



# Genio 1200 Evaluation Kit Quick Start Guide

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## Version History

Version	Date	Author	Description
0.1	2023-05-09	MediaTek	Draft Release
0.2	2023-05-25	MediaTek	Update Figure 3-1, Figure 3-2

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# 1 Packing List

**Table 1-1 Genio 1200 EVK Packing List**

S.No	Part Number or Marketing	Item Name	Description	Quantity
1	Genio 1200 EVK-P1V2	Genio 1200 EVK Main Board		1
2	IoT-CAM-DTB -D1V2-D2	D2 Camera Board	Camera Daughter Board Using IMX214 Image Sensor	1
3	IoT-CAM-DTB-D1V3-D6	D6 Camera Board	Camera Daughter Board Using AR0830 Image Sensor	1
4	KD070FHFID078-01-C021A	7" LCD Panel	LCM Module	1
5	M.2 Wi-Fi 6 module AW-XB468NF (IC: MT7921L)	Wi-Fi Module	Installed	1
6	IPEX to IPEX cable-158mm		Installed on Mainboard	1
7	IPEX to IPEX cable-50mm		Installed on Mainboard	1
8	SMA antenna	Wi-Fi Antenna		2
9	12V AC adaptor + power cord			1

## 2 Genio 1200 EVK System Setup

The Genio 1200 EVK, the entire peripherals include:

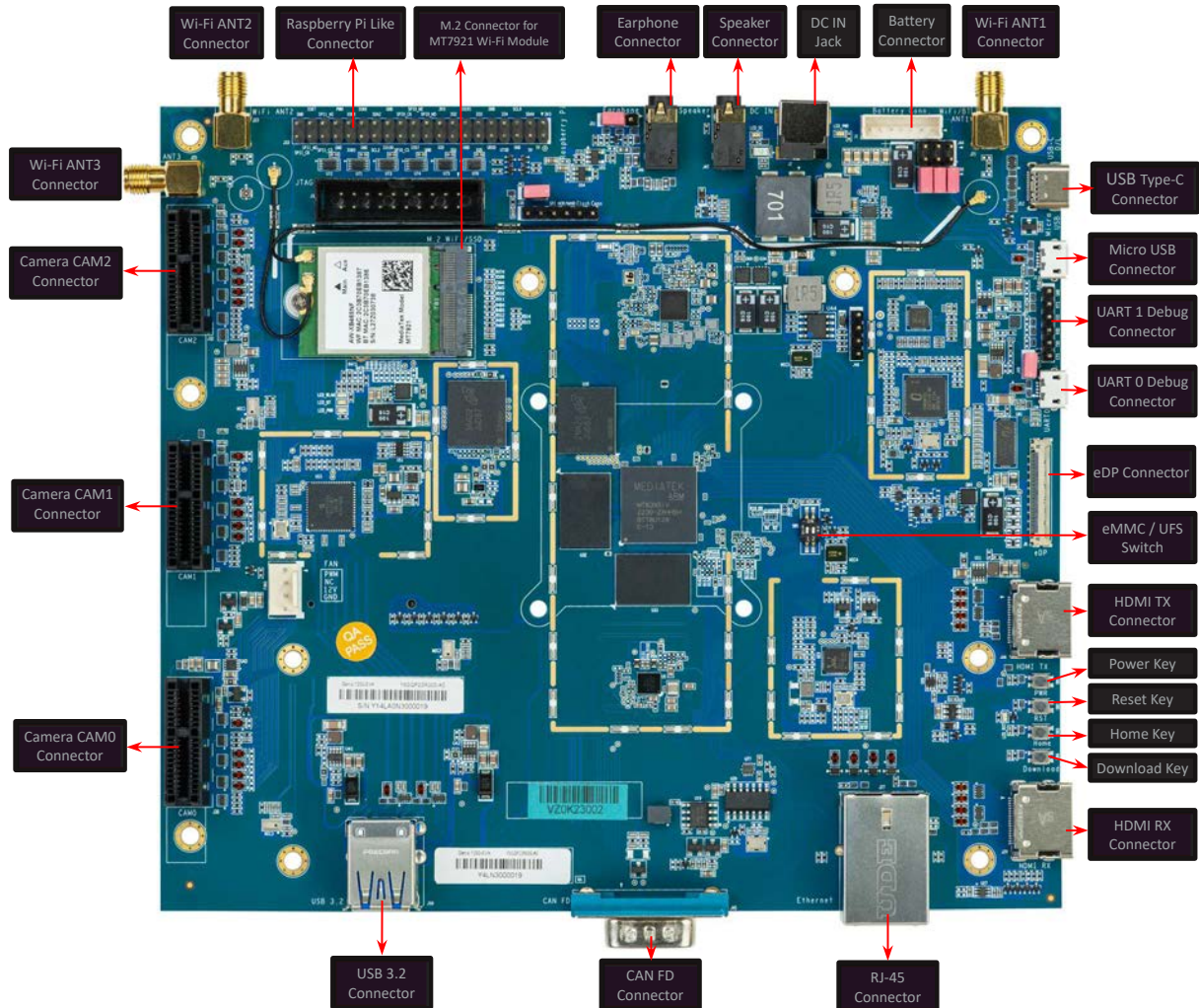
- 1: LCM module with touch panel (installed)
- 2: D2 camera daughter board
- 3: D6 camera daughter board
- 4: Wi-Fi module (installed) with 2 antennas
- 5: Power adapter with power cord



**Figure 2-1 Genio 1200 EVK Set**

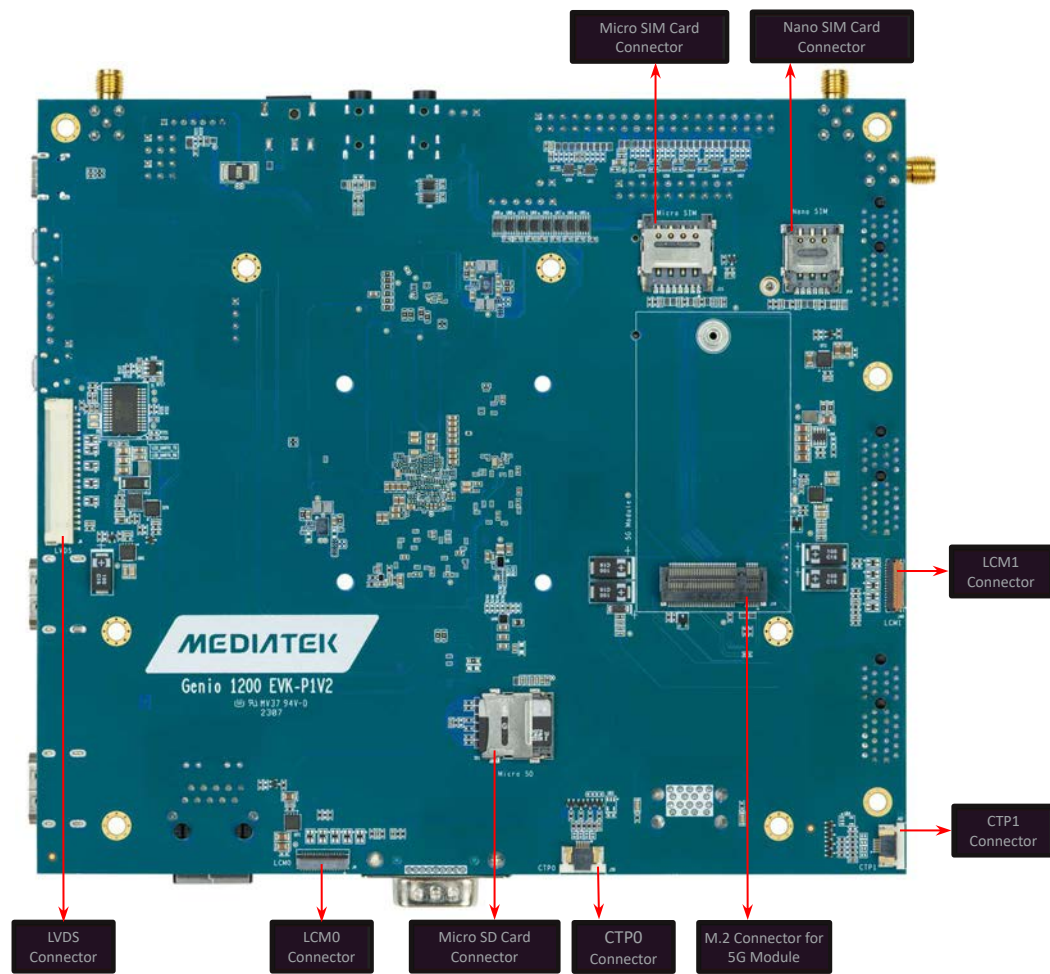
### 3 Genio 1200 EVK Board Overview

Please refer below picture for IO function overview of EVK.



**Figure 3-1 Genio 1200 EVK Top View**

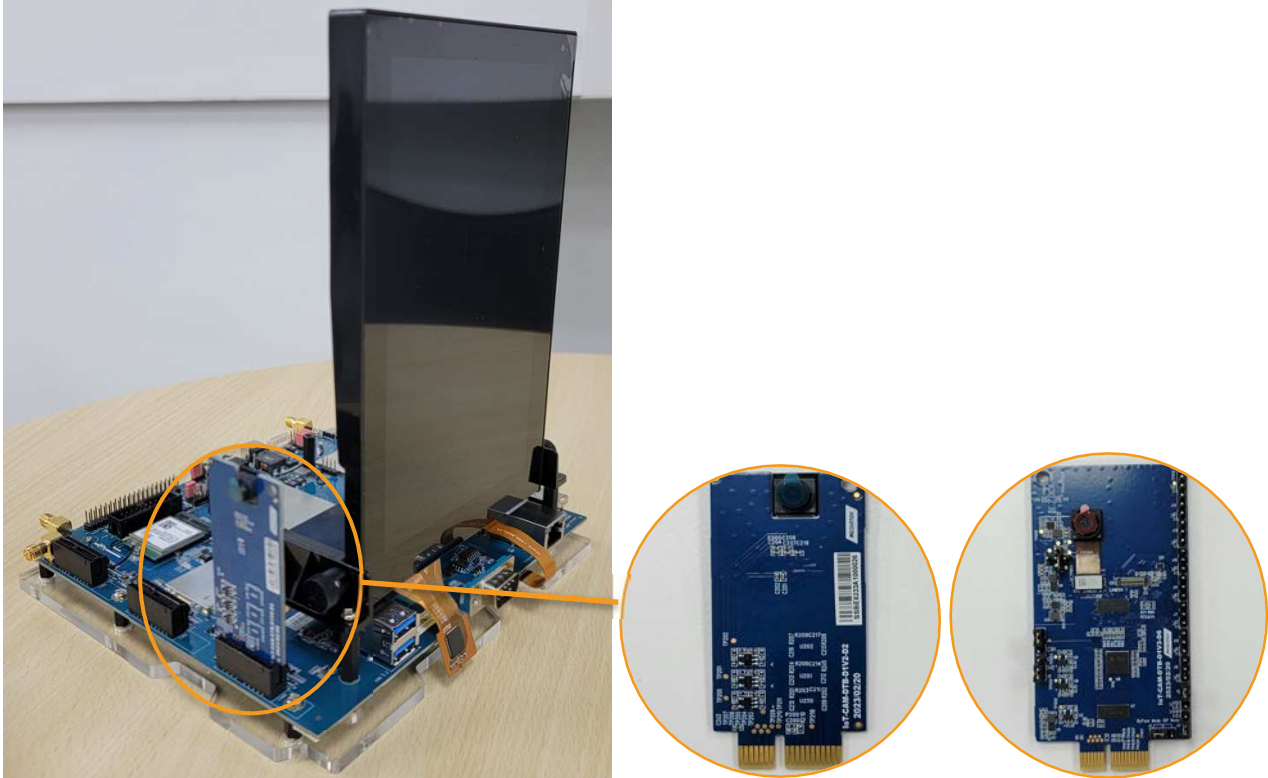




**Figure 3-2 Genio 1200 EVK Bottom View**

## 4 Camera Daughter Board Installation

Insert D2/D6 camera daughter board to Genio 1200 EVK CAM0 (or CAM2) connector.



**Figure 4-1 D2/D6 Camera Daughter Board Installation**

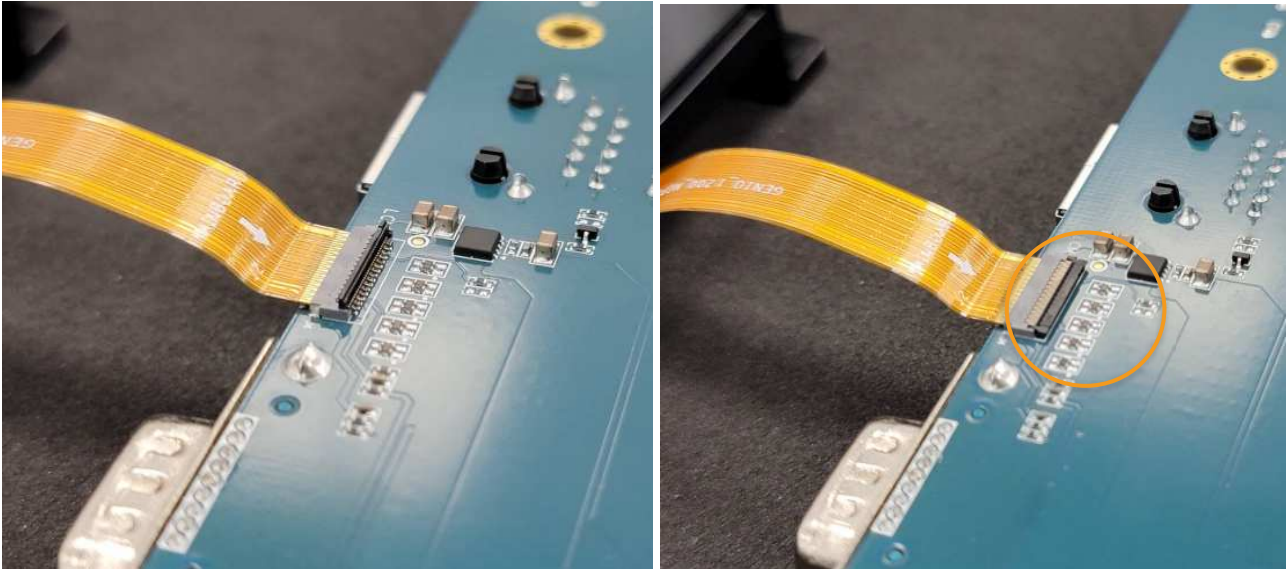


## 5 MIPI DSI Panel FPC and Touch Cable Connection

Install procedure:

- Step 1

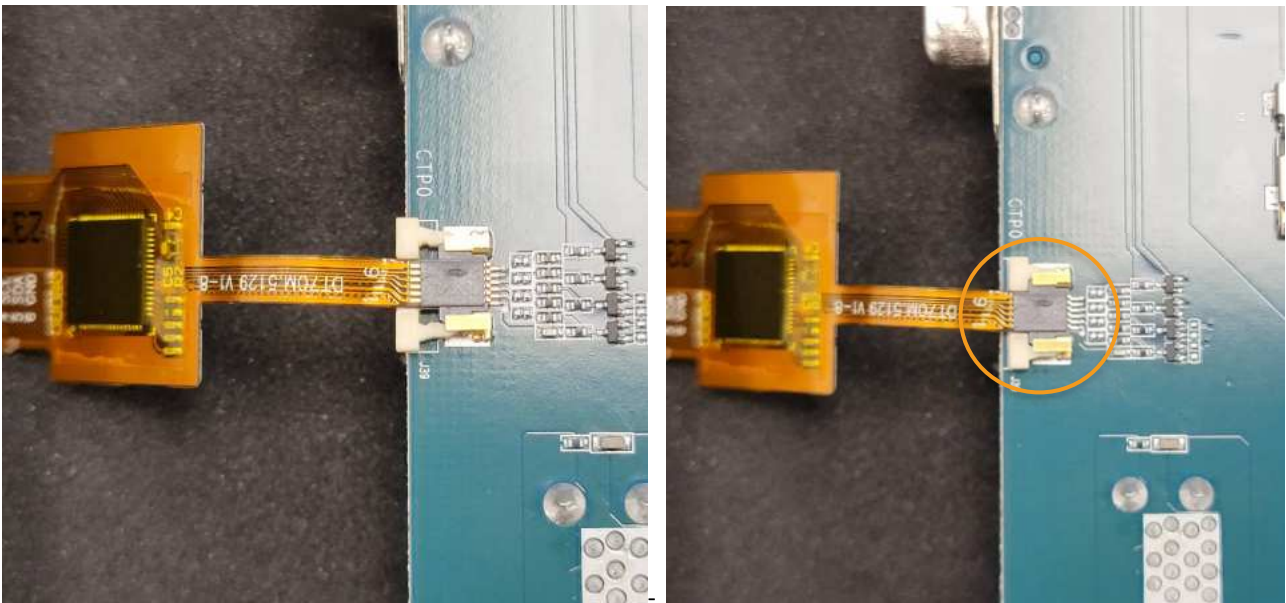
Insert the MIPI DSI panel FPC into Genio 1200 EVK LCM0 connector. After cable inserted, the FPC connector must be pressed down firmly.



**Figure 5-1 Connect the MIPI DSI Panel FPC**

- Step 2

Loosen the Genio 1200 EVK CPT0 connector head, insert the touch cable into CPT0 connector. After cable insert, press tightly the connector head.



**Figure 5-2 Connect the Touch Cable**

## 6 How to Power Up the System

Step1: Must install Camera DTB on CAM0 or CAM2 connector.

(If camera app without in Android desktop, please refer to chapter 7 Appendix of Genio 1200 EVK User Guide for fixed it)

Step2: Connect UART0 to the computer via a micro-USB cable. (If you want to see the logs)

Step3: Plug in the DC 12V power adapter.

Step4: Long press PWR button more than 3 seconds.

You will see the screen is shown on MIPI display and some trace logs in UART0.

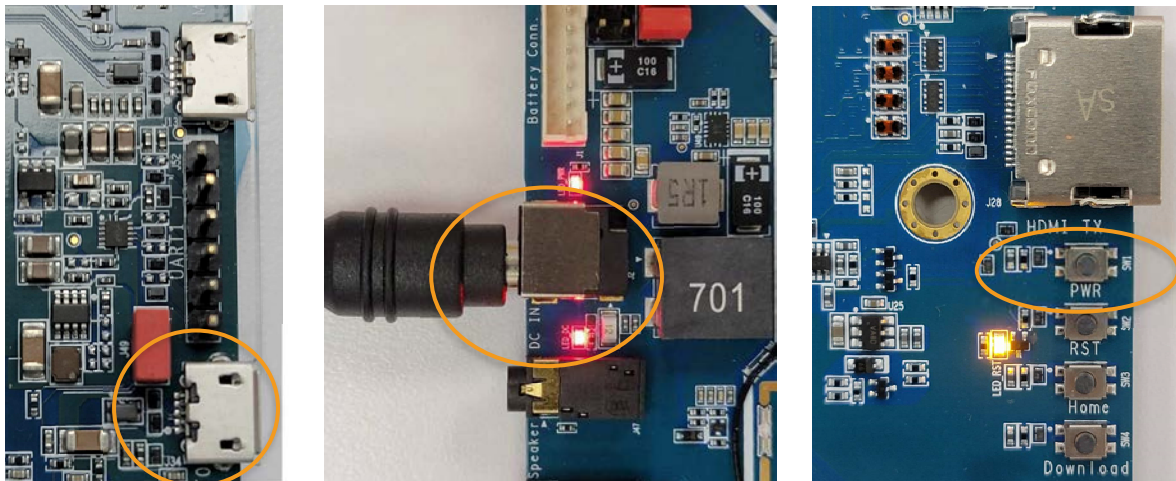


Figure 6-1 Power Up the System

```
[ 28.759408] <4>-(4) [1070:Binder:1022_2][CEC] mtk_cec_tx_event_handler,888,err:Header NACK
[ 28.760435] <4>-(4) [1070:Binder:1022_2][CEC] mtk_cec_tx_event_handler,913,err:Retransmit
[ 28.761451] <4>-(4) [173:kworker/4:2][CEC] mtk_cec_tx_work_handle,740,notify CEC CORE adapter trans
mit NACK
[ 28.763097] <7>-(7) [130:cec-mtk-hdmi-ce][CEC] mtk_cec_adap_transmit
[ 28.763665] <5>-(5) [1083:ActivityManager]BOOTPROF: 28763.662145:AP_Init:[service]:[com.android
.inputmethod.latin]:[com.android.inputmethod.latin/com.android.inputmethod.latin.LatinIME]]:pid:35
14
[ 28.763925] <7>-(7) [130:cec-mtk-hdmi-ce][CEC] mtk_cec_print_cec_frame,386,cec message initiator 1
s 0
[ 28.767008] <4>-(4) [1072:android.fg]BOOTPROF: 28767.005222:PMS:reconcileAppsDataLI
[ 28.767744] <7>-(7) [130:cec-mtk-hdmi-ce][CEC] mtk_cec_print_cec_frame,387,cec message follower is
0
[ 28.769639] <7>-(7) [130:cec-mtk-hdmi-ce][CEC] mtk_cec_print_cec_frame,388,cec message length is 1
5
[ 28.771098] <7>-(7) [130:cec-mtk-hdmi-ce][CEC] mtk_cec_print_cec_frame,389,cec message opcode is 0
x47
[ 28.772242] <7>-(7) [130:cec-mtk-hdmi-ce][CEC] mtk_cec_send_msg,667,tx header=0x40,seq=6,op=0x47,1
-15
[ 28.773396] <7>-(7) [130:cec-mtk-hdmi-ce][CEC] mtk_cec_tx_trigger_send
[ 28.790010] <1>-(1) [1:init]init 27: [28768][0]processing action (sys.boot_completed=1) from (/vend
or/etc/init/hw/init.mt8395.rc:997)
[ 28.790408] <6>-(6) [72:kworker/6:1]mt635x-auxadc mt635x-auxadc: name:CHIP_TEMP, channel=4, adc_ou
t=0x634, adc_result=697
[ 28.792305] <1>-(1) [1:init]init 27: [28768][0]Command 'write /sys/devices/system/cpu/eas/enable 2
' action=SYS_BOOT_COMPLETED=1 (/vendor/etc/init/hw/init.mt8395.rc:999) took 0ms and failed: Unable t
o write to file '/sys/devices/system/cpu/eas/enable': open() failed: Permission denied
[ 28.802653] <0>-(0) [1:init]init 27: [28779][0]Command 'write /proc/sys/kernel/sched_migration_coe
st_ns 200000' action=SYS_BOOT_COMPLETED=1 (/vendor/etc/init/hw/init.mt8395.rc:1007) took 0ms and fail
ed: Unable to write to file '/proc/sys/kernel/sched_migration_cost_ns': open() failed: Permission de
nied
[ 28.818566] <0>-(0) [347:init]BOOTPROF: 28818.557145: OFF
[ 28.819469] <0>-(0) [1:init]init 27: [28797][0]processing action (sys.boot_completed=1) from (/sys
tem_ext/etc/init/hw/init.ase.rc:50)
[ 28.821290] <0>-(0) [1:init]init 27: [28797][0]starting service 'ase-reinit'...
[ 28.835404] <7>-(7) [1:init]init 27: [28813][0]processing action (ro.build.type=userdebug && sys.b
oot_completed=1) from (/system_ext/etc/init/hw/init.ase.rc:61)
```

Figure 6-2 Log Result Show on Screen

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