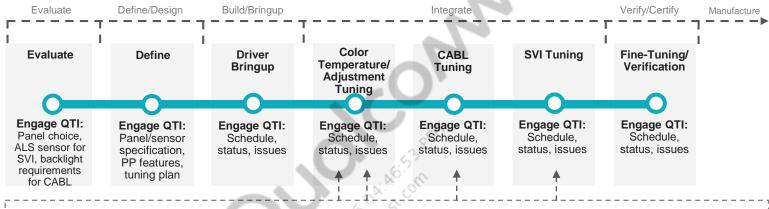


## **MSM8909 Display Quick Start**

### **Overview**

This customer guide summarizes the QTI recommended process, tools, and resources to efficiently execute MSM8909 display projects.

### Stages of Display Development



#### **Color Temperature Tuning**

Use QDCM Mobile to interactively change color temperature. Save changed temperature as default, confirm panel color temperature with measurement device, and iterate until desired color temperature is attained.

### **Color Adjustment Tuning**

Perform on-target color adjustment with QDCM Mobile. Choose test pattern/ image on QDCM Mobile and perform color adjustment until the qualitative IQ requirement is met.

#### Content Adaptive Backlight (CABL) Tuning

Use CABL OEM design guide to perform panel gamma response curve and backlight response curve measurements.

#### Sunlight Visibility Improvement (SVI) Tuning

Utilize SVI OEM design guide to perform sensor mapping calibration, panel reflectance calibration, and backlight response linearization.

### Resources Per Display Stage

Evaluate Define Driver Bringup

Display Overview 80-NV396-16

CABL OEM Design Guide 80-VP119-1

SVI OEM Design Guide 80-NP906-2 Display Overview 80-NV396-16

Multimedia Driver Development and Bringup Guide – Display 80-NU323-3

Color Temperature/ Adjustment Tuning

QDCM Mobile 3.0 User Guide 80-NV054-1

Android Display Debug Guide 80-NP925-1

**CABL** Tuning

CABL OEM Design Guide 80-VP119-1

> Android Display Debug Guide 80-NP925-1

**SVI Tuning** 

SVI OEM Design Guide 80-NP906-2

Android Display Debug Guide 80-NP925-1 Final Tuning/ Quality Verification

QDCM Mobile 3.0 User Guide 80-NV054-1

SVI OEM Design Guide 80-NP906-2

### **Recommended Tuning Tools**

# **QDCM** Mobile

#### **About**

QDCM Mobile 3.0 is an on-target display tuning tool. Used in conjunction with the Qualcomm<sup>®</sup> Snapdragon<sup>™</sup> SDK ColorManager Java interface, QDCM Mobile enables adjustment of display color temperature and picture adjustment, including Hue, Saturation, Intensity, and Contrast (HSIC).

#### **Download**

The APK package for QDCM Mobile 3.0 is available as part of the build release at

/out/target/product/msm8909/system/app/QDCMMobileApp.apk

The reference APK source for QDCM Mobile 3.0 is available at

/vendor/qcom/proprietary/snapdragonsdk/display/qdcm\_mobile

## Did you know?

Based on the type of display case you file, the case system immediately sends you an email with a list of documents that could help resolve your issue.

For technical assistance, submit a case at https://createpoint.qti.qualcomm.com/.

Direct your case to the display customer engineering team by selecting:

- Problem Area 1 Multimedia
- Problem Area 2 Display

QTI greatly appreciates your suggestions on improving the quality of display software, IQ, tools, documents, support, PVL, etc. All it takes to improve your QTI display experience is an email to <a href="mailto:Display.Feedback@qti.qualcomm.com">Display.Feedback@qti.qualcomm.com</a> with your feedback.

### Contact Us

Through email: Display.Feedback@qti.qualcomm.com, through your assigned Technical Account Manager, or visit us at http://createpoint.qti.qualcomm.com/.



Restricted Distribution: Not to be distributed to anyone who is not an employee of either Qualcomm Technologies, Inc. or its affiliated companies without the express approval of Qualcomm Configuration Management. Qualcomm Snapdragon is a product of Qualcomm Technologies, Inc. Other Qualcomm products referenced herein are products of Qualcomm Technologies, Inc. or its subsidiaries. Qualcomm and Snapdragon are trademarks 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. 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.