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i.MX Android™ Camera Issues on the SDP Platform

Contents

1 Overview of the SDP Platform

A standard Android™ tablet layout is contrasted with the SABRE-SDP. An overview of hardware components and software screen layouts is provided.

For more information, see SABRE Platform for Smart Devices Reference Design Based on the i.MX 6 Series.

2 Standard Android Tablet Layout

In a standard Android tablet, certain miscellaneous devices such as layout, acceleration, sensor, and G-sensor should be aligned with each other.

- The device mold layout represents a tablet layout. Typically the user is able to hold it and can view the tablet logo.
- The screen layout points out which pixel is the (0,0) on the screen, which side is W and which one is H. Screen layout should be the same as the device mold layout.
- The camera layout represents a camera lens layout which points to the image capture view. The camera

layout should be the same as the screen layout. The back camera should be placed into the back side of the device.
- The acceleration sensor and the G-sensor layout represent a device X/Y/Z rotation report. They should report the same Y-Axis rotation when the user rotates the device.

The following figure shows the standard tablet layout:

- The device mode layout is aligned with the screen layout and front camera layout.
- The sensor does not report a rotation when the user holds the device as the mold layout. It reports the right Y rotation if the device has a Y rotation.

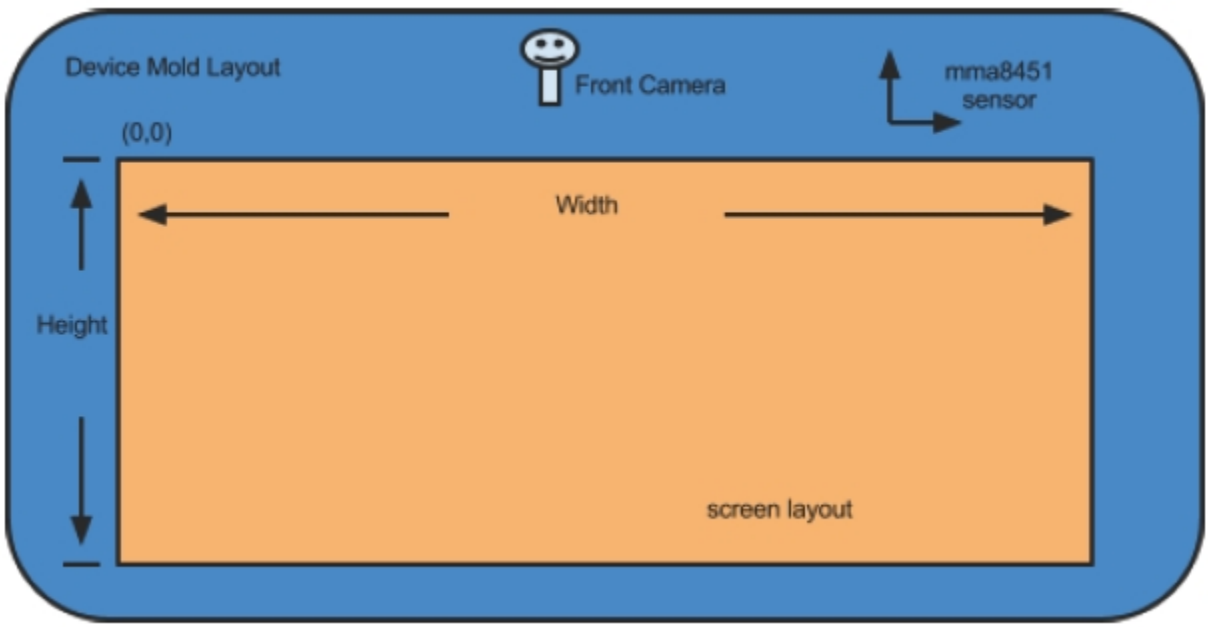

Figure 1. Standard Android tablet layout

3 SABRE-SDP Layout

The SABRE-SDP board layout is shown as follows.

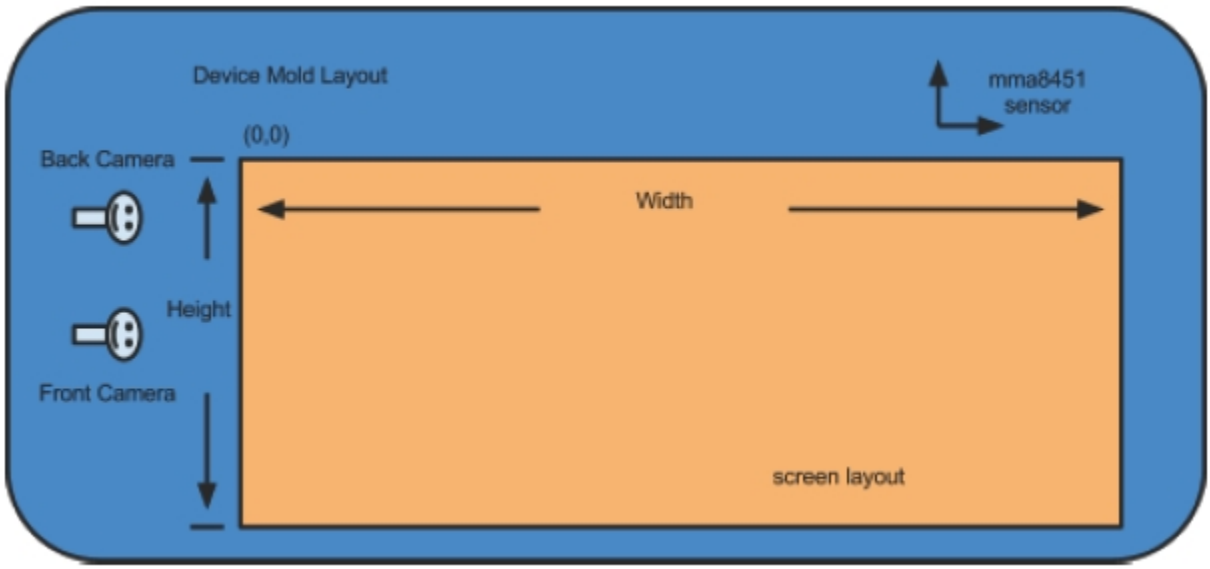

Figure 2. Standard data path for each UI component (Windows® OS and Video)

These are the two issues associated with the SABRE-SDP layout:

- Camera sensors have a 270 degree clockwise turn to the screen layout.
- The back camera is not placed on the back side of the device.

Because of the above issues, in the preview of the front camera is the calendar standing vertically on the Desktop, as shown in this figure.

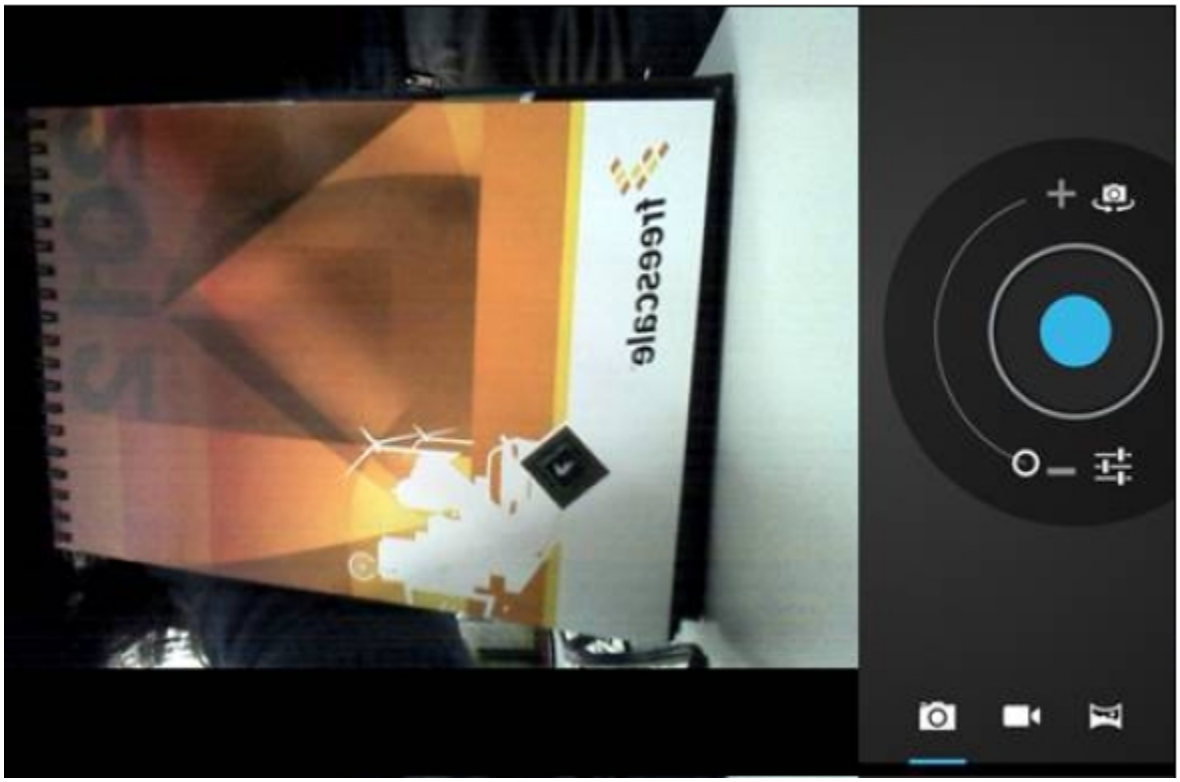

Figure 3. Issue of front camera preview

4 Revision History

Table 1. Revision history

Revision number	Date	Substantive changes
O8.0.0_1.0.0	02/2018	Initial release

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