# 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

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# 1. Get to know the MX8-DSI-OLED1 accessory card

MX8-DSI-OLED1 accessory kit contains:

Item	Quantity
OLED display panel	1
8" mini-SAS cable	1



Figure 1. MX8-DSI-OLED1 display panel front

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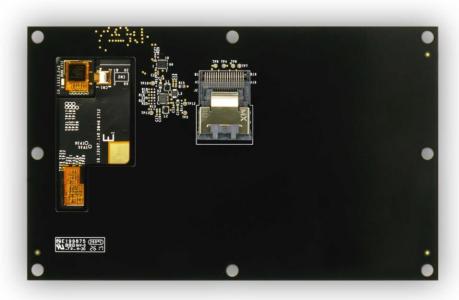


Figure 2. MX8-DSI-OLED1 display panel back

# 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.

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Figure 3. Hardware setup for MX8-DSI-OLED1 accessory board

# **Software Setup: Linux**

### Step 1:

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

# **Step 2:**

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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 1. Link to access software/order Evaluation Kit

Compatible boards	Description	Link
MCIMX8M-EVK	i.MX 8M Evaluation Kit	https://www.nxp.com/imx8mquadevk

 $For \ latest \ software, \ visit - \underline{https://www.nxp.com/support/developer-resources/run-time-software/i.mx-developer-resources/i.mx-software-and-development-tool-resources: \underline{IMX\_SW}$ 

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#### References

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

Accessory Boards	Description	Link
IMX-MIPI-HDMI	Converts MIPI-DSI signal to HDMI signal	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
MX8-DSI-OLED1	MIPI-DSI interface OLED display kit with touch screen	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
MINISASTOCSI	MIPI-CSI interface camera kit based on OmniVision chipset OV5640	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

How to Reach Us:

Home Page:

 $\, nxp.com \,$ 

Web Support:

nxp.com/support

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