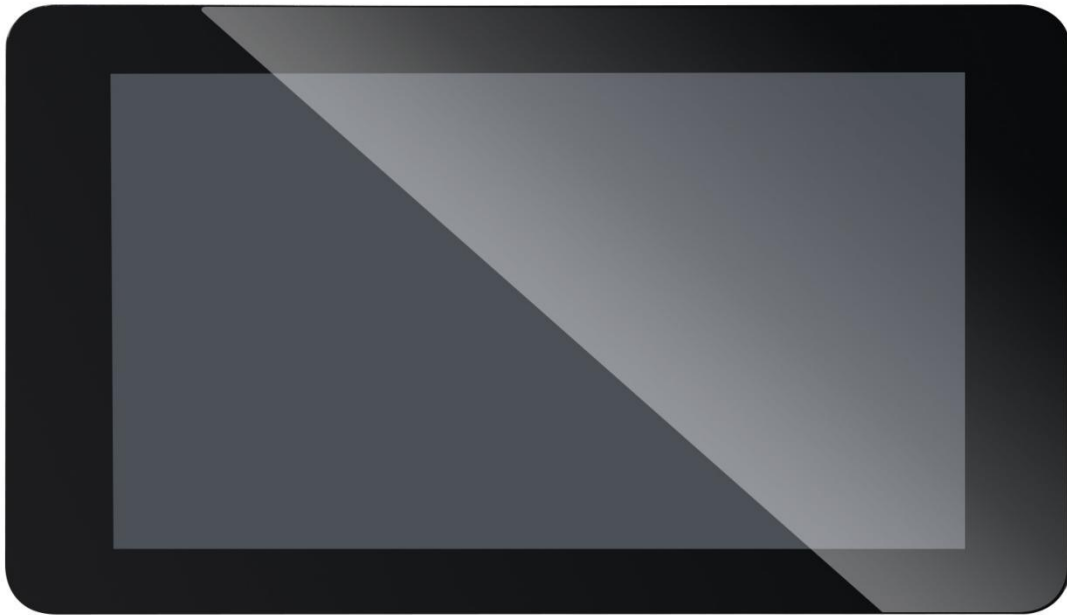


## LCD-MIPI7C-8MM



| Data       | Version | Modify Details              |
|------------|---------|-----------------------------|
| 2022-12-12 | V1.0    | First Released              |
| 2023-06-26 | V1.1    | Add NXP I.MX8M Plus Support |

## 1 Description

- This LCD-MIPI7C-8MM capacitive touch display enables user to prototype end applications such as tablets, infotainment systems and embedded projects.
- This display is compatible with SBC-IMX8MM Series.
- The display's active area is 154.21mm x 85.92mm featuring a resolution of 1024 x 600
- The display connects to the SBC-IMX8MM via an adapter board which handles power and signal conversion to the standardize SBC-IMX8MM 30-pin Connector and IIC Connector.
- Note: Only compatible with the SBC-IMX8MM Platform.

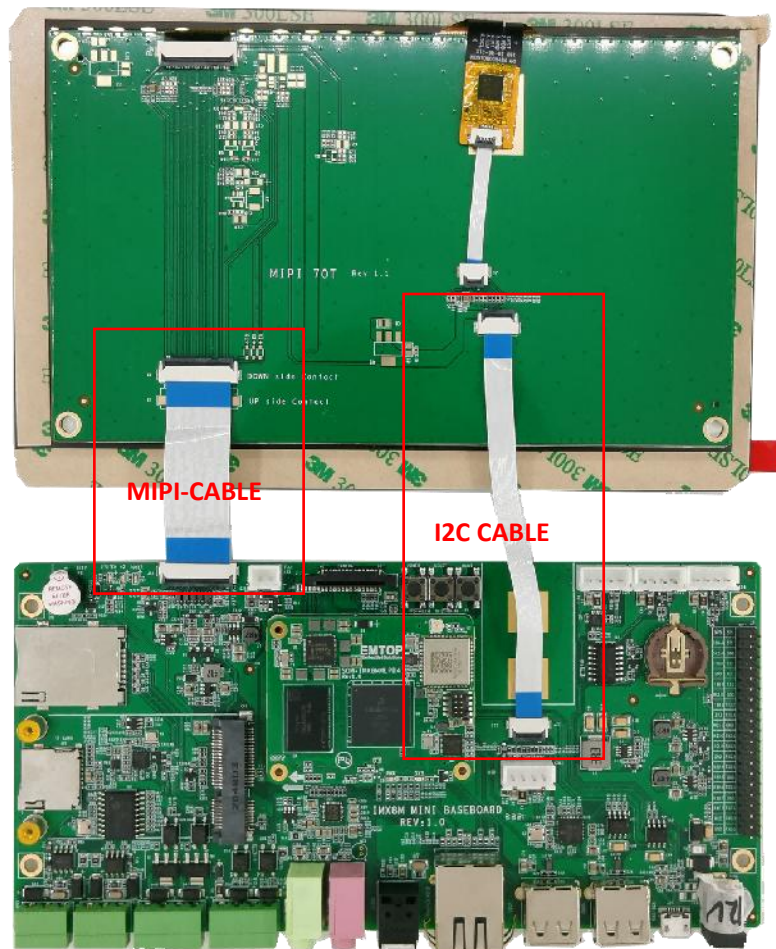
## 2 Specification

| Item                  | Specification  |
|-----------------------|----------------|
| Resolution            | 1024x600       |
| Touch IC              | GT911          |
| LCD Type              | TFT            |
| Display color         | 16.7M          |
| Viewing Direction     | 6              |
| Operating temperature | -30° -+80°     |
| ActiveArea(W×H)       | 154.21x85.92mm |
| Number of Dots        | 1024×RGB×600   |
| Backlight             | 21pcs          |
| Data Transfer         | MIPI           |



## 4 Work With NXP I.MX8M MINI Board

### 4.1 Connection



### 4.2 Enable Mipi Display As Output Device

#### 4.2.1 Modify uEnv.txt

System Boot up from EMMC

```
$sudo nano /run/media//mmcblk2p1/u.Env.txt
```

## System Boot up from TF Card

```
$sudo nano /run/media/mmcbk1p1/uEnv.txt
```

Remark:

- Boot from emmc, the device is **/mmcblk2p1/**
- Boot from TF card, the device is **/mmcblk1p1/**

## 4.2.2 For SOM-IMX8MM-LPD4

```
fdt_file=emtop-mc-si8mm.dtb  
#fdt_file=emtop-mc-si8mm-lt8912-lvds.dtb  
#fdt_file=emtop-mc-si8mm-vislcd-mipi.dtb  
#fdt_file=emtop-mc-si8mm-hdmi.dtb
```

Remark:

Add"#" Means Disable, remove " #" Means Enable

## 4.2.3 For SOM-IMX8MM

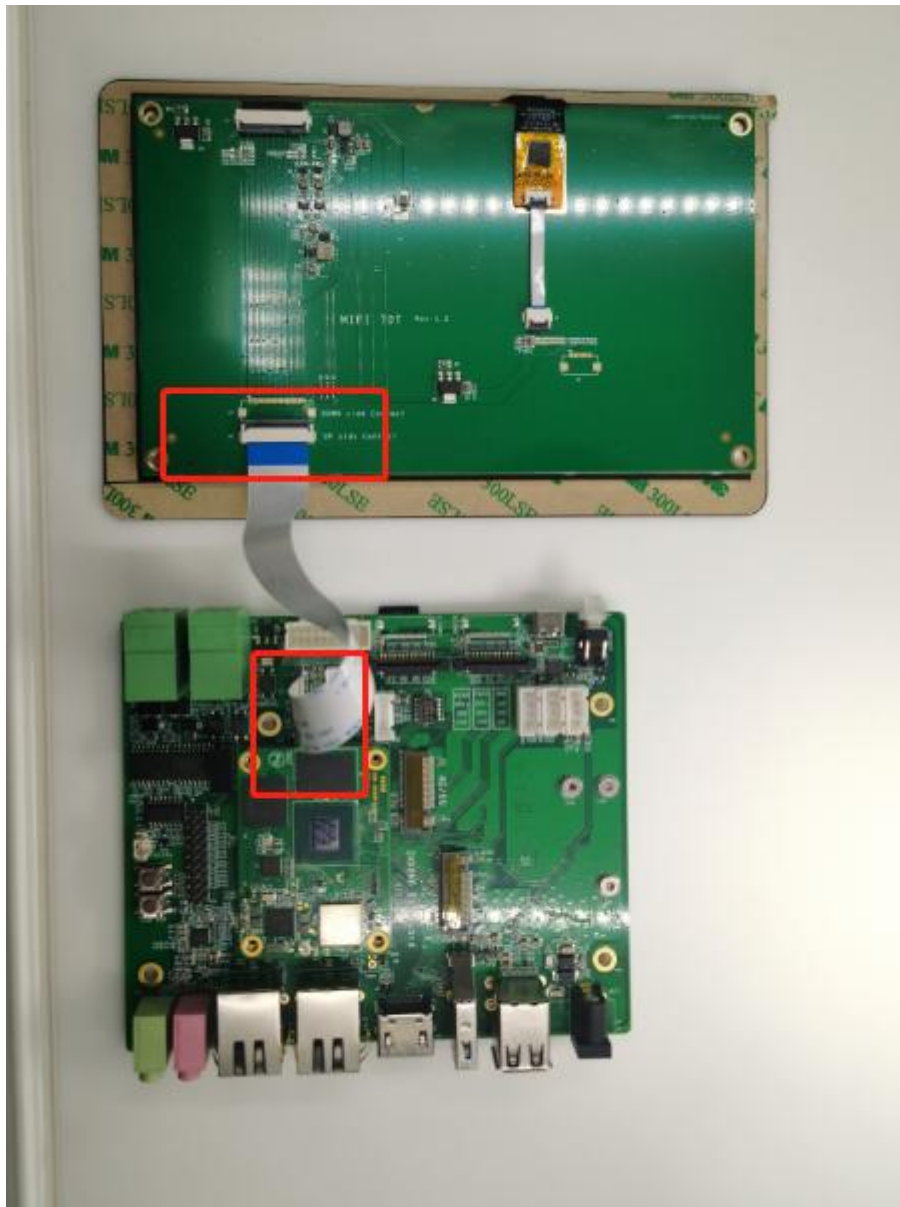
```
fsl-imx8mm-demo.dtb  
#fsl-imx8mm-demo-vislcd-mipi.dtb  
#fdt_file=emtop-mc-si8mm-vislcd-mipi.dtb  
#fsl-imx8mm-demo-lt8912-lvds.dtb
```

Remark:

Add"#" Means Disable, remove " #" Means Enable

## 5 Work With NXP I.MX8M Plus Board

### 5.1 Connection



### 5.2 Enable MIPI Display As default Output Device

You can find below dtb file under TF/EMMC boot Partition

|                                     |                 |
|-------------------------------------|-----------------|
| emtop-imx8mp-baseboard-hdmi.dtb     | HDMI Output     |
| emtop-imx8mp-baseboard-mipi-dsi.dtb | MIPI-DSI Output |
| emtop-imx8mp-baseboard-lvds.dtb     | LVDS Output     |

## 5.2.1 Select output device Under Windows:

You can check the file u.Env.txt from the TF card boot Partition

|                                     |                 |        |           |
|-------------------------------------|-----------------|--------|-----------|
| ChangeLog                           | 2023/6/12 13:17 | 文本文档   | 1 KB      |
| emtop-imx8mp-baseboard-hdmi.dtb     | 2023/3/17 7:52  | DTB 文件 | 65 KB     |
| emtop-imx8mp-baseboard-lvds.dtb     | 2023/3/17 7:52  | DTB 文件 | 65 KB     |
| emtop-imx8mp-baseboard-mipi-dsi.dtb | 2023/3/17 7:52  | DTB 文件 | 65 KB     |
| Image                               | 2023/6/12 13:14 | 文件     | 30,691 KB |
| uEnv                                | 2023/3/9 3:48   | 文本文档   | 1 KB      |

```
# fdtfile=emtop-imx8mp-baseboard-hdmi.dtb  
fdtfile=emtop-imx8mp-baseboard-mipi-dsi.dtb  
# fdtfile=emtop-imx8mp-baseboard-lvds.dtb  
|
```

Remove the #. means MIPI-DSI Output method enable.

## 5.2.2 Selete Output device from board

System Boot up from EMMC

```
$sudo nano /run/media//mmcblk2p1/u.Env.txt
```

System Boot up from TF Card



```
$sudo nano /run/media/mmcblk1p1/uEnv.txt
```

Remark:

- Boot from emmc, the device is **/mmcblk2p1/**
- Boot from TF card, the device is **/mmcblk1p1/**

