



QUICK GUIDE

# VIA Edge AI Developer Kit

# 1. Packing List

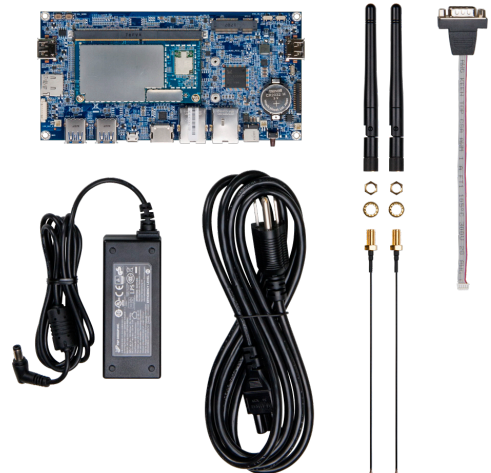
## Items for STK-VT6093-01A1

- 1 x SOM-9X20 module
- 1 x SOMDB2 carrier board
- 1 x VT6093 audio module
- 1 x COM cable
- 1 x AC adapter
- 1 x Power cord US type
- 2 x Antennas for Wi-Fi & Bluetooth
- 1 x VT6093-CAM-T Camera-CSI converter board
- 1 x 13MP CMOS camera module
- 1 x FPC cable for CSI connector



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# 2. Optional Accessories

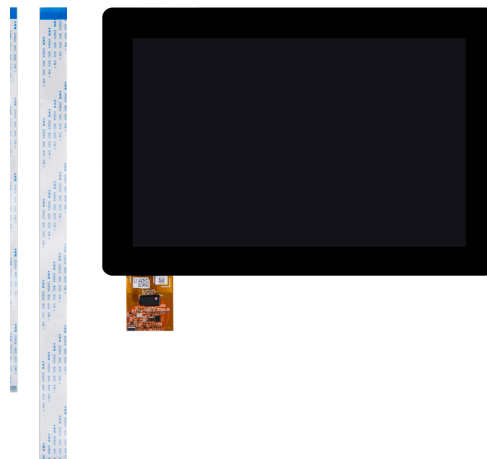
## Touch Panel

### Part Number

99G47-01025F

### Description

10.1" MIPI 16:10 (WUXGA 1920 x 1200, 16.7M) LCD Touch panel with USB FPC touch cable and MIPI FPC cable

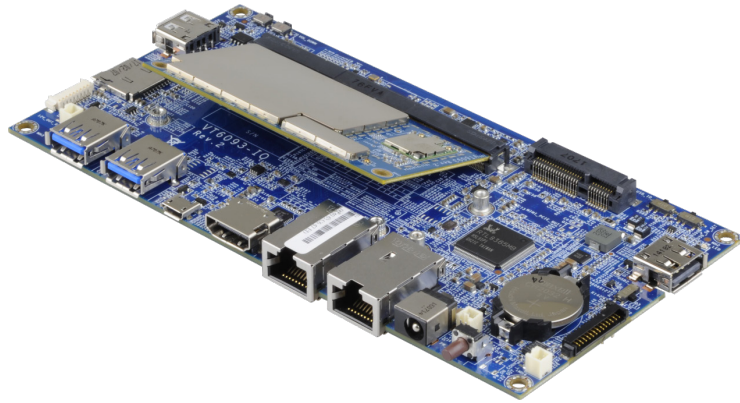


## 3. Developer Kit Assembly

### 3.1 Installing the SOM-9X20 Module on the SOMDB2 Carrier Board

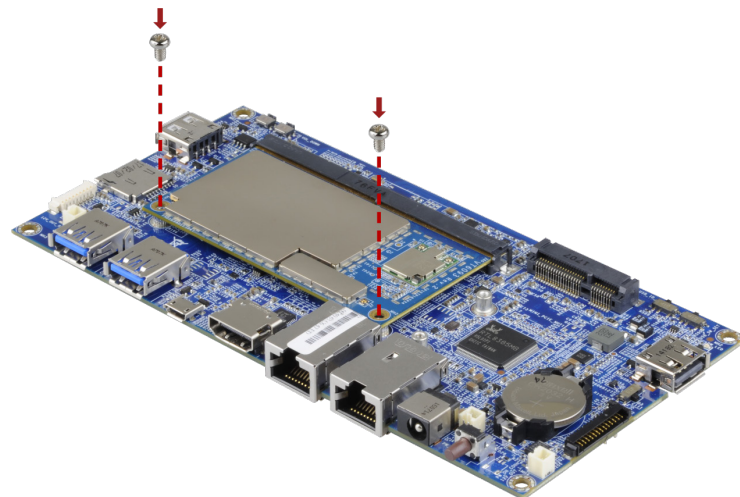
#### Step 1

Align the notch on the SOM-9X20 module with its counterpart on the MXM 3.0 slot on the SOMDB2 carrier board. Then insert the module at a 30° angle.



#### Step 2

Once the SOM-9X20 module has been fully inserted, push down the module until the standoff holes align with the screw holes and then secure the module with the provided screws.



## 3.2 Connecting the 13MP CMOS Camera Module

### Step 1

Connect the FPC cable to the VT6093-CAM-T (Camera-CSI converter board).



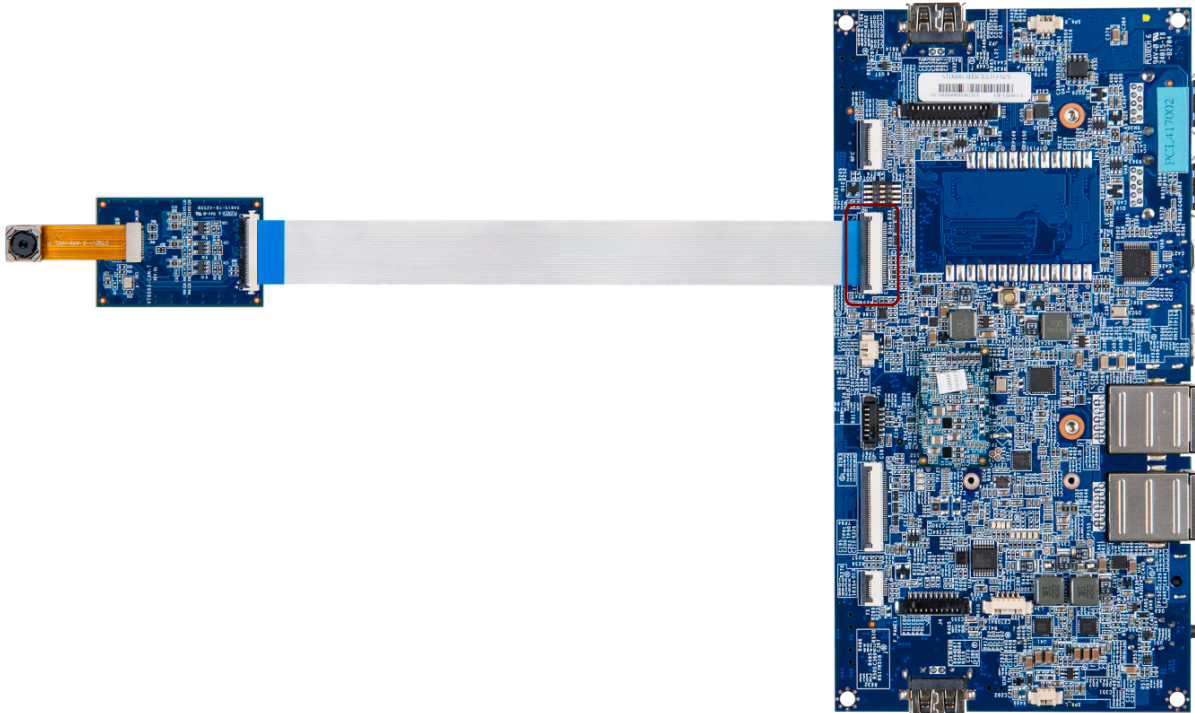
### Step 2

Connect the 13MP CMOS camera module to the VT6093-CAM-T (Camera-CSI converter board).



### Step 3

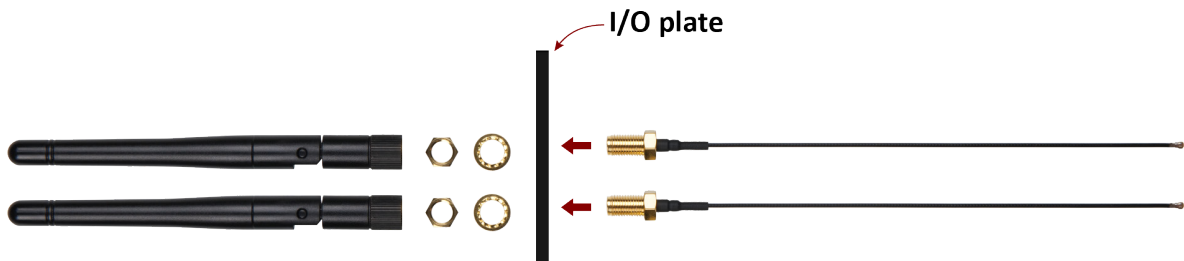
Connect the other end of the FPC cable to the MIPI CSI connector on the SOMDB2 carrier board.



### 3.3 Connecting Wi-Fi and Bluetooth Antennas

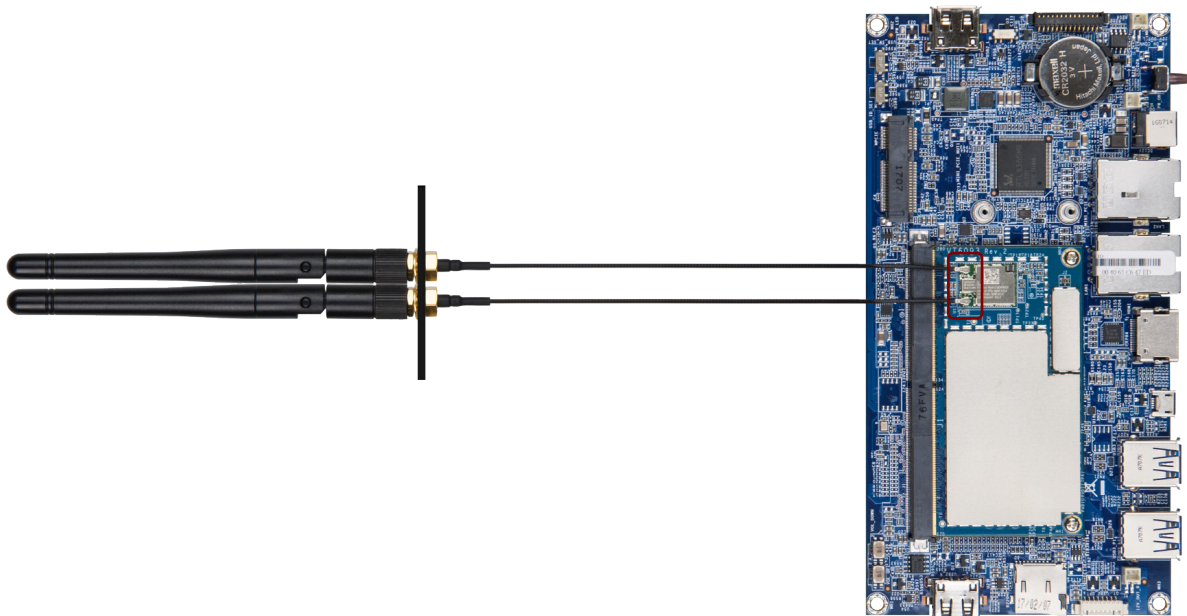
#### Step 1

Insert the antenna cables into the antenna holes from inside of the chassis (I/O plate). Insert the washers and fasten it with the nuts, and then install the external Wi-Fi and Bluetooth antennas.



#### Step 2

Connect the plug connectors of the antenna cables onto the respective micro-miniature RF antenna connectors on the onboard Wi-Fi+BT LGA module on the SOM-9X20 module.



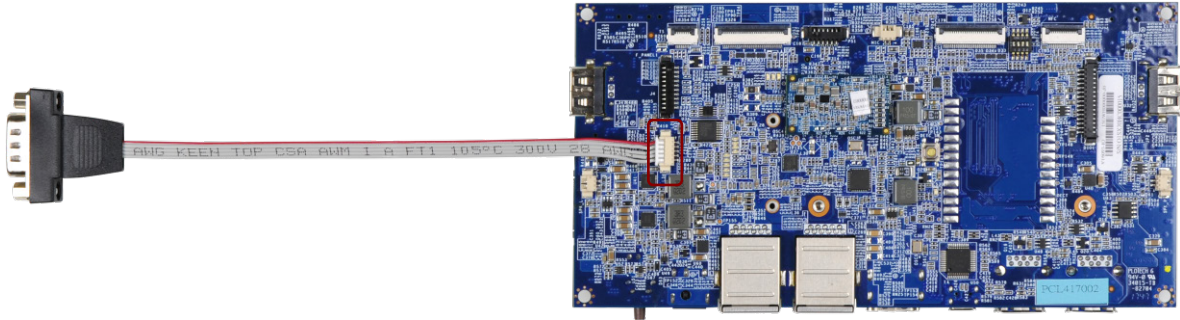
**Reminder:**

We recommend to use a Jig when mating or unmating the plug connector to and from the micro-miniature RF antenna connector on the onboard Wi-Fi & BT LGA module. For more details, refer to Appendix B.

## 3.4 Connecting the COM Cable

### Step 1

Connect the COM cable to the COM connector on the SOMDB2 carrier board.

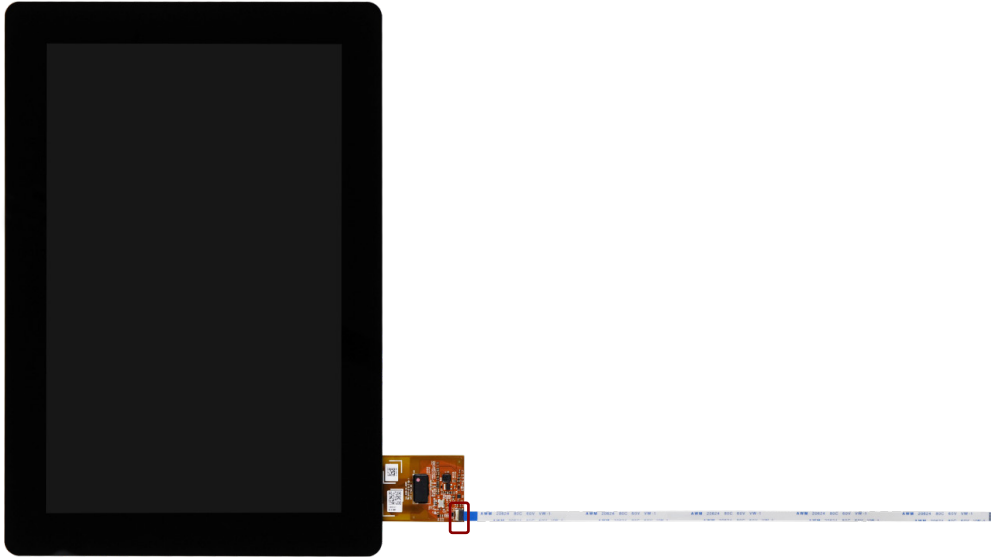


# Appendix A. Connecting LCD Touch Panel

## A.1. Connecting 10.1" MIPI LCD Touch Panel

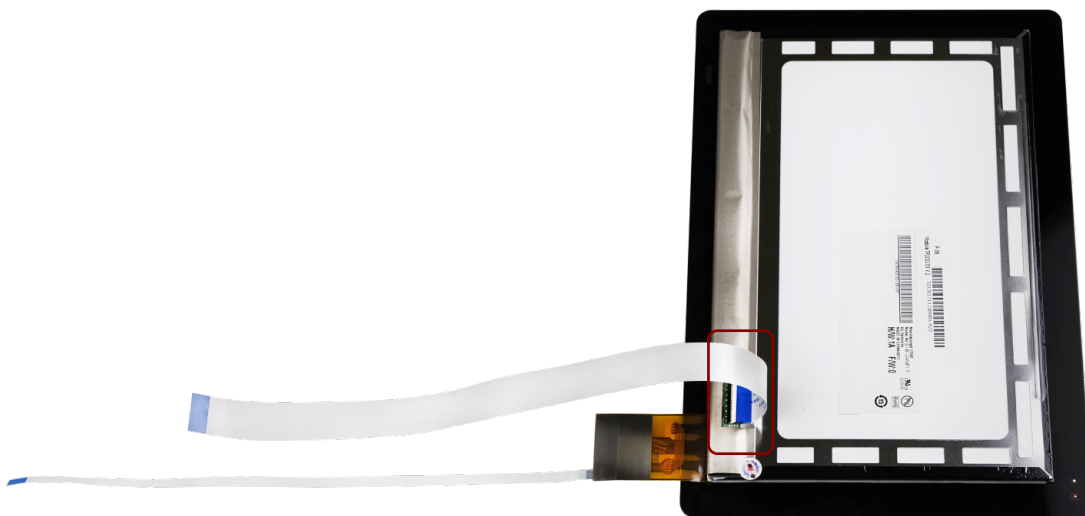
### Step 1

Connect the USB FPC touch cable to the flexible printed circuit on the LCD touch panel.



### Step 2

Connect the MIPI FPC cable to the LCD connector on the back of the LCD touch panel.



### Step 3

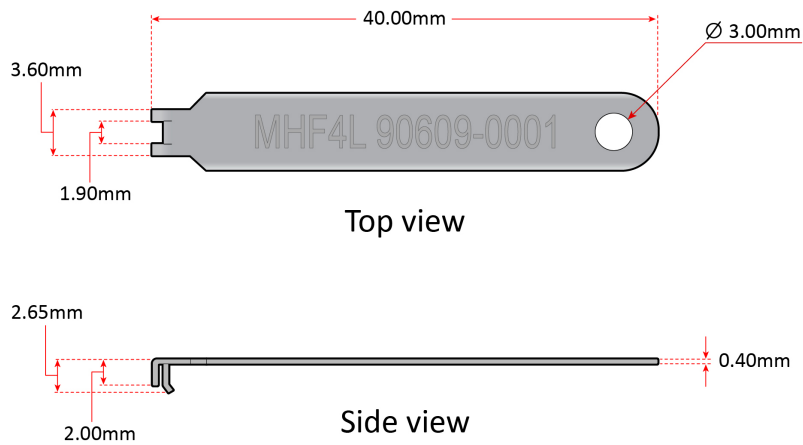
Connect the other ends of the USB FPC touch cable and MIPI FPC cable to the P-Cap touch connector and MIPI DSI LCD panel connector respectively on the SOMDB2 carrier board.





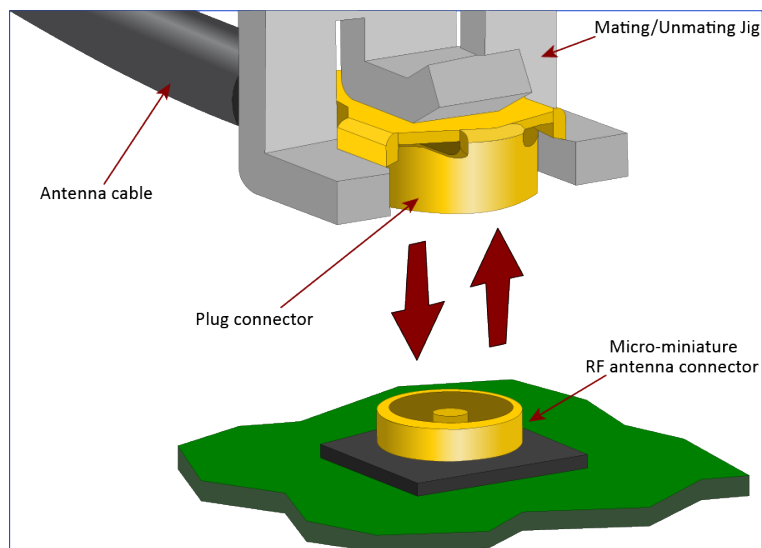
# Appendix B. Recommended Mating & Unmating Jig

## B.1. Jig Dimensions



## B.2. Mating Method of Plug Connector

Using the jig, align the plug connector onto the micro-miniature RF antenna connector. Then push down gently until the plug connector is fully connected. The recommended force must be 30N (maximum).





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