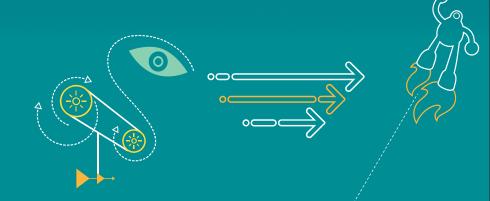
高通协议技术期刊 -2015/04/20

QIIALCONN®

Qualcomm Technologies, Inc.

Confidential and Proprietary – Qualcomm Technologies, Inc. 机密和专有信息——高通技术股份有限公司



Confidential and Proprietary – Qualcomm Technologies, Inc.

Confidential and Proprietary - Qualcomm Technologies, Inc.

NO PUBLIC DISCLOSURE PERMITTED: Please report postings of this document on public servers or web sites to: DocCtrlAgent@qualcomm.com. 禁止公开:如在公共服务器或网站上发现本文档,请报告至:DocCtrlAgent@qualcomm.com.

Restricted Distribution: Not to be distributed to anyone who is not an employee of either Qualcomm or its affiliated without the express approval of Qualcomm's Configuration Management. 限制分发:未经高通配置管理部门的明示批准,不得发布给任何非高通或高通附属及关联公司员工的人。 Not to be used, copied, reproduced, or modified in whole or in part, nor its contents revealed in any manner to others without the express written permission of Qualcomm Technologies, Inc. 未经高通技术股份有限公司明示的书面允许,不得使用、复印、 复制、或修改全部或部分文档,不得以任何形式向他人透露其内容。

The user of this documentation acknowledges and agrees that any Chinese text and/or translation herein shall be for reference purposes only and that in the event of any conflict between the English text and/or version and the Chinese text and/or version, the English text and/or version shall be controlling. 本文档的用户知悉并同意中文文本和/或翻译仅供参考之目的,如英文 文本和/或版本和中文文本和/或版本之间存在冲突,以英文文本和/或版本为准。 This document contains confidential and proprietary information and must be shredded when discarded. 未经高通明示的书面允许,不得使用、复印、复制全部或部分文档,不得以任何形式向他人透露其内容。本文档含有高通机密和专有信息,丢弃时必须粉碎销毁。

Qualcomm reserves the right to make changes to the product(s) or information contained herein without notice. No liability is assumed for any damages arising directly or indirectly by their use or application. The information provided in this document is provided on an "as is" basis. 高通保留未经通知即修改本文档中提及的产品或信息的权利。本公司对使用或应用本文档所产生的直接或间接损失概不负责。本文档中的信息为基于现状所提供,使用风险由用户自行承担。

Qualcomm is a trademark of QUALCOMM Incorporated, registered in the United States and other countries. All QUALCOMM Incorporated trademarks are used with permission. Other product and brand names may be trademarks or registered trademarks of their respective owners. Qualcomm是高通公司在美国及其它国家注册的商标。所有高通公司的商标皆获得使用许可。 其它产品和品牌名称可能为其各自所有者的商标或注册商标。

This technical data may be subject to U.S. and international export, re-export, or transfer ("export") laws. Diversion contrary to U.S. and international law is strictly prohibited. 本文档及所含技术资料可能受美国和国际出口、再出口或转移出口法律的 限制。严禁违反或偏离美国和国际的相关法律。

Qualcomm Technologies, Inc. 5775 Morehouse Drive San Diego, CA 92121 U.S.A. 高通技术股份有限公司,美国加利福尼亚州圣地亚哥市莫豪斯路 5775 号,邮编 92121

Revision History

Revision	Date	Description	
А	Apr 2015	Initial release	

Note: There is no Rev. I, O, Q, S, X, or Z per Mil. standards.

Contents

- 8916/8939/9x30系统解决方案
- MBN solution
- Recent CSFB related issues
- How to build secondary boot image
- 手机在EVDO模式下不能上网
- Lesson Learn: OEM should never call other task's APIs in a task handler

8916/8936/9x30系统解决方案Solution

- 为了直观,便于检索,我们在Saleforce系统上编写了系统解决方案。包含各个技术领域,便 于大家查找。
- 8916系统解决方案
- Solution Number: 00029134
- 链接: https://qualcomm-cdmatech-support.my.salesforce.com/5013000000VfUZ?srPos=0&srKp=501
- 8939系统解决方案
- Solution Number: 00029333
- 链接: https://qualcomm-cdmatech-support.my.salesforce.com/50130000000Vg5B
- MDM9x30/9x35系统解决方案
- Solution Number 00029678
- https://qualcomm-cdmatech-support.my.salesforce.com/50130000000ViGQ

MBN介绍

- MBN的设计需求,文档,实现方法,请参阅Solution number:00029357.
- https://qualcomm-cdmatechsupport.my.salesforce.com/5013000000VgDA?srPos=0&srKp=501
- 因为客户量产的版本可能不是高通最新的版本,但是MBN却随着软件版本不断的更新,所以推荐将高通最新软件版本的MBN,合入客户的版本中。
- Solution 00030261, MBN build command for Windows when Excel not work.
- Solution 00030575, How to check if baseline support build multi MBN into NON-HLOS.bin.
- Solution 00030566, How to fix MBN Excel crash issue.

Recent CSFB related issues

Summary:

- If G2L fast return is enabled by EFS g2l_blind_redir_after_csfb_control or W2L fast return is enabled by NV 67219. But UE still cannot return to LTE after call release in the following scenarios:
- Camp on LTE;
- L2W CSFB;
- W2G CS HO;
- End voice call in GSM;
- No G2L Fast Return is triggered.
- or
- Camp on LTE;
- L2G CSFB;
- G2W CS HO;
- End voice call in WCDMA;
- No W2L Fast Return is triggered.
- Solution:
- 3CRs 609574/639173/709165 can solve above issue.

How to build secondary boot image

- Load secondary boot image is necessary for all the Tput test cases. This
 will be our recommendation for all the OEM. Compared with primary
 image, this image has minimum logging information which will be good for
 performance test.
- Customer can refer to 80-NH569-1 to find below instruction on secondary boot image loading.
- Compiling Secondary Boot image
 - For Qualcomm build: secondary boot image can be found under:
 LINUX\android\out\target\product\<<u>corresponding_target</u>>\secondary-boot
 - OEM needs to compile its own secondary boot image
- To load secondary boot image, use the below commands:
 - adb root
 - adb reboot bootloader
 - cd /path/to/secondary-boot/directory
 - fastboot flash boot boot.img
 - fastboot reboot

手机在EVDO模式下不能上网

- 1.问题:手机在EVDO模式下不能上网
- 2.原因:手机的ESN/MEID未设置
- 3. 解决:每一部手机都需要设置合法且唯一的ESN/MEID
- 4. Log样本:
- // 1. UE negotiate HDR session. UE report ESN/MEID = 0.
- OTA LOG 02:15:35.181 SCCHD/Address Mgmt/Hardware ID Request Channel: 78, Pilot PN: 274
- OTA LOG 02:15:35.193 SACH/Address Mgmt/Hardware ID Response Channel: 78, Pilot PN: 274
- hardware_id_type = 65536 (0x10000)
- hardware_id_length = 4 (0x4)
- hardware_id_value[0] = 0 (0x0) // all zero HardwareID, this is wrong
- hardware_id_value[1] = 0 (0x0)
- hardware_id_value[2] = 0 (0x0)
- hardware_id_value[3] = 0 (0x0)
- OTA LOG 02:15:40.357 SFTCH/Session Config/Soft Configuration Complete Channel: 78, Pilot PN: 274
- // 2. After above session established, the network side quick close session. And restart a new round of HDR session negotiation.
- OTA LOG 02:15:41.597 SCCHD/Session Mgmt/Session Close Channel: 78, Pilot PN: 92
- ... // repeat such pattern throughout this log and data call setup failed all the time.

Lesson Learn: OEM should never call other task's APIs in a task handler

- Recently one issue is reported. The root cause is that QMI API is called in CallManager API.
- Lesson Learn:
- OEM should never call other task's APIs in a task handler, that would make the 2 tasks running concurrently, may bring some unpredictable abnormal result, or side effects.

References

Ref.	Document			
Qualcomm Technologies				
Q1	Application Note: Software Glossary for Customers	CL93-V3077-1		
Standards				
S1	Title	Standard Number (June 2002)		
Resources				
R1				

Questions?

https://support.cdmatech.com

