6, SUB SMPS, S4]	1.80	0.00
134	QFPROM [LDO, L6, SUB SMPS, S4]	1.80	0.00
147	VGA_CAM_1P8 [LDO, L6, SUB SMPS, S4]	1.80	0.00
130	HV_BBRX [LDO, L7, SUB SMPS, S4]	1.79	0.79
133	SR_PLL [LDO, L7, SUB SMPS, S4]	1.79	1.23
26	TXDAC0_1 [LDO, L7, SUB SMPS, S4]	1.79	5.09
27	HS_USB_1P8 [LDO, L7, SUB SMPS, S4]	1.80	0.01
131	WTR1605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.79	1.26
132	WTR2605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.80	0.07
139	Rhea_CLK_XO [LDO, L7, SUB SMPS, S4]	1.80	0.00

RCM channel	Regulator	Voltage (V)	I (mA)
14	RF_CLK + PM8916_XO_Block [SMPS, S4]	2.13	3.34
11	CDC_PA [SMPS, S4]	2.14	0.00
12	CDC_CP [SMPS, S4]	2.14	0.00
140	S4_CAM [SMPS, S4]	2.14	0.00
55	Rhea_PA_2P85 [LDO, L9]	1.85	0.00
65	MIPI_CAM_13MP [LDO, L10]	0.00	0.00
58	PX2 [LDO, L12]	0.00	0.00
23	HS_USB2_3P3 [LDO, L13]	0.00	0.00
148	ACCMTR/Compass/AMBT light ANA [LDO, L17]	2.88	0.00
59	LCD1_MIPI [LDO, L17]	2.88	0.01
60	Cap TS_2P85 [LDO, L17]	2.88	0.63
66	MIPI-8MP_2P85 [LDO, L17]	2.88	0.00
67	VGA_CAM_2P85 [LDO, L17]	2.88	0.00
138	RF_SW [LDO, L17]	2.88	0.00
141	RF360 [LDO, L18]	2.69	2.57
54	eMMC_2P9 [LDO, L8]	1.92	0.20
57	SD/MMC_1P8 [LDO, L11]	0.00	0.00
29	UIM1 [LDO, L14]	1.79	0.10
135	PX5 [LDO, L14]	1.79	0.00
30	UIM2 [LDO, L15]	0.00	0.00
136	PX6 [LDO, L15]	0.00	0.00
31	UIM3 [LDO, L16]	0.00	0.00
137	PX4 [LDO, L16]	0.00	0.00
69	CDC_BOOST_OUTPUT	3.70	0.01
35	PWR_WLED	3.70	0.01
36	PWR_HRLED	3.70	0.00
38	PWR_CAM_3P7	3.70	0.02
39	PWR_MISC	3.70	0.01
61	GSM_PA1	3.70	10.53
62	GSM_PA2	3.70	0.04
63	PWR_DISP	3.70	0.00
125	PWR_VIBRATOR	3.70	0.00
146	PWR_WLAN	3.70	0.02
	Battery (measured)	3.71	177.10

Table 4-13 EV-DO downlink 3.1 Mbps + 0 dBm, cell

RCM channel	Regulator	Voltage (V)	I (mA)
3	S1_OUTPUT [CX, MSS, GFX, MDSP, CDC, SMPS, S1]	1.05	116.50
8	S2_OUTPUT [APC, SMPS, S2]	1.01	45.08
20	LV_BBRX [SMPS, S3]	1.27	7.83
41	Rhea_ANA_1P3 [SMPS, S3]	1.28	0.01
124	WLAN [SMPS, S3]	1.28	0.00
43	WTR2605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	1.20	0.00
56	WTR1605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	1.18	111.90
49	LPDDR2_EBIO [LDO, L3, SUB SMPS, S3]	1.15	0.75
21	MODEM_BIMC_PLL [LDO, L3, SUB SMPS, S3]	1.15	0.65
5	MX [LDO, L3, SUB SMPS, S3]	1.15	15.29
143	HS_USB2_1P15 [LDO, L3, SUB SMPS, S3]	1.15	0.04
45	LPDDR2 [LDO, L2, SUB SMPS, S3]	1.20	6.30
44	PX1 [LDO, L2, SUB SMPS, S3]	1.20	2.70
46	MIPI_DSI_1P2 [LDO, L2, SUB SMPS, S3]	1.20	0.01
47	MIPI_CSI_1p2 [LDO, L2, SUB SMPS, S3]	1.20	0.00
48	WTR1605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	2.01	38.71
50	WTR2605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	2.01	0.00
126	GPS_eLNA [LDO, L4, SUB SMPS, S4]	2.01	0.00
68	CDC_ANA_DIG [LDO, L5, SUB SMPS, S4]	1.82	0.00
22	Rhea I/O [LDO, L5, SUB SMPS, S4]	1.82	0.00
37	LDO5_MISC [LDO, L5, SUB SMPS, S4]	1.82	0.07
51	PX3 [LDO, L5, SUB SMPS, S4]	1.82	0.94
52	LPDDR2_CH0 [LDO, L5, SUB SMPS, S4]	1.82	0.77
53	eMMC_1P8 [LDO, L5, SUB SMPS, S4]	1.82	0.20
64	PX7 [LDO, L5, SUB SMPS, S4]	1.82	0.01
142	NFC [LDO, L5, SUB SMPS, S4]	1.82	0.00
42	MIPI_DSI_1P8 and PLL [LDO, L6, SUB SMPS, S4]	1.22	0.00
128	ACMTR+CMPSS DIG [LDO, L6, SUB SMPS, S4]	1.22	0.00
25	Cap TS_1P8 [LDO, L6, SUB SMPS, S4]	1.22	0.00
127	MIPI_CAM_8MP_1P8 [LDO, L6, SUB SMPS, S4]	1.22	0.00
129	LCD1_MIPI [LDO, L6, SUB SMPS, S4]	1.22	0.00
134	QFPROM [LDO, L6, SUB SMPS, S4]	1.22	0.00
147	VGA_CAM_1P8 [LDO, L6, SUB SMPS, S4]	1.22	0.00
130	HV_BBRX [LDO, L7, SUB SMPS, S4]	1.79	0.98
133	SR_PLL [LDO, L7, SUB SMPS, S4]	1.79	1.24
26	TXDAC0_1 [LDO, L7, SUB SMPS, S4]	1.79	4.61
27	HS_USB_1P8 [LDO, L7, SUB SMPS, S4]	1.80	0.01
131	WTR1605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.79	1.16
132	WTR2605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.80	0.06
139	Rhea_CLK_XO [LDO, L7, SUB SMPS, S4]	1.80	0.00

RCM channel	Regulator	Voltage (V)	I (mA)
14	RF_CLK + PM8916_XO_Block [SMPS, S4]	2.13	3.34
11	CDC_PA [SMPS, S4]	2.14	0.00
12	CDC_CP [SMPS, S4]	2.14	0.00
140	S4_CAM [SMPS, S4]	2.14	0.00
55	Rhea_PA_2P85 [LDO, L9]	2.61	0.01
65	MIPI_CAM_13MP [LDO, L10]	0.00	0.00
58	PX2 [LDO, L12]	0.00	0.00
23	HS_USB2_3P3 [LDO, L13]	0.00	0.00
148	ACCMTR/Compass/AMBT light ANA [LDO, L17]	0.00	0.00
59	LCD1_MIPI [LDO, L17]	0.00	0.00
60	Cap TS_2P85 [LDO, L17]	0.00	0.00
66	MIPI-8MP_2P85 [LDO, L17]	0.00	0.00
67	VGA_CAM_2P85 [LDO, L17]	0.00	0.00
138	RF_SW [LDO, L17]	0.00	0.00
141	RF360 [LDO, L18]	2.69	2.73
54	eMMC_2P9 [LDO, L8]	2.90	0.33
57	SD/MMC_1P8 [LDO, L11]	0.00	0.00
29	UIM1 [LDO, L14]	1.79	0.10
135	PX5 [LDO, L14]	1.79	0.00
30	UIM2 [LDO, L15]	0.00	0.00
136	PX6 [LDO, L15]	0.00	0.00
31	UIM3 [LDO, L16]	0.00	0.00
137	PX4 [LDO, L16]	0.00	0.00
69	CDC_BOOST_OUTPUT	3.70	0.01
35	PWR_WLED	3.70	0.00
36	PWR_HRLED	3.70	0.00
38	PWR_CAM_3P7	3.70	0.01
39	PWR_MISC	3.70	0.00
61	GSM_PA1	3.70	8.79
62	GSM_PA2	3.70	0.03
63	PWR_DISP	3.70	0.00
125	PWR_VIBRATOR	3.70	0.00
146	PWR_WLAN	3.70	0.02
	Battery (measured)	3.71	161.45

Table 4-14 LTE standby 2.56 sec

RCM channel	Regulator	LTE sleep		LTE awake	
		Voltage (V)	I (mA)	Voltage (V)	I (mA)
3	S1_OUTPUT [CX, MSS, GFX, MDSP, CDC, SMPS, S1]	0.53	1.60	0.92	79.38
8	S2_OUTPUT [APC, SMPS, S2]	0.00	0.00	0.00	0.00
20	LV_BBRX [SMPS, S3]	1.25	0.00	1.27	1.00
41	Rhea_ANA_1P3 [SMPS, S3]	1.25	0.00	1.27	0.17
124	WLAN [SMPS, S3]	1.25	0.00	1.27	0.00
43	WTR2605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	0.00	0.00	0.94	0.17
56	WTR1605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	0.00	0.00	0.94	10.64
49	LPDDR2_EBIO [LDO, L3, SUB SMPS, S3]	0.66	0.01	1.14	0.35
21	MODEM_BIMC_PLL [LDO, L3, SUB SMPS, S3]	0.66	0.00	1.14	0.60
5	MX [LDO, L3, SUB SMPS, S3]	0.66	0.24	1.14	7.07
143	HS_USB2_1P15 [LDO, L3, SUB SMPS, S3]	0.66	0.00	1.14	0.05
45	LPDDR2 [LDO, L2, SUB SMPS, S3]	1.22	0.76	1.22	6.93
44	PX1 [LDO, L2, SUB SMPS, S3]	1.22	0.00	1.22	3.71
46	MIPI_DSI_1P2 [LDO, L2,SUB SMPS, S3]	1.22	0.01	1.22	0.01
47	MIPI_CSI_1p2 [LDO, L2, SUB SMPS, S3]	1.22	0.00	1.22	0.00
48	WTR1605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	1.88	0.00	2.05	3.61
50	WTR2605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	1.88	0.00	2.05	0.00
126	GPS_eLNA [LDO, L4, SUB SMPS, S4]	1.88	0.00	2.05	0.00
68	CDC_ANA_DIG [LDO, L5, SUB SMPS, S4]	1.80	0.00	1.80	0.01
22	Rhea I/O [LDO, L5, SUB SMPS, S4]	1.80	0.00	1.80	0.00
37	LDO5_MISC [LDO, L5, SUB SMPS, S4]	1.80	0.05	1.80	0.03
51	PX3 [LDO, L5, SUB SMPS, S4]	1.80	0.19	1.80	0.52
52	LPDDR2_CH0 [LDO, L5, SUB SMPS, S4]	1.80	0.29	1.80	0.78
53	eMMC_1P8 [LDO, L5, SUB SMPS, S4]	1.80	0.07	1.80	0.09
64	PX7 [LDO, L5, SUB SMPS, S4]	1.80	0.00	1.80	0.01
142	NFC [LDO, L5, SUB SMPS, S4]	1.80	0.00	1.80	0.01
42	MIPI_DSI_1P8 and PLL [LDO, L6, SUB SMPS, S4]	1.65	0.00	1.70	0.00
128	ACMTR+CMPSS DIG [LDO, L6, SUB SMPS, S4]	1.65	0.00	1.70	0.00
25	Cap TS_1P8 [LDO, L6, SUB SMPS, S4]	1.65	0.01	1.70	0.01
127	MIPI_CAM_8MP_1P8 [LDO, L6, SUB SMPS, S4]	1.65	0.00	1.70	0.00
129	LCD1_MIPI [LDO, L6, SUB SMPS, S4]	1.65	0.00	1.70	0.00
134	QFPROM [LDO, L6, SUB SMPS, S4]	1.65	0.00	1.70	0.00
147	VGA_CAM_1P8 [LDO, L6, SUB SMPS, S4]	1.65	0.00	1.70	0.00

RCM channel	Regulator	LTE sleep		LTE awake	
		Voltage (V)	I (mA)	Voltage (V)	I (mA)
130	HV_BBRX [LDO, L7, SUB SMPS, S4]	1.83	0.00	1.82	0.11
133	SR_PLL [LDO, L7, SUB SMPS, S4]	1.83	0.00	1.82	0.86
26	TXDAC0_1 [LDO, L7, SUB SMPS, S4]	1.83	0.00	1.82	0.08
27	HS_USB_1P8 [LDO, L7, SUB SMPS, S4]	1.83	0.01	1.82	0.01
131	WTR1605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.83	0.06	1.82	0.32
132	WTR2605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.83	0.00	1.82	0.01
139	Rhea_CLK_XO [LDO, L7, SUB SMPS, S4]	1.83	0.00	1.82	0.00
14	RF_CLK + PM8916_XO_Block [SMPS, S4]	1.84	0.00	2.10	2.87
11	CDC_PA [SMPS, S4]	1.84	0.00	2.10	0.00
12	CDC_CP [SMPS, S4]	1.84	0.00	2.10	0.00
140	S4_CAM [SMPS, S4]	1.84	0.00	2.10	0.00
55	Rhea_PA_2P85 [LDO, L9]	0.09	0.00	0.08	0.00
65	MIPI_CAM_13MP [LDO, L10]	0.00	0.00	0.00	0.00
58	PX2 [LDO, L12]	0.00	0.00	0.00	0.00
23	HS_USB2_3P3 [LDO, L13]	0.00	0.00	0.00	0.00
148	ACCMTR/Compass/AMBT light ANA [LDO, L17]	0.00	0.00	0.00	0.00
59	LCD1_MIPI [LDO, L17]	0.00	0.00	0.00	0.01
60	Cap TS_2P85 [LDO, L17]	0.00	0.00	0.00	0.00
66	MIPI-8MP_2P85 [LDO, L17]	0.00	0.00	0.00	0.00
67	VGA_CAM_2P85 [LDO, L17]	0.00	0.00	0.00	0.01
138	RF_SW [LDO, L17]	0.00	0.00	0.00	0.00
141	RF360 [LDO, L18]	0.17	0.00	2.16	1.24
54	eMMC_2P9 [LDO, L8]	0.00	0.00	0.00	0.02
57	SD/MMC_1P8 [LDO, L11]	0.00	0.00	0.00	0.00
29	UIM1 [LDO, L14]	1.80	0.03	1.80	0.03
135	PX5 [LDO, L14]	1.80	0.00	1.80	0.00
30	UIM2 [LDO, L15]	0.00	0.00	0.00	0.01
136	PX6 [LDO, L15]	0.00	0.00	0.00	0.00
31	UIM3 [LDO, L16]	0.00	0.00	0.00	0.00
137	PX4 [LDO, L16]	0.00	0.00	0.00	0.00
69	CDC_BOOST_OUTPUT	3.71	0.02	3.71	0.00
35	PWR_WLED	3.71	0.00	3.71	0.00
36	PWR_HRLED	3.71	0.00	3.71	0.01
38	PWR_CAM_3P7	3.71	0.02	3.71	0.00
39	PWR_MISC	3.71	0.01	3.71	0.02
61	GSM_PA1	3.71	0.11	3.71	1.14
62	GSM_PA2	3.71	0.08	3.71	0.00
63	PWR_DISP	3.71	0.01	3.71	0.00

RCM channel	Regulator	LTE sleep		LTE awake	
		Voltage (V)	I (mA)	Voltage (V)	I (mA)
125	PWR_VIBRATOR	3.71	0.00	3.71	0.00
146	PWR_WLAN	3.71	0.02	3.71	0.00
	Battery (measured)	3.71	1.66	3.71	43.18

1 **Table 4-15 LTE Cat 3 (68/23 Mbps, 0 dBm, B13)**

RCM channel	Regulator	Voltage (V)	I (mA)
3	S1_OUTPUT [CX, MSS, GFX, MDSP, CDC, SMPS, S1]	1.04	283.03
8	S2_OUTPUT [APC, SMPS, S2]	1.08	103.60
20	LV_BBRX [SMPS, S3]	1.27	14.60
41	Rhea_ANA_1P3 [SMPS, S3]	1.27	0.00
124	WLAN [SMPS, S3]	1.27	0.00
43	WTR2605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	1.20	0.00
56	WTR1605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	1.18	99.59
49	LPDDR2_EBIO [LDO, L3, SUB SMPS, S3]	1.14	2.40
21	MODEM_BIMC_PLL [LDO, L3, SUB SMPS, S3]	1.14	1.25
5	MX [LDO, L3, SUB SMPS, S3]	1.14	51.02
143	HS_USB2_1P15 [LDO, L3, SUB SMPS, S3]	1.15	0.04
45	LPDDR2 [LDO, L2, SUB SMPS, S3]	1.20	28.09
44	PX1 [LDO, L2, SUB SMPS, S3]	1.20	17.85
46	MIPI_DSI_1P2 [LDO, L2, SUB SMPS, S3]	1.20	0.01
47	MIPI_CSI_1p2 [LDO, L2, SUB SMPS, S3]	1.20	0.00
48	WTR1605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	2.05	63.70
50	WTR2605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	2.06	0.00
126	GPS_eLNA [LDO, L4, SUB SMPS, S4]	2.06	0.00
68	CDC_ANA_DIG [LDO, L5, SUB SMPS, S4]	1.82	0.00
22	Rhea I/O [LDO, L5, SUB SMPS, S4]	1.82	0.00
37	LDO5_MISC [LDO, L5, SUB SMPS, S4]	1.82	0.08
51	PX3 [LDO, L5, SUB SMPS, S4]	1.82	1.01
52	LPDDR2_CH0 [LDO, L5, SUB SMPS, S4]	1.82	2.09
53	eMMC_1P8 [LDO, L5, SUB SMPS, S4]	1.82	0.36
64	PX7 [LDO, L5, SUB SMPS, S4]	1.82	0.04
142	NFC [LDO, L5, SUB SMPS, S4]	1.79	0.00
42	MIPI_DSI_1P8 and PLL [LDO, L6, SUB SMPS, S4]	1.82	0.00
128	ACMTR+CMPSS DIG [LDO, L6, SUB SMPS, S4]	1.24	0.00
25	Cap TS_1P8 [LDO, L6, SUB SMPS, S4]	1.24	0.00
127	MIPI_CAM_8MP_1P8 [LDO, L6, SUB SMPS, S4]	1.24	0.01
129	LCD1_MIPI [LDO, L6, SUB SMPS, S4]	1.24	0.00
134	QFPROM [LDO, L6, SUB SMPS, S4]	1.24	0.00

RCM channel	Regulator	Voltage (V)	I (mA)
147	VGA_CAM_1P8 [LDO, L6, SUB SMPS, S4]	1.24	0.00
130	HV_BBRX [LDO, L7, SUB SMPS, S4]	1.79	1.59
133	SR_PLL [LDO, L7, SUB SMPS, S4]	1.79	1.24
26	TXDAC0_1 [LDO, L7, SUB SMPS, S4]	1.79	8.28
27	HS_USB_1P8 [LDO, L7, SUB SMPS, S4]	1.80	0.01
131	WTR1605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.79	1.36
132	WTR2605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.79	0.00
139	Rhea_CLK_XO [LDO, L7, SUB SMPS, S4]	1.79	0.00
14	RF_CLK + PM8916_XO_Block [SMPS, S4]	2.13	3.38
11	CDC_PA [SMPS, S4]	2.14	0.00
12	CDC_CP [SMPS, S4]	2.14	0.00
140	S4_CAM [SMPS, S4]	2.14	0.00
55	Rhea_PA_2P85 [LDO, L9]	2.65	0.01
65	MIPI_CAM_13MP [LDO, L10]	0.00	0.00
58	PX2 [LDO, L12]	0.00	0.00
23	HS_USB2_3P3 [LDO, L13]	0.00	0.00
148	ACCMTR/Compass/AMBT light ANA [LDO, L17]	0.00	0.00
59	LCD1_MIPI [LDO, L17]	0.00	0.00
60	Cap TS_2P85 [LDO, L17]	0.00	0.00
66	MIPI-8MP_2P85 [LDO, L17]	0.00	0.00
67	VGA_CAM_2P85 [LDO, L17]	0.00	0.00
138	RF_SW [LDO, L17]	0.00	0.00
141	RF360 [LDO, L18]	2.69	2.62
54	eMMC_2P9 [LDO, L8]	2.89	0.66
57	SD/MMC_1P8 [LDO, L11]	0.00	0.00
29	UIM1 [LDO, L14]	1.79	0.08
135	PX5 [LDO, L14]	1.79	0.00
30	UIM2 [LDO, L15]	0.00	0.00
136	PX6 [LDO, L15]	0.00	0.00
31	UIM3 [LDO, L16]	0.00	0.00
137	PX4 [LDO, L16]	0.00	0.00
69	CDC_BOOST_OUTPUT	3.70	0.02
35	PWR_WLED	3.70	0.01
36	PWR_HRLED	3.70	0.01
38	PWR_CAM_3P7	3.70	0.06
39	PWR_MISC	3.70	0.01
61	GSM_PA1	3.70	8.29
62	GSM_PA2	3.70	0.04
63	PWR_DISP	3.70	0.00

RCM channel	Regulator	Voltage (V)	I (mA)
125	PWR_VIBRATOR	3.70	0.00
146	PWR_WLAN	3.70	0.01
	Battery (measured)	3.71	282.86

1 **Table 4-16 MP3 playback 128 Kbps (Tunnel mode – DSP audio codec)**

RCM channel	Regulator	Voltage (V)	I (mA)
3	S1_OUTPUT [CX, MSS, GFX, MDSP, CDC, SMPS,S1]	0.95	34.19
8	S2_OUTPUT [APC, SMPS, S2]	0.02	1.91
20	LV_BBRX [SMPS, S3]	1.24	0.01
41	Rhea_ANA_1P3 [SMPS, S3]	1.24	0.31
124	WLAN [SMPS, S3]	1.24	0.00
43	WTR2605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	0.00	0.00
56	WTR1605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	0.00	0.00
49	LPDDR2_EBIO [LDO, L3, SUB SMPS, S3]	1.04	0.13
21	MODEM_BIMC_PLL [LDO, L3, SUB SMPS, S3]	1.04	1.22
5	MX [LDO, L3, SUB SMPS, S3]	1.04	3.04
143	HS_USB2_1P15 [LDO, L3, SUB SMPS, S3]	1.04	0.03
45	LPDDR2 [LDO, L2, SUB SMPS, S3]	1.19	1.70
44	PX1 [LDO, L2, SUB SMPS, S3]	1.19	0.21
46	MIPI_DSI_1P2 [LDO, L2, SUB SMPS, S3]	1.19	0.01
47	MIPI_CSI_1p2 [LDO, L2, SUB SMPS, S3]	1.19	0.00
48	WTR1605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	0.00	0.00
50	WTR2605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	0.00	0.00
126	GPS_eLNA [LDO, L4, SUB SMPS, S4]	0.00	0.00
68	CDC_ANA_DIG [LDO, L5, SUB SMPS, S4]	1.82	0.01
22	Rhea I/O [LDO, L5, SUB SMPS, S4]	1.82	0.00
37	LDO5_MISC [LDO, L5, SUB SMPS, S4]	1.82	0.31
51	PX3 [LDO, L5, SUB SMPS, S4]	1.82	2.75
52	LPDDR2_CH0 [LDO ,L5, SUB SMPS, S4]	1.82	0.41
53	eMMC_1P8 [LDO, L5, SUB SMPS, S4]	1.82	0.09
64	PX7 [LDO, L5, SUB SMPS, S4]	1.82	0.00
142	NFC [LDO, L5, SUB SMPS, S4]	1.82	0.00
42	MIPI_DSI_1P8 and PLL [LDO, L6, SUB SMPS, S4]	1.74	0.00
128	ACMTR+CMPSS DIG [LDO, L6, SUB SMPS, S4]	1.74	0.00
25	Cap TS_1P8 [LDO, L6, SUB SMPS, S4]	1.74	0.01
127	MIPI_CAM_8MP_1P8 [LDO, L6, SUB SMPS, S4]	1.74	0.00
129	LCD1_MIPI [LDO, L6, SUB SMPS, S4]	1.74	0.00
134	QFPROM [LDO, L6, SUB SMPS, S4]	1.74	0.00
147	VGA_CAM_1P8 [LDO, L6, SUB SMPS, S4]	1.74	0.00
130	HV_BBRX [LDO, L7, SUB SMPS, S4]	1.80	0.00

RCM channel	Regulator	Voltage (V)	I (mA)
133	SR_PLL [LDO, L7, SUB SMPS, S4]	1.79	1.21
26	TXDAC0_1 [LDO, L7, SUB SMPS, S4]	1.80	0.14
27	HS_USB_1P8 [LDO, L7, SUB SMPS, S4]	1.80	0.01
131	WTR1605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.80	0.05
132	WTR2605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.80	0.04
139	Rhea_CLK_XO [LDO, L7, SUB SMPS, S4]	1.80	0.00
14	RF_CLK + PM8916_XO_Block [SMPS, S4]	2.05	0.17
11	CDC_PA [SMPS, S4]	2.05	1.08
12	CDC_CP [SMPS, S4]	2.05	1.40
140	S4_CAM [SMPS, S4]	2.05	0.00
55	Rhea_PA_2P85 [LDO, L9]	0.69	0.00
65	MIPI_CAM_13MP [LDO, L10]	0.00	0.00
58	PX2 [LDO, L12]	0.00	0.00
23	HS_USB2_3P3 [LDO, L13]	0.00	0.00
148	ACCMTR/Compass/AMBT light ANA [LDO, L17]	0.00	0.00
59	LCD1_MIPI [LDO, L17]	0.00	0.00
60	Cap TS_2P85 [LDO, L17]	0.00	0.00
66	MIPI-8MP_2P85 [LDO, L17]	0.00	0.00
67	VGA_CAM_2P85 [LDO, L17]	0.00	0.00
138	RF_SW [LDO, L17]	0.00	0.00
141	RF360 [LDO, L18]	0.24	0.00
54	eMMC_2P9 [LDO, L8]	0.97	0.06
57	SD/MMC_1P8 [LDO, L11]	0.00	0.00
29	UIM1 [LDO, L14]	0.00	0.00
135	PX5 [LDO, L14]	0.00	0.00
30	UIM2 [LDO, L15]	0.00	0.00
136	PX6 [LDO, L15]	0.00	0.00
31	UIM3 [LDO, L16]	0.00	0.00
137	PX4 [LDO, L16]	0.00	0.00
69	CDC_BOOST_OUTPUT	3.70	0.01
35	PWR_WLED	3.70	0.01
36	PWR_HRLED	3.70	0.01
38	PWR_CAM_3P7	3.70	0.03
39	PWR_MISC	3.70	0.01
61	GSM_PA1	3.70	0.15
62	GSM_PA2	3.70	0.07
63	PWR_DISP	3.70	0.00
125	PWR_VIBRATOR	3.70	0.00
146	PWR_WLAN	3.70	0.02
	Battery (measured)	3.71V	24.8

Table 4-17 H.264 720p decode, 30 fps

RCM channel	Regulator	Voltage (V)	I (mA)
3	S1_OUTPUT [CX, MSS, GFX, MDSP, CDC, SMPS, S1]	0.95	83.09
8	S2_OUTPUT [APC, SMPS, S2]	0.79	71.82
20	LV_BBRX [SMPS, S3]	1.24	0.00
41	Rhea_ANA_1P3 [SMPS, S3]	1.24	0.02
124	WLAN [SMPS, S3]	1.24	0.00
43	WTR2605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	0.00	0.00
56	WTR1605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	0.00	0.00
49	LPDDR2_EBIO [LDO, L3, SUB SMPS, S3]	1.11	0.67
21	MODEM_BIMC_PLL [LDO, L3, SUB SMPS, S3]	1.11	1.25
5	MX [LDO, L3, SUB SMPS, S3]	1.11	15.20
143	HS_USB2_1P15 [LDO, L3, SUB SMPS, S3]	1.11	0.04
45	LPDDR2 [LDO, L2, SUB SMPS, S3]	1.19	30.45
44	PX1 [LDO, L2, SUB SMPS, S3]	1.19	13.40
46	MIPI_DSI_1P2 [LDO, L2, SUB SMPS, S3]	1.19	4.86
47	MIPI_CSI_1p2 [LDO, L2, SUB SMPS, S3]	1.19	0.00
48	WTR1605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	0.00	0.00
50	WTR2605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	0.00	0.00
126	GPS_eLNA [LDO, L4, SUB SMPS, S4]	0.00	0.00
68	CDC_ANA_DIG [LDO, L5, SUB SMPS, S4]	1.82	0.01
22	Rhea I/O [LDO, L5, SUB SMPS, S4]	1.82	0.00
37	LDO5_MISC [LDO, L5, SUB SMPS, S4]	1.82	0.10
51	PX3 [LDO, L5, SUB SMPS, S4]	1.82	2.60
52	LPDDR2_CH0 [LDO, L5, SUB SMPS, S4]	1.82	2.09
53	eMMC_1P8 [LDO, L5, SUB SMPS, S4]	1.82	0.74
64	PX7 [LDO, L5, SUB SMPS, S4]	1.82	0.05
142	NFC [LDO, L5, SUB SMPS, S4]	1.82	0.00
42	MIPI_DSI_1P8 and PLL [LDO, L6, SUB SMPS, S4]	1.79	2.52
128	ACMTR+CMPSS DIG [LDO, L6, SUB SMPS, S4]	1.79	0.00
25	Cap TS_1P8 [LDO, L6, SUB SMPS, S4]	1.79	0.02
127	MIPI_CAM_8MP_1P8 [LDO, L6, SUB SMPS, S4]	1.79	0.00
129	LCD1_MIPI [LDO, L6, SUB SMPS, S4]	1.78	16.90
134	QFPROM [LDO, L6, SUB SMPS, S4]	1.79	0.00
147	VGA_CAM_1P8 [LDO, L6, SUB SMPS, S4]	1.79	0.00
130	HV_BBRX [LDO, L7, SUB SMPS, S4]	1.80	0.00
133	SR_PLL [LDO, L7, SUB SMPS, S4]	1.79	1.22
26	TXDAC0_1 [LDO, L7, SUB SMPS, S4]	1.80	0.14
27	HS_USB_1P8 [LDO, L7, SUB SMPS, S4]	1.80	0.01
131	WTR1605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.80	0.05
132	WTR2605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.80	0.04
139	Rhea_CLK_XO [LDO, L7, SUB SMPS, S4]	1.80	0.00

RCM channel	Regulator	Voltage (V)	I (mA)
14	RF_CLK + PM8916_XO_Block [SMPS, S4]	2.05	0.17
11	CDC_PA [SMPS, S4]	2.05	1.11
12	CDC_CP [SMPS, S4]	2.05	1.38
140	S4_CAM [SMPS, S4]	2.05	0.00
55	Rhea_PA_2P85 [LDO, L9]	1.66	0.00
65	MIPI_CAM_13MP [LDO, L10]	0.00	0.00
58	PX2 [LDO, L12]	0.00	0.00
23	HS_USB2_3P3 [LDO, L13]	0.00	-0.01
148	ACCMTR/Compass/AMBT light ANA [LDO, L17]	2.84	0.00
59	LCD1_MIPI [LDO, L17]	2.83	26.15
60	Cap TS_2P85 [LDO, L17]	2.84	0.55
66	MIPI-8MP_2P85 [LDO, L17]	2.84	0.00
67	VGA_CAM_2P85 [LDO, L17]	2.84	0.00
138	RF_SW [LDO, L17]	2.84	0.00
141	RF360 [LDO, L18]	0.24	0.00
54	eMMC_2P9 [LDO, L8]	2.86	1.17
57	SD/MMC_1P8 [LDO, L11]	0.00	-0.02
29	UIM1 [LDO, L14]	0.00	-0.01
135	PX5 [LDO, L14]	0.00	-0.01
30	UIM2 [LDO, L15]	0.00	0.00
136	PX6 [LDO, L15]	0.00	0.00
31	UIM3 [LDO, L16]	0.00	-0.01
137	PX4 [LDO, L16]	0.00	0.00
69	CDC_BOOST_OUTPUT	3.70	0.01
35	PWR_WLED	3.68	79.70
36	PWR_HRLED	3.69	0.00
38	PWR_CAM_3P7	3.70	0.00
39	PWR_MISC	3.70	0.01
61	GSM_PA1	3.70	0.16
62	GSM_PA2	3.70	0.00
63	PWR_DISP	3.69	0.00
125	PWR_VIBRATOR	3.69	0.00
146	PWR_WLAN	3.70	0.04
	Battery (measured)	3.71	206.64

1 Dashboard data = 206.64 mA - 117.04 mA (touchscreen + display) = 89.6 mA

Table 4-18 H.264 1080p decode, 30 fps

RCM channel	Regulator	Voltage (V)	I (mA)
3	S1_OUTPUT [CX, MSS, GFX, MDSP, CDC, SMPS, S1]	1.05	129.73
8	S2_OUTPUT [APC, SMPS, S2]	0.80	73.14
20	LV_BBRX [SMPS, S3]	1.25	0.00
41	Rhea_ANA_1P3 [SMPS, S3]	1.25	0.01
124	WLAN [SMPS, S3]	1.25	0.00
43	WTR2605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	0.00	0.00
56	WTR1605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	0.00	0.00
49	LPDDR2_EBIO [LDO, L3, SUB SMPS, S3]	1.13	1.02
21	MODEM_BIMC_PLL [LDO, L3, SUB SMPS, S3]	1.13	1.90
5	MX [LDO, L3, SUB SMPS, S3]	1.13	22.91
143	HS_USB2_1P15 [LDO, L3, SUB SMPS, S3]	1.14	0.04
45	LPDDR2 [LDO, L2, SUB SMPS, S3]	1.19	48.01
44	PX1 [LDO, L2, SUB SMPS, S3]	1.19	25.78
46	MIPI_DSI_1P2 [LDO, L2, SUB SMPS, S3]	1.19	4.83
47	MIPI_CSI_1p2 [LDO, L2, SUB SMPS, S3]	1.19	0.00
48	WTR1605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	0.00	0.00
50	WTR2605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	0.00	0.00
126	GPS_eLNA [LDO, L4, SUB SMPS, S4]	0.00	0.00
68	CDC_ANA_DIG [LDO, L5, SUB SMPS, S4]	1.82	0.01
22	Rhea I/O [LDO, L5, SUB SMPS, S4]	1.82	0.00
37	LDO5_MISC [LDO, L5, SUB SMPS, S4]	1.82	0.10
51	PX3 [LDO, L5, SUB SMPS, S4]	1.82	2.59
52	LPDDR2_CH0 [LDO, L5, SUB SMPS, S4]	1.82	2.74
53	eMMC_1P8 [LDO, L5, SUB SMPS, S4]	1.82	1.62
64	PX7 [LDO, L5, SUB SMPS, S4]	1.82	0.10
142	NFC [LDO, L5, SUB SMPS, S4]	1.82	0.00
42	MIPI_DSI_1P8 and PLL [LDO, L6, SUB SMPS, S4]	1.79	2.53
128	ACMTR+CMPSS DIG [LDO, L6, SUB SMPS, S4]	1.79	0.00
25	Cap TS_1P8 [LDO, L6, SUB SMPS, S4]	1.79	0.02
127	MIPI_CAM_8MP_1P8 [LDO, L6, SUB SMPS, S4]	1.79	0.00
129	LCD1_MIPI [LDO, L6, SUB SMPS, S4]	1.78	16.84
134	QFPROM [LDO, L6, SUB SMPS, S4]	1.79	0.00
147	VGA_CAM_1P8 [LDO, L6, SUB SMPS, S4]	1.79	0.00
130	HV_BBRX [LDO, L7, SUB SMPS, S4]	1.80	0.00
133	SR_PLL [LDO, L7, SUB SMPS, S4]	1.79	1.22
26	TXDAC0_1 [LDO, L7, SUB SMPS, S4]	1.80	0.14
27	HS_USB_1P8 [LDO, L7, SUB SMPS, S4]	1.80	0.01
131	WTR1605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.80	0.05
132	WTR2605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.80	0.04
139	Rhea_CLK_XO [LDO, L7, SUB SMPS, S4]	1.80	0.00

RCM channel	Regulator	Voltage (V)	I (mA)
14	RF_CLK + PM8916_XO_Block [SMPS, S4]	2.05	0.17
11	CDC_PA [SMPS, S4]	2.05	1.12
12	CDC_CP [SMPS, S4]	2.05	1.49
140	S4_CAM [SMPS, S4]	2.05	0.00
55	Rhea_PA_2P85 [LDO, L9]	2.12	0.00
65	MIPI_CAM_13MP [LDO, L10]	0.00	0.00
58	PX2 [LDO, L12]	0.00	0.00
23	HS_USB2_3P3 [LDO, L13]	0.00	0.00
148	ACCMTR/Compass/AMBT light ANA [LDO, L17]	2.84	0.00
59	LCD1_MIPI [LDO, L17]	2.83	26.37
60	Cap TS_2P85 [LDO, L17]	2.84	0.56
66	MIPI-8MP_2P85 [LDO, L17]	2.84	0.00
67	VGA_CAM_2P85 [LDO, L17]	2.84	0.00
138	RF_SW [LDO, L17]	2.84	0.00
141	RF360 [LDO, L18]	0.24	0.00
54	eMMC_2P9 [LDO, L8]	2.86	2.57
57	SD/MMC_1P8 [LDO, L11]	0.00	0.00
29	UIM1 [LDO, L14]	0.00	0.00
135	PX5 [LDO, L14]	0.00	0.00
30	UIM2 [LDO, L15]	0.00	0.00
136	PX6 [LDO, L15]	0.00	0.00
31	UIM3 [LDO, L16]	0.00	0.00
137	PX4 [LDO, L16]	0.00	0.00
69	CDC_BOOST_OUTPUT	3.70	0.01
35	PWR_WLED	3.68	79.75
36	PWR_HRLED	3.69	0.00
38	PWR_CAM_3P7	3.70	0.00
39	PWR_MISC	3.70	0.00
61	GSM_PA1	3.70	0.11
62	GSM_PA2	3.70	0.01
63	PWR_DISP	3.69	0.01
125	PWR_VIBRATOR	3.69	0.00
146	PWR_WLAN	3.70	0.02
	Battery (measured)	3.71	241.71

1 Dashboard data = 241.71 mA - 117.22 mA (touchscreen + display) = 124.49 mA

Table 4-19 H.264 1080p encode, 30 fps

RCM channel	Regulator	Voltage (V)	I (mA)
3	S1_OUTPUT [CX, MSS, GFX, MDSP, CDC, SMPS, S1]	1.05	288.49
8	S2_OUTPUT [APC, SMPS, S2]	1.08	282.07
20	LV_BBRX [SMPS, S3]	1.26	0.00
41	Rhea_ANA_1P3 [SMPS, S3]	1.26	0.37
124	WLAN [SMPS, S3]	1.26	0.00
43	WTR2605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	0.00	0.00
56	WTR1605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	0.00	0.01
49	LPDDR2_EBIO [LDO, L3, SUB SMPS, S3]	1.16	3.06
21	MODEM_BIMC_PLL [LDO, L3, SUB SMPS, S3]	1.16	1.96
5	MX [LDO, L3, SUB SMPS, S3]	1.16	68.39
143	HS_USB2_1P15 [LDO, L3, SUB SMPS, S3]	1.18	114.00
45	LPDDR2 [LDO, L2, SUB SMPS, S3]	1.18	41.44
44	PX1 [LDO, L2, SUB SMPS, S3]	1.18	4.62
46	MIPI_DSI_1P2 [LDO, L2, SUB SMPS, S3]	1.18	2.68
47	MIPI_CSI_1p2 [LDO, L2, SUB SMPS, S3]	1.18	114.00
48	WTR1605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	0.00	0.00
50	WTR2605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	0.00	0.00
126	GPS_eLNA [LDO, L4, SUB SMPS, S4]	0.00	0.00
68	CDC_ANA_DIG [LDO, L5, SUB SMPS, S4]	1.82	0.53
22	Rhea I/O [LDO, L5, SUB SMPS, S4]	1.82	0.00
37	LDO5_MISC [LDO, L5, SUB SMPS, S4]	1.82	0.11
51	PX3 [LDO, L5, SUB SMPS, S4]	1.82	4.97
52	LPDDR2_CH0 [LDO, L5, SUB SMPS, S4]	1.82	5.62
53	eMMC_1P8 [LDO, L5, SUB SMPS, S4]	1.82	2.02
64	PX7 [LDO, L5, SUB SMPS, S4]	1.82	0.73
142	NFC [LDO, L5, SUB SMPS, S4]	1.82	0.00
42	MIPI_DSI_1P8 and PLL [LDO, L6, SUB SMPS, S4]	1.76	2.53
128	ACMTR+CMPSS DIG [LDO, L6, SUB SMPS, S4]	1.76	0.00
25	Cap TS_1P8 [LDO, L6, SUB SMPS, S4]	1.76	0.01
127	MIPI_CAM_8MP_1P8 [LDO, L6, SUB SMPS, S4]	1.74	98.93
129	LCD1_MIPI [LDO, L6, SUB SMPS, S 4]	1.76	13.09
134	QFPROM [LDO, L6, SUB SMPS, S4]	1.76	0.00
147	VGA_CAM_1P8 [LDO, L6, SUB SMPS, S4]	1.78	0.25
130	HV_BBRX [LDO, L7, SUB SMPS, S4]	1.80	0.00
133	SR_PLL [LDO, L7, SUB SMPS, S4]	1.79	1.39
26	TXDAC0_1 [LDO, L7, SUB SMPS, S4]	1.80	0.14
27	HS_USB_1P8 [LDO, L7, SUB SMPS, S4]	1.80	0.00
131	WTR1605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.80	0.05
132	WTR2605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.80	0.04
139	Rhea_CLK_XO [LDO, L7, SUB SMPS, S4]	1.80	0.00

RCM channel	Regulator	Voltage (V)	I (mA)
14	RF_CLK + PM8916_XO_Block [SMPS, S4]	2.10	0.17
11	CDC_PA [SMPS, S4]	2.10	0.00
12	CDC_CP [SMPS, S4]	2.10	0.00
140	S4_CAM [SMPS, S4]	2.10	0.05
55	Rhea_PA_2P85 [LDO, L9]	1.98	0.01
65	MIPI_CAM_13MP [LDO, L10]	2.79	11.50
58	PX2 [LDO, L12]	0.00	0.01
23	HS_USB2_3P3 [LDO, L13]	3.11	0.01
148	ACCMTR/Compass/AMBT light ANA [LDO, L17]	2.83	0.01
59	LCD1_MIPI [LDO, L17]	2.83	28.34
60	Cap TS_2P85 [LDO, L17]	2.83	0.55
66	MIPI-8MP_2P85 [LDO, L17]	2.78	54.87
67	VGA_CAM_2P85 [LDO, L17]	2.84	0.02
138	RF_SW [LDO, L17]	2.84	0.00
141	RF360 [LDO, L18]	0.24	0.00
54	eMMC_2P9 [LDO, L8]	2.86	7.24
57	SD/MMC_1P8 [LDO, L11]	0.00	0.02
29	UIM1 [LDO, L14]	0.00	0.00
135	PX5 [LDO, L14]	0.00	0.00
30	UIM2 [LDO, L15]	0.00	0.00
136	PX6 [LDO, L15]	0.00	0.00
31	UIM3 [LDO, L16]	0.00	0.00
137	PX4 [LDO, L16]	0.00	0.00
69	CDC_BOOST_OUTPUT	3.70	0.01
35	PWR_WLED	3.68	79.69
36	PWR_HRLED	3.69	0.00
38	PWR_CAM_3P7	3.70	0.01
39	PWR_MISC	3.70	0.01
61	GSM_PA1	3.70	0.15
62	GSM_PA2	3.70	0.09
63	PWR_DISP	3.69	0.01
125	PWR_VIBRATOR	3.69	0.00
146	PWR_WLAN	3.70	0.03
	Battery (measured)	3.71	554.14

1 Dashboard data = 554.14 - (118.31 + 145.11) mA (touchscreen + display + camera sensor) = 263.42 mA

Table 4-20 3D UI 30 fps (Graphic, PowerLift)

RCM channel	Regulator	Voltage (V)	I (mA)
3	S1_OUTPUT [CX, MSS, GFX, MDSP, CDC, SMPS, S1]	0.95	86.14
8	S2_OUTPUT [APC, SMPS, S2]	1.05	73.35
20	LV_BBRX [SMPS, S3]	1.24	0.00
41	Rhea_ANA_1P3 [SMPS, S3]	1.24	0.30
124	WLAN [SMPS, S3]	1.24	0.00
43	WTR2605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	0.00	0.00
56	WTR1605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	0.00	0.00
49	LPDDR2_EBIO [LDO, L3, SUB SMPS, S3]	1.13	0.86
21	MODEM_BIMC_PLL [LDO, L3, SUB SMPS, S3]	1.13	0.59
5	MX [LDO, L3, SUB SMPS, S3]	1.13	20.29
143	HS_USB2_1P15 [LDO, L3, SUB SMPS, S3]	1.13	0.05
45	LPDDR2 [LDO, L2, SUB SMPS, S3]	1.19	29.50
44	PX1 [LDO, L2, SUB SMPS, S3]	1.19	10.88
46	MIPI_DSI_1P2 [LDO, L2, SUB SMPS, S3]	1.19	4.86
47	MIPI_CSI_1p2 [LDO, L2, SUB SMPS, S3]	1.19	0.00
48	WTR1605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	0.00	-0.01
50	WTR2605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	0.00	0.00
126	GPS_eLNA [LDO, L4, SUB SMPS, S4]	0.00	0.00
68	CDC_ANA_DIG [LDO, L5, SUB SMPS, S4]	1.82	0.00
22	Rhea I/O [LDO, L5, SUB SMPS, S4]	1.82	0.00
37	LDO5_MISC [LDO, L5, SUB SMPS, S4]	1.82	0.10
51	PX3 [LDO, L5, SUB SMPS, S4]	1.82	0.46
52	LPDDR2_CH0 [LDO, L5, SUB SMPS, S4]	1.82	1.76
53	eMMC_1P8 [LDO, L5, SUB SMPS, S4]	1.82	0.07
64	PX7 [LDO, L5, SUB SMPS, S4]	1.82	0.00
142	NFC [LDO, L5, SUB SMPS, S4]	1.82	0.00
42	MIPI_DSI_1P8 and PLL [LDO, L6, SUB SMPS, S4]	1.79	2.52
128	ACMTR+CMPSS DIG [LDO, L6, SUB SMPS, S4]	1.79	0.00
25	Cap TS_1P8 [LDO, L6, SUB SMPS, S4]	1.79	0.02
127	MIPI_CAM_8MP_1P8 [LDO, L6, SUB SMPS, S4]	1.79	0.00
129	LCD1_MIPI [LDO, L6, SUB SMPS, S4]	1.78	17.01
134	QFPROM [LDO, L6, SUB SMPS, S4]	1.79	0.00
147	VGA_CAM_1P8 [LDO, L6, SUB SMPS, S4]	1.79	0.00
130	HV_BBRX [LDO, L7, SUB SMPS, S4]	1.80	0.00
133	SR_PLL [LDO, L7, SUB SMPS, S4]	1.80	0.02
26	TXDAC0_1 [LDO, L7, SUB SMPS, S4]	1.80	0.14
27	HS_USB_1P8 [LDO, L7, SUB SMPS, S4]	1.80	0.01
131	WTR1605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.80	0.05
132	WTR2605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.80	0.04
139	Rhea_CLK_XO [LDO, L7, SUB SMPS, S4]	1.80	0.00

RCM channel	Regulator	Voltage (V)	I (mA)
14	RF_CLK + PM8916_XO_Block [SMPS, S4]	2.05	0.17
11	CDC_PA [SMPS, S4]	2.05	0.00
12	CDC_CP [SMPS, S4]	2.05	0.00
140	S4_CAM [SMPS, S4]	2.05	0.00
55	Rhea_PA_2P85 [LDO, L9]	0.19	0.00
65	MIPI_CAM_13MP [LDO, L10]	0.00	0.00
58	PX2 [LDO, L12]	0.00	0.00
23	HS_USB2_3P3 [LDO, L13]	0.00	0.00
148	ACCMTR/Compass/AMBT light ANA [LDO, L17]	2.84	0.00
59	LCD1_MIPI [LDO, L17]	2.83	27.51
60	Cap TS_2P85 [LDO, L17]	2.84	0.55
66	MIPI-8MP_2P85 [LDO, L17]	2.84	0.00
67	VGA_CAM_2P85 [LDO, L17]	2.84	0.00
138	RF_SW [LDO, L17]	2.84	0.00
141	RF360 [LDO, L18]	0.24	0.00
54	eMMC_2P9 [LDO, L8]	0.00	0.00
57	SD/MMC_1P8 [LDO, L11]	0.00	0.00
29	UIM1 [LDO, L14]	0.00	0.00
135	PX5 [LDO, L14]	0.00	0.00
30	UIM2 [LDO, L15]	0.00	0.00
136	PX6 [LDO, L15]	0.00	0.00
31	UIM3 [LDO, L16]	0.00	0.00
137	PX4 [LDO, L16]	0.00	0.00
69	CDC_BOOST_OUTPUT	3.70	0.00
35	PWR_WLED	3.68	79.77
36	PWR_HRLED	3.69	0.01
38	PWR_CAM_3P7	3.70	0.03
39	PWR_MISC	3.70	0.01
61	GSM_PA1	3.70	0.10
62	GSM_PA2	3.70	0.00
63	PWR_DISP	3.69	0.00
125	PWR_VIBRATOR	3.69	0.00
146	PWR_WLAN	3.70	0.02
	Battery (measured)	3.71	204.21

1 Dashboard data = 204.21 mA - 118.64 mA (touchscreen + display) = 85.57 mA

Table 4-21 3D GFX Egypt, 60 fps

RCM channel	Regulator	Voltage (V)	I (mA)
3	S1_OUTPUT [CX, MSS, GFX, MDSP, CDC, SMPS, S1]	1.14	248.51
8	S2_OUTPUT [APC, SMPS, S2]	1.14	209.75
20	LV_BBRX [SMPS, S3]	1.33	0.00
41	Rhea_ANA_1P3 [SMPS, S3]	1.33	0.02
124	WLAN [SMPS, S3]	1.33	0.00
43	WTR2605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	0.00	0.00
56	WTR1605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	0.00	0.00
49	LPDDR2_EBIO [LDO, L3, SUB SMPS, S3]	1.27	2.87
21	MODEM_BIMC_PLL [LDO, L3, SUB SMPS, S3]	1.27	1.40
5	MX [LDO, L3, SUB SMPS, S3]	1.27	67.27
143	HS_USB2_1P15 [LDO, L3, SUB SMPS, S3]	1.27	0.07
45	LPDDR2 [LDO, L2, SUB SMPS, S3]	1.18	82.93
44	PX1 [LDO, L2, SUB SMPS, S3]	1.18	30.73
46	MIPI_DSI_1P2 [LDO, L2, SUB SMPS, S3]	1.19	3.74
47	MIPI_CSI_1p2 [LDO, L2, SUB SMPS, S3]	1.19	0.00
48	WTR1605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	0.00	0.00
50	WTR2605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	0.00	0.00
126	GPS_eLNA [LDO, L4, SUB SMPS, S4]	0.00	0.00
68	CDC_ANA_DIG [LDO, L5, SUB SMPS, S4]	1.82	0.00
22	Rhea I/O [LDO, L5, SUB SMPS, S4]	1.82	0.00
37	LDO5_MISC [LDO, L5, SUB SMPS, S4]	1.82	0.10
51	PX3 [LDO, L5, SUB SMPS, S4]	1.82	0.48
52	LPDDR2_CH0 [LDO, L5, SUB SMPS, S4]	1.82	3.52
53	eMMC_1P8 [LDO, L5, SUB SMPS, S4]	1.82	0.07
64	PX7 [LDO, L5, SUB SMPS, S4]	1.82	0.00
142	NFC [LDO, L5, SUB SMPS, S4]	1.82	0.00
42	MIPI_DSI_1P8 and PLL [LDO, L6, SUB SMPS, S4]	1.79	2.53
128	ACMTR+CMPSS DIG [LDO, L6, SUB SMPS, S4]	1.79	0.00
25	Cap TS_1P8 [LDO, L6, SUB SMPS, S4]	1.79	0.02
127	MIPI_CAM_8MP_1P8 [LDO, L6, SUB SMPS, S4]	1.79	0.00
129	LCD1_MIPI [LDO, L6, SUB SMPS, S4]	1.78	16.82
134	QFPROM [LDO, L6, SUB SMPS, S4]	1.79	0.00
147	VGA_CAM_1P8 [LDO, L6, SUB SMPS, S4]	1.79	0.00
130	HV_BBRX [LDO, L7, SUB SMPS, S4]	1.80	0.00
133	SR_PLL [LDO, L7, SUB SMPS, S4]	1.79	0.61
26	TXDAC0_1 [LDO, L7, SUB SMPS, S4]	1.80	0.14
27	HS_USB_1P8 [LDO, L7, SUB SMPS, S4]	1.80	0.01
131	WTR1605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.80	0.05
132	WTR2605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.80	0.04
139	Rhea_CLK_XO [LDO, L7, SUB SMPS, S4]	1.80	0.00

RCM channel	Regulator	Voltage (V)	I (mA)
14	RF_CLK + PM8916_XO_Block [SMPS, S4]	1.04	0.00
11	CDC_PA [SMPS, S4]	0.00	0.00
12	CDC_CP [SMPS, S4]	0.00	0.00
140	S4_CAM [SMPS, S4]	0.00	0.00
55	Rhea_PA_2P85 [LDO, L9]	2.84	0.00
65	MIPI_CAM_13MP [LDO, L10]	2.83	26.76
58	PX2 [LDO, L12]	2.84	0.55
23	HS_USB2_3P3 [LDO, L13]	2.84	0.00
148	ACCMTR/Compass/AMBT light ANA [LDO, L17]	2.84	0.00
59	LCD1_MIPI [LDO, L17]	2.84	0.00
60	Cap TS_2P85 [LDO, L17]	0.24	0.00
66	MIPI-8MP_2P85 [LDO, L17]	1.40	0.03
67	VGA_CAM_2P85 [LDO, L17]	0.00	0.00
138	RF_SW [LDO, L17]	0.00	0.00
141	RF360 [LDO, L18]	0.00	0.00
54	eMMC_2P9 [LDO, L8]	0.00	0.00
57	SD/MMC_1P8 [LDO, L11]	0.00	0.00
29	UIM1 [LDO, L14]	0.00	0.00
135	PX5 [LDO, L14]	0.00	0.00
30	UIM2 [LDO, L15]	3.70	0.00
136	PX6 [LDO, L15]	1.04	0.00
31	UIM3 [LDO, L16]	0.00	0.00
137	PX4 [LDO, L16]	0.00	0.00
69	CDC_BOOST_OUTPUT	0.00	0.00
35	PWR_WLED	3.68	79.72
36	PWR_HRLED	3.69	0.01
38	PWR_CAM_3P7	3.70	0.01
39	PWR_MISC	3.70	0.01
61	GSM_PA1	3.70	0.14
62	GSM_PA2	3.70	0.06
63	PWR_DISP	3.69	0.00
125	PWR_VIBRATOR	3.69	0.00
146	PWR_WLAN	3.70	0.02
	Battery (measured)	3.71	367.87

1 Dashboard data = 367.87 mA - 117.69 mA (touchscreen + display) = 250.18 mA

Table 4-22 Static image display

RCM channel	Regulator	Voltage (V)	I (mA)
3	S1_OUTPUT [CX, MSS, GFX, MDSP, CDC, SMPS, S1]	0.95	42.81
8	S2_OUTPUT [APC, SMPS, S2]	0.00	0.22
20	LV_BBRX [SMPS, S3]	1.25	0.00
41	Rhea_ANA_1P3 [SMPS, S3]	1.25	0.01
124	WLAN [SMPS, S3]	1.25	0.00
43	WTR2605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	0.00	0.00
56	WTR1605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	0.00	0.00
49	LPDDR2_EBIO [LDO, L3, SUB SMPS, S3]	1.04	0.19
21	MODEM_BIMC_PLL [LDO, L3, SUB SMPS, S3]	1.04	0.58
5	MX [LDO, L3, SUB SMPS, S3]	1.04	4.28
143	HS_USB2_1P15 [LDO, L3, SUB SMPS, S3]	1.04	0.04
45	LPDDR2 [LDO, L2, SUB SMPS, S3]	1.19	14.10
44	PX1 [LDO, L2, SUB SMPS, S3]	1.19	3.61
46	MIPI_DSI_1P2 [LDO, L2, SUB SMPS, S3]	1.19	4.46
47	MIPI_CSI_1p2 [LDO, L2, SUB SMPS, S3]	1.19	0.00
48	WTR1605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	0.00	0.00
50	WTR2605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	0.00	0.00
126	GPS_eLNA [LDO, L4, SUB SMPS, S4]	0.00	0.00
68	CDC_ANA_DIG [LDO, L5, SUB SMPS, S4]	1.82	0.00
22	Rhea I/O [LDO, L5, SUB SMPS, S4]	1.82	0.00
37	LDO5_MISC [LDO, L5, SUB SMPS, S4]	1.82	0.10
51	PX3 [LDO, L5, SUB SMPS, S4]	1.82	0.46
52	LPDDR2_CH0 [LDO, L5, SUB SMPS, S4]	1.82	1.13
53	eMMC_1P8 [LDO, L5, SUB SMPS, S4]	1.82	0.07
64	PX7 [LDO, L5, SUB SMPS, S4]	1.82	0.00
142	NFC [LDO, L5, SUB SMPS, S4]	1.82	0.00
42	MIPI_DSI_1P8 and PLL [LDO, L6, SUB SMPS, S4]	1.79	2.52
128	ACMTR+CMPSS DIG [LDO, L6, SUB SMPS, S4]	1.79	0.00
25	Cap TS_1P8 [LDO, L6, SUB SMPS, S4]	1.79	0.02
127	MIPI_CAM_8MP_1P8 [LDO, L6, SUB SMPS, S4]	1.79	0.00
129	LCD1_MIPI [LDO, L6, SUB SMPS, S4]	1.78	16.82
134	QFPROM [LDO, L6, SUB SMPS, S4]	1.79	0.00
147	VGA_CAM_1P8 [LDO, L6, SUB SMPS, S4]	1.79	0.00
130	HV_BBRX [LDO, L7, SUB SMPS, S4]	1.80	0.00
133	SR_PLL [LDO, L7, SUB SMPS, S4]	1.80	0.03
26	TXDAC0_1 [LDO, L7, SUB SMPS, S4]	1.80	0.14
27	HS_USB_1P8 [LDO, L7, SUB SMPS, S4]	1.80	0.01
131	WTR1605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.80	0.05
132	WTR2605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.80	0.04
139	Rhea_CLK_XO [LDO, L7, SUB SMPS, S4]	1.80	0.00

RCM channel	Regulator	Voltage (V)	I (mA)
14	RF_CLK + PM8916_XO_Block [SMPS, S4]	2.05	0.17
11	CDC_PA [SMPS, S4]	2.05	0.00
12	CDC_CP [SMPS, S4]	2.05	0.00
140	S4_CAM [SMPS, S4]	2.05	0.00
55	Rhea_PA_2P85 [LDO, L9]	0.24	0.00
65	MIPI_CAM_13MP [LDO, L10]	0.00	0.00
58	PX2 [LDO, L12]	0.00	0.00
23	HS_USB2_3P3 [LDO, L13]	0.00	0.00
148	ACCMTR/Compass/AMBT light ANA [LDO, L17]	2.84	0.00
59	LCD1_MIPI [LDO, L17]	2.83	24.87
60	Cap TS_2P85 [LDO, L17]	2.84	0.56
66	MIPI-8MP_2P85 [LDO, L17]	2.84	0.00
67	VGA_CAM_2P85 [LDO, L17]	2.84	0.00
138	RF_SW [LDO, L17]	2.84	0.00
141	RF360 [LDO, L18]	0.24	0.00
54	eMMC_2P9 [LDO, L8]	0.00	0.00
57	SD/MMC_1P8 [LDO, L11]	0.00	0.00
29	UIM1 [LDO, L14]	0.00	0.00
135	PX5 [LDO, L14]	0.00	0.00
30	UIM2 [LDO, L15]	0.00	0.00
136	PX6 [LDO, L15]	0.00	0.00
31	UIM3 [LDO, L16]	0.00	0.00
137	PX4 [LDO, L16]	0.00	0.00
69	CDC_BOOST_OUTPUT	3.70	0.02
35	PWR_WLED	3.68	79.72
36	PWR_HRLED	3.69	0.01
38	PWR_CAM_3P7	3.70	0.05
39	PWR_MISC	3.70	0.01
61	GSM_PA1	3.70	0.10
62	GSM_PA2	3.70	0.00
63	PWR_DISP	3.69	0.00
125	PWR_VIBRATOR	3.69	0.00
146	PWR_WLAN	3.70	0.02
	Battery (measured)	3.71	147.47

1 Dashboard data = 147.47 mA - 115.75 mA (touchscreen + display) = 31.72 mA

Table 4-23 Video streaming 720P Over Wi-Fi

RCM channel	Regulator	Voltage (V)	I (mA)
3	S1_OUTPUT [CX, MSS, GFX, MDSP, CDC, SMPS, S1]	1.05	105.49
8	S2_OUTPUT [APC, SMPS, S2]	0.90	127.12
20	LV_BBRX [SMPS, S3]	1.25	0.00
41	Rhea_ANA_1P3 [SMPS, S3]	1.25	14.27
124	WLAN [SMPS, S3]	0.00	0.00
43	WTR2605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	0.00	0.00
56	WTR1605_RF1_1P3 [LDO, L1, SUB SMPS, S3]	1.14	0.94
49	LPDDR2_EBIO [LDO, L3, SUB SMPS, S3]	1.14	1.28
21	MODEM_BIMC_PLL [LDO, L3, SUB SMPS, S3]	1.14	19.72
5	MX [LDO, L3, SUB SMPS, S3]	1.14	0.05
143	HS_USB2_1P15 [LDO, L3, SUB SMPS, S3]	0.00	0.00
45	LPDDR2 [LDO, L2, SUB SMPS, S3]	1.19	35.09
44	PX1 [LDO, L2, SUB SMPS, S3]	1.19	14.82
46	MIPI_DSI_1P2 [LDO, L2, SUB SMPS, S3]	1.19	4.80
47	MIPI_CSI_1p2 [LDO, L2, SUB SMPS, S3]	1.19	0.00
48	WTR1605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	0.00	0.00
50	WTR2605_RF2_2P05 [LDO, L4, SUB SMPS, S4]	0.00	0.00
126	GPS_eLNA [LDO, L4, SUB SMPS, S4]	0.00	0.00
68	CDC_ANA_DIG [LDO, L5, SUB SMPS, S4]	1.82	0.01
22	Rhea I/O [LDO, L5, SUB SMPS, S4]	1.82	0.40
37	LDO5_MISC [LDO, L5, SUB SMPS, S4]	1.82	0.10
51	PX3 [LDO, L5, SUB SMPS, S4]	1.82	2.61
52	LPDDR2_CH0 [LDO, L5, SUB SMPS, S4]	1.82	2.28
53	eMMC_1P8 [LDO, L5, SUB SMPS, S4]	1.82	0.17
64	PX7 [LDO, L5, SUB SMPS, S4]	1.82	0.01
142	NFC [LDO, L5, SUB SMPS, S4]	1.82	0.00
42	MIPI_DSI_1P8 and PLL [LDO, L6, SUB SMPS, S4]	1.79	2.52
128	ACMTR+CMPSS DIG [LDO, L6, SUB SMPS, S4]	1.79	0.00
25	Cap TS_1P8 [LDO, L6, SUB SMPS, S4]	1.79	0.02
127	MIPI_CAM_8MP_1P8 [LDO, L6, SUB SMPS, S4]	1.79	0.00
129	LCD1_MIPI [LDO, L6, SUB SMPS, S4]	1.78	16.79
134	QFPROM [LDO, L6, SUB SMPS, S4]	1.79	0.00
147	VGA_CAM_1P8 [LDO, L6, SUB SMPS, S4]	1.79	0.00
130	HV_BBRX [LDO, L7, SUB SMPS, S4]	1.80	0.00
133	SR_PLL [LDO, L7, SUB SMPS, S4]	1.79	1.57
26	TXDAC0_1 [LDO, L7, SUB SMPS, S4]	1.80	0.14
27	HS_USB_1P8 [LDO, L7, SUB SMPS, S4]	1.80	0.01
131	WTR1605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.80	0.05
132	WTR2605_RF_1P8 [LDO, L7, SUB SMPS, S4]	1.80	0.04
139	Rhea_CLK_XO [LDO, L7, SUB SMPS, S4]	1.79	1.69

RCM channel	Regulator	Voltage (V)	I (mA)
14	RF_CLK + PM8916_XO_Block [SMPS, S4]	2.05	0.17
11	CDC_PA [SMPS, S4]	2.05	1.10
12	CDC_CP [SMPS, S4]	2.05	1.44
140	S4_CAM [SMPS, S4]	2.05	0.01
55	Rhea_PA_2P85 [LDO, L9]	3.28	0.08
65	MIPI_CAM_13MP [LDO, L10]	0.00	0.00
58	PX2 [LDO, L12]	0.00	0.00
23	HS_USB2_3P3 [LDO, L13]	0.00	-0.01
148	ACCMTR/Compass/AMBT light ANA [LDO, L17]	2.84	0.00
59	LCD1_MIPI [LDO, L17]	2.83	25.78
60	Cap TS_2P85 [LDO, L17]	2.84	0.55
66	MIPI-8MP_2P85 [LDO, L17]	2.84	0.00
67	VGA_CAM_2P85 [LDO, L17]	2.84	0.00
138	RF_SW [LDO, L17]	2.84	0.00
141	RF360 [LDO, L18]	0.25	0.00
54	eMMC_2P9 [LDO, L8]	1.63	0.24
57	SD/MMC_1P8 [LDO, L11]	0.00	0.00
29	UIM1 [LDO, L14]	0.00	0.00
135	PX5 [LDO, L14]	0.00	0.00
30	UIM2 [LDO, L15]	0.00	0.00
136	PX6 [LDO, L15]	0.00	0.00
31	UIM3 [LDO, L16]	0.00	0.00
137	PX4 [LDO, L16]	0.00	0.00
69	CDC_BOOST_OUTPUT	3.70	0.02
35	PWR_WLED	3.68	79.72
36	PWR_HRLED	3.69	0.01
38	PWR_CAM_3P7	3.70	0.05
39	PWR_MISC	3.70	0.01
61	GSM_PA1	3.70	0.10
62	GSM_PA2	3.70	0.00
63	PWR_DISP	3.69	0.00
125	PWR_VIBRATOR	3.69	0.00
146	PWR_WLAN	3.70	0.02
	Battery (measured)	3.71	249.10

1 Dashboard data = 249.10 mA - 117 mA (touchscreen + display) = 132.10 mA

4.4 A7 vs A53 Dhrystone power

Figure 4-1 shows the power comparison between A7 and A53 in a single core.

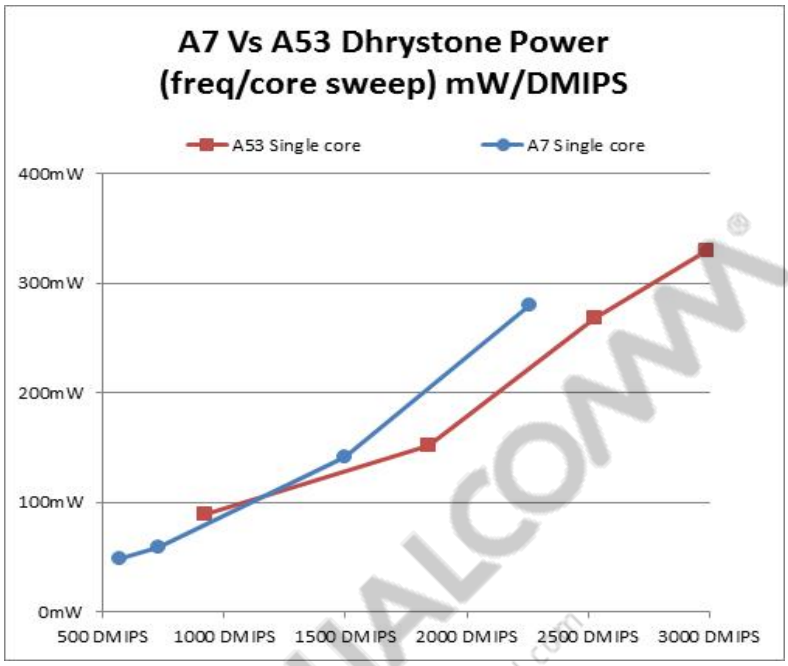

Figure 4-1 A7 vs A53 single core Dhrystone power

Figure 4-2 shows the power comparison between A7 and A53 in a quad core.

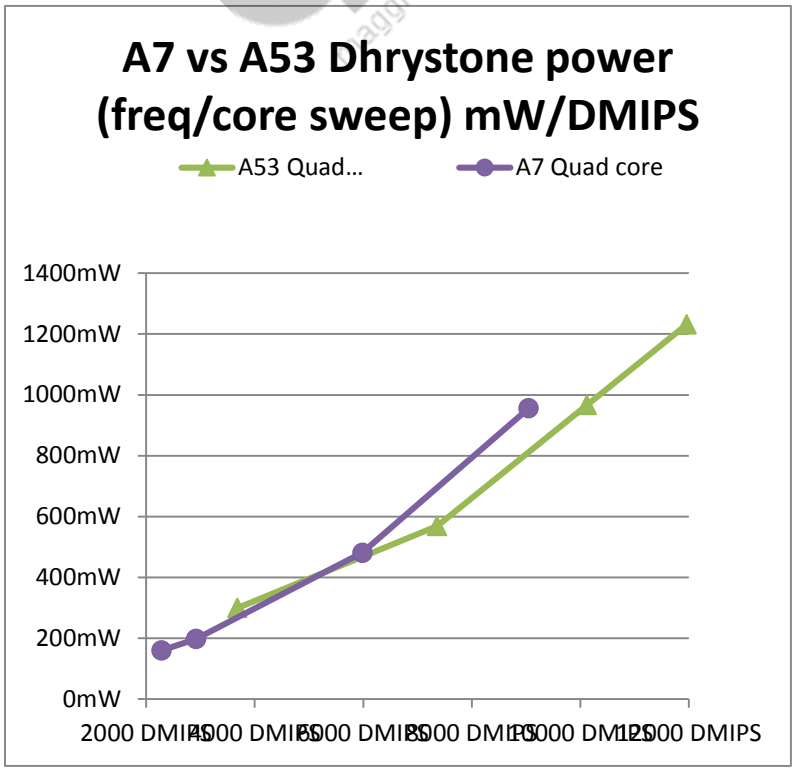

Figure 4-2 A7 vs A53 quad core Dhrystone power