



iMX8MP-SOM-EVB

Rev.1.0 May 2024

User Manual olimex.com

Table of Contents

What is iMX8MP-SOM-EVB	3
Order codes for iMX8MP-SOM-EVB and accessories:	4
HARDWARE	5
iMX8MP-SOM-EVB layout:	6
iMX8MP-SOM-EVB schematics:	7
iMX8MP-SOM-EVB connectors:	8
UEXT	8
Micro-SD-card	9
Buttons	10
EXT1	11
EXT2:	12
M.2 nVM:	13
Audio out:	14
Audio in:	15
SOFTWARE	16
Recommended Olimage Linux images and changelog	16
Olimage Linux guide	
Revision History	17

What is iMX8MP-SOM-EVB

<u>iMX8MP-SOM-EVB</u> is evaluation board for iMX8MP-SOM system on module development board with:

- connectors for iMX8MP-SOM system on module
- HDMI 2.0 connector
- Two Gigabit Ethernet connectors (LAN1 with TSN support)
- Two USB3.0 hosts
- Two CAN drivers and connectors
- M2 nVM SSD disk connector
- UEXT connecotr
- SD-card
- Reset and Power Buttons
- eMMC / Flash connector
- Audio Input on 3.5 mm jack
- Audio Output on 3.5 mm jack
- Dimensions: 155x102 mm

Order codes for iMX8MP-SOM-EVB and accessories:

iMX8MP-SOM-4GB-IND module with iMX8MPLUS, 4GB LPDDR4, EEPROM, PMIC

<u>iMX8MP-SOM-EVB</u> evaluation board for iMX8MP-SOM which can be used

as reference design

MICRO-SD-16GB-CLASS10 16GB microSD card

<u>SY1005E</u> power adapter 5V 2A

<u>USB-SERIAL-F</u> serial debug cable for console log

<u>CABLE-HDMI-50CM</u> HDMI cable

<u>BATTERY-LIPO1400mAh</u> LiPo battery for standalone operation

<u>LCD/LCD-OLinuXino-5CTS</u> 5 inch LCD 800x480 pixels with capacitive touch panel

<u>LCD-OLinuXino-7CTS</u> 7 inch LCD 1024x600 pixels with capacitive touch panel

<u>LCD-OLinuXino-10CTS</u> 10 inch LCD 1024x600 pixels with capacitive touch panel

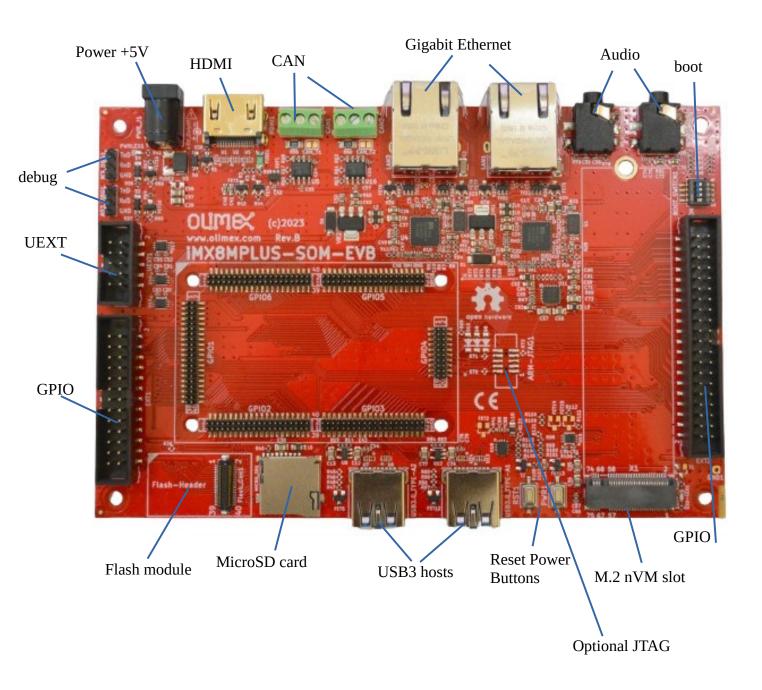
<u>UEXT modules</u> There are temperature, humidity, pressure, magnetic field, light sensors.

Modules with LCDs, LED matrix, Relays, Bluetooth, Zigbee, WiFi,

GSM, GPS, RFID, RTC, EKG, sensors and etc.

HARDWARE

iMX8MP-SOM-EVB layout:



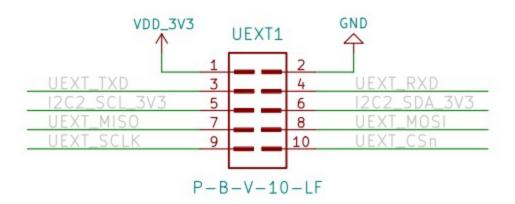
iMX8MP-SOM-EVB schematics:

 $\underline{iMX8MP\text{-}SOM\text{-}EVB}$ latest schematic is on Olimex web.

iMX8MP-SOM-EVB connectors:

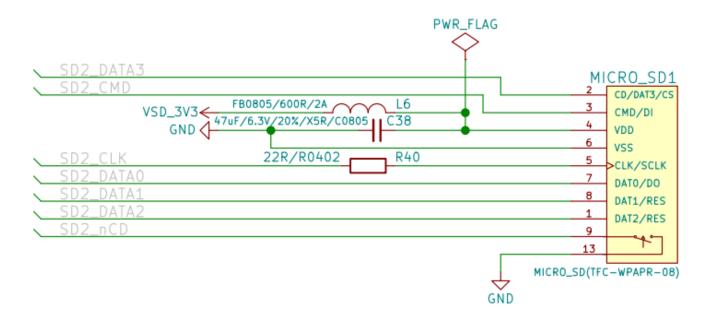
UEXT





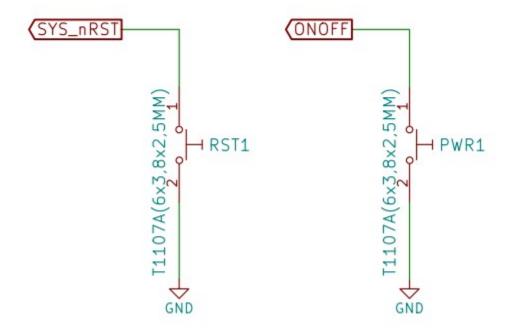
Micro-SD-card

T-Card

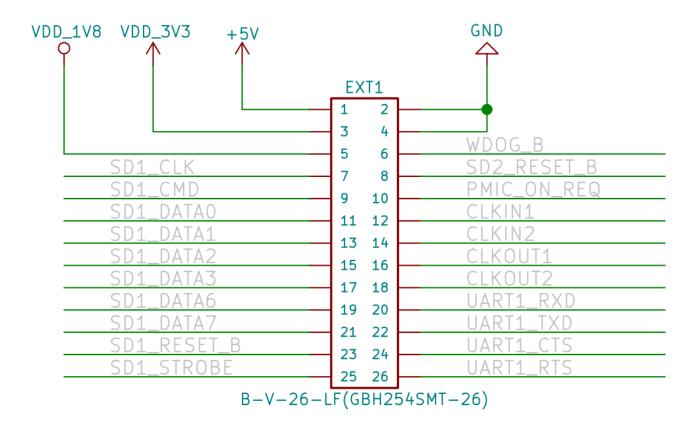


Buttons

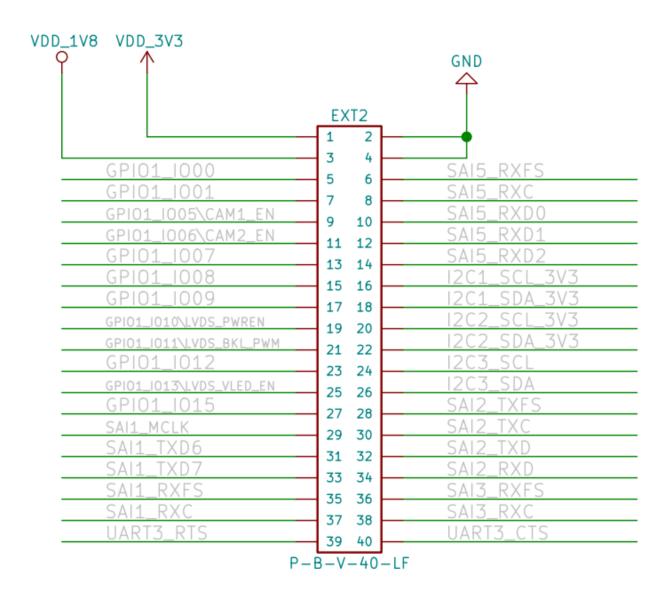
Buttons



EXT1

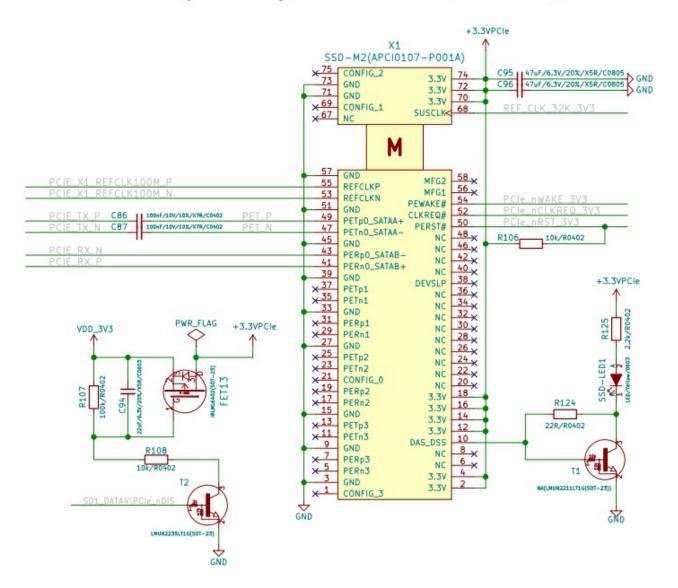


EXT2:



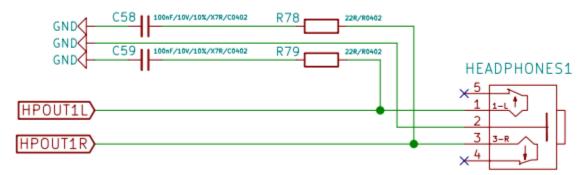
M.2 nVM:

M.2(NGFF) Socket 3 - Key M



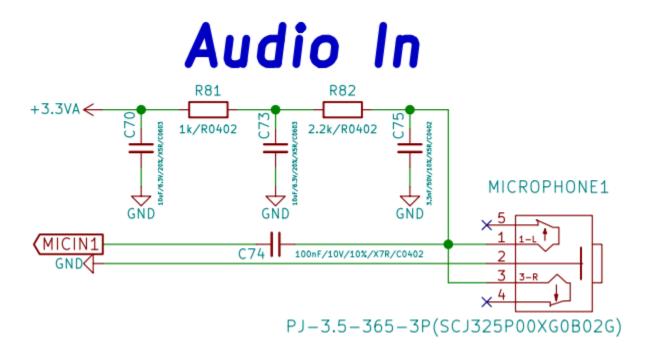
Audio out:

Audio Out



PJ-3.5-365-3P(SCJ325P00XG0B02G)

Audio in:



SOFTWARE

- Recommended Olimage Linux images and changelog
- Olimage Linux guide

Revision History

Revision 1.0 May 2024 initial