Quick Start Guide

Revision History

Date	Version	Description
2023/06/13	V1.0	First Released
2023/07/01	V1.1	Check And Correction

1.Prepare

SBC-IMX8MP Support SSH or Serial to get debug information

- 1xSBC-IMX8MP   Must
- 1x12V@2A Power Adapter   Must
- 1xUSB Type C Cable (Connect to Serial Interface)   Must
- PC(Windows with Putty or other serial /SSH Tool)
- (Option) 1xHDMI Display, 1xEthernet Cable,1xMIPI-DSI Display

2.Hardware Connection
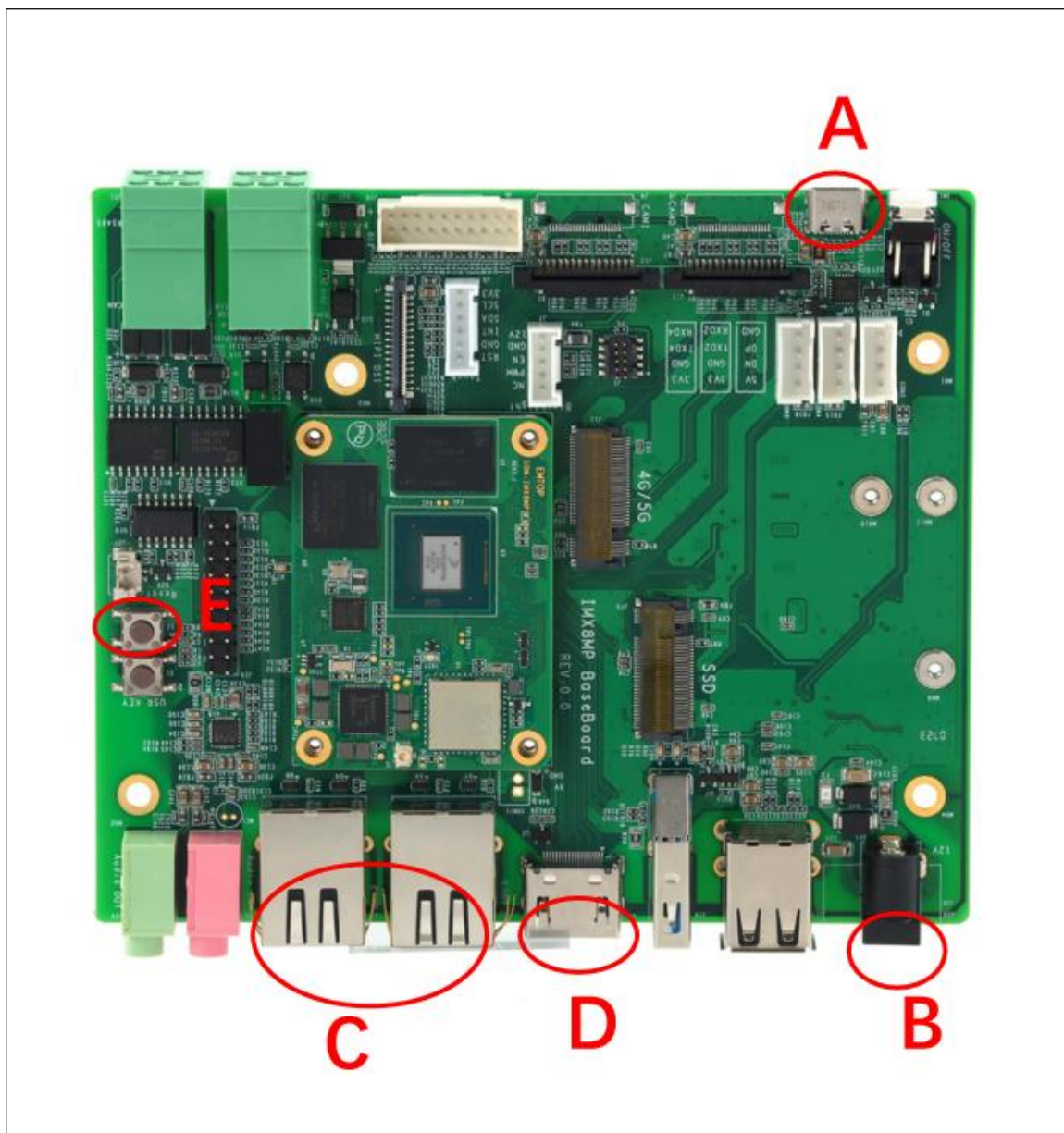
A	Debug Serial, Type-C Interface,Connector To your PC, Drivers will auto install.
B	12V@2A Power Adapter
C	Option,Connect Ethernet cable to your router if you use SSH
D	Option,Connect to your hdmi display
E	If you wish to boot from tf card, Press S2 Reset before Power up

3.Make A Bootable TF Card

Download system Image from below link:

https://www.jianguoyun.com/p/DRcrVQYQ7L_aCRiR7ocFIAA
(Password : 4x4fhu)

| ?	IMX8MP-BASEBOARD-Yocto-SD-REV01.img.xz	👁 ⬇ 871 MB
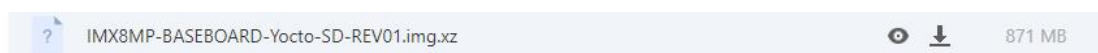
Get the system image from Image directory, named as
IMX8MP-BASEBOARD-Yocto-SD-REVXX.img.xz, unxz it and get the raw image
IMX8MP-BASEBOARD-Yocto-SD-REVXX.img.
If you work under Windows system, please run Tools/win32diskimager to write the
IMX8MP-BASEBOARD-Yocto-SD-REVXX.img into TF Card. If you work under Linux
system, please use dd command to write it into TF Card.

Default output device is hdmi.

| Image Name	Display Supported
IMX8MP-BASEBOARD-Yocto-SD-REVXX.img	HDMI

4.Debug From Serial
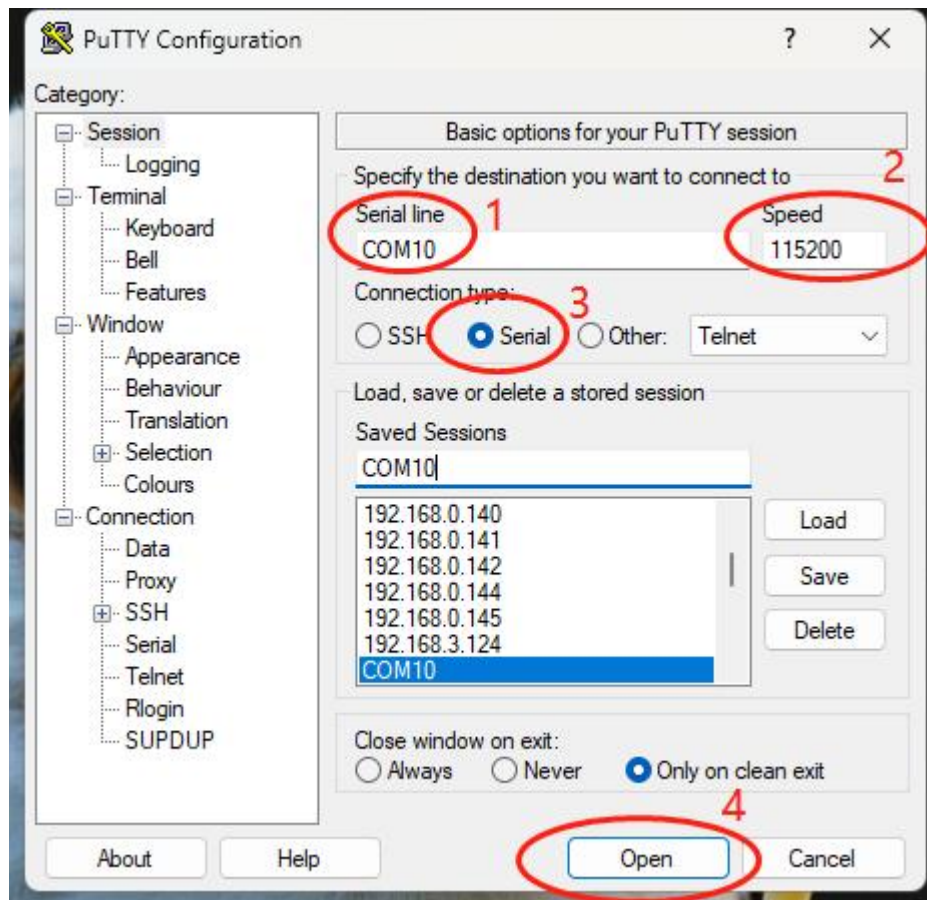
1	After connect the type-c to your pc, check your device manager COM Number
2	Baud rate Choose as 115200
3	Choose Serial
4	Open

You can download drivers or serial/ssh Tools from our github link:
https://github.com/EMTOP-TECH/SOM-IMX8MP

5. Debug From SSH

The Board default enable SSH,default name is imx8mpevk,default user is root.
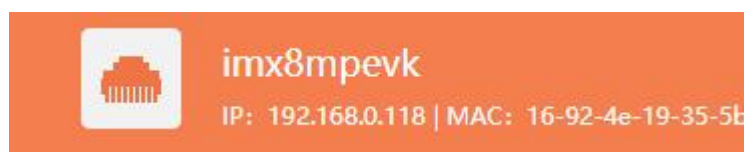
Password is:root

www.emtop-tech.com	https://github.com/EMTOP-TECH/SOM-IMX8MP
sales@emtop-tech.com	support@emtop-tech.com

Output Device Select

The board support 3 kinds output device.**lvds/hdmi/mipi-dsi**

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

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.

Selete Output device from board
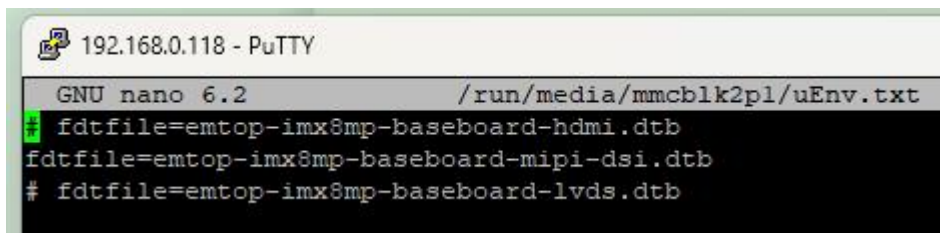
System Boot up from EMMC

```
$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/**