Quick Start Guide for MX8-DSI-OLED1 for i.MX 8M Evaluation Kit

Introduction

NXP provides optional accessory boards that can be used to evaluate the i.MX 8M Evaluation kit. The MX8-DSI-OLED1 for the i.MX 8M EVK is a MIPI-DSI interface OLED display kit with touch screen support. The MX8-DSI-OLED1 card can be purchased at nxp.com.

This document provides a brief overview on how to get started with the MX8-DSI-OLED1 accessory card and the i.MX 8M EVK.

Key specifications / features:

- 5.49" FHD (1920*1080) AMOLED display
- 16.7M (RGB*8bits) display color
- Touch screen
- 4-lane MIPI-DSI interface for display
- I2C interface for touch and control
1. Get to know the MX8-DSI-OLED1 accessory card

MX8-DSI-OLED1 accessory kit contains:

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>OLED display panel</td>
<td>1</td>
</tr>
<tr>
<td>8&quot; mini-SAS cable</td>
<td>1</td>
</tr>
</tbody>
</table>

Figure 1. MX8-DSI-OLED1 display panel front
2. How to use the MX8-DSI-OLED1 accessory card

Quick steps to get started with the MX8-DSI-OLED1 display.

NOTE

Before plugging in the cable, remove the plastic cover on the mini-SAS connectors.

Hardware Setup

Step 1:
Plug in the mini-SAS cable into J1501 on the i.MX 8M Evaluation kit.

Step 2:
Plug in the other end of the mini-SAS cable into mini-SAS connector on to the back of the MX8-DSI-OLED1 display.
Software Setup: Linux

Step 1:
Power on the board and press any key to interrupt auto-boot in the serial terminal.

Step 2:
Change the device tree file by entering this command in the terminal:

```
U-Boot > setenv fdt_file fsl-imx8mq-evk-dcss-rm67191.dtb
U-Boot > run bootcmd
```

Once booting completes, the image displays on the MX8-DSI-OLED1 display.

### 3. References

*Table 1* provides the link to access software or order the Evaluation Kit and accessory boards.

<table>
<thead>
<tr>
<th>Compatible boards</th>
<th>Description</th>
<th>Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCIMX8M-EVK</td>
<td>i.MX 8M Evaluation Kit</td>
<td><a href="https://www.nxp.com/imx8muadevk">https://www.nxp.com/imx8muadevk</a></td>
</tr>
</tbody>
</table>

For latest software, visit - [https://www.nxp.com/support/developer-resources/run-time-software/i.mx-developer-resources/i.mx-software-and-development-tool-resources:IMX_SW](https://www.nxp.com/support/developer-resources/run-time-software/i.mx-developer-resources/i.mx-software-and-development-tool-resources:IMX_SW)
For more information on the MX8-DSI-OLED1 accessory card or other accessory cards for the i.MX 8M EVK, please visit the following.

**Table 2. Links to accessory cards for the i.MX 8M EVK**

<table>
<thead>
<tr>
<th>Accessory Boards</th>
<th>Description</th>
<th>Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>MX8-DSI-OLED1</td>
<td>MIPI-DSI interface OLED display kit with touch screen</td>
<td><a href="https://www.nxp.com/support/developer-resources/run-time-software/i.mx-developer-resources/evaluation-kit-for-the-i.mx-8m-applications-processor:MCIMX8M-EVK?tab=Buy_Parametric_Tab">https://www.nxp.com/support/developer-resources/run-time-software/i.mx-developer-resources/evaluation-kit-for-the-i.mx-8m-applications-processor:MCIMX8M-EVK?tab=Buy_Parametric_Tab</a></td>
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