



# STMP1(A13)-EVB

## **User Manual**

Rev.1.0 May 2021

olimex.com

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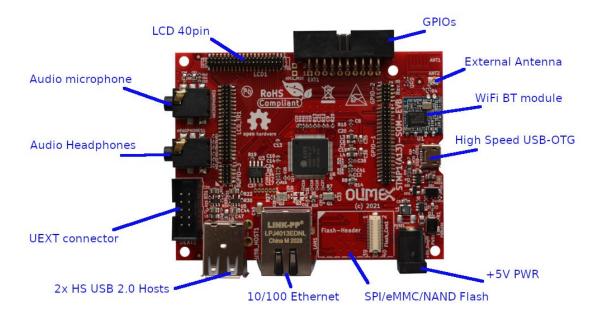
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## **Overview**

<u>STMP1(A13)-EVB</u> is evaluation board for <u>STMP15x-SOM</u> or <u>A13-SOM</u> System On Module running Linux mainline Kernel and Uboot on ST Microelectronics industrial grade Dual Core Cortex-A7 ARM SOC.

As <u>A13-SOM</u> and <u>STMP15x-SOM</u> share same pinout this evaluation board is suitable also for <u>A13-SOM</u> System On Module.

Top view:



#### **General information**

<u>STM32MP15X</u> SOC are Dual-core Arm Cortex-A7 running up to 800 MHz and Cortex-M4 at 209 MHz combined with a LCD interface, dedicated 3D graphics processing unit (GPU).

<u>STMP1(A13)-EVB</u> demo evaluation board is produced only in commercial temperature grade 0-70C.

#### **Order codes**

STMP1(A13)-EVB

only evaluation board for <u>STMP15x-SOM</u> or <u>A13-SOM</u>, does not include SOM module which have to be bough separately

#### STMP1(A13)-EVB Features

- 0.05 inch (1.27 mm) connectors for <u>STMP15x-SOM</u> or <u>A13-SOM</u>
- Two High Speed USB 2.0 Hosts
- High Speed USB 2.0 OTG
- 10/100Mb Ethernet connector
- WiFi / Bluetooth module with PCB antenna and option for external antenna
- Flash module connector for: SPI, eMMC, NAND Flash options
- 3.5mm Audio jack for microphone
- 3.5mm Audio jack for headphones
- UEXT connector
- GPIO connector
- 40 pin 0.05 inch (1.27 mm) step connector compatible with LCD-OLinuXino
- Power supply connector 5VDC

## **Power supply**

STMP1(A13)-EVB requires +5V, 0.2A to operate.

Do not apply more than 5V as this would damage the board.

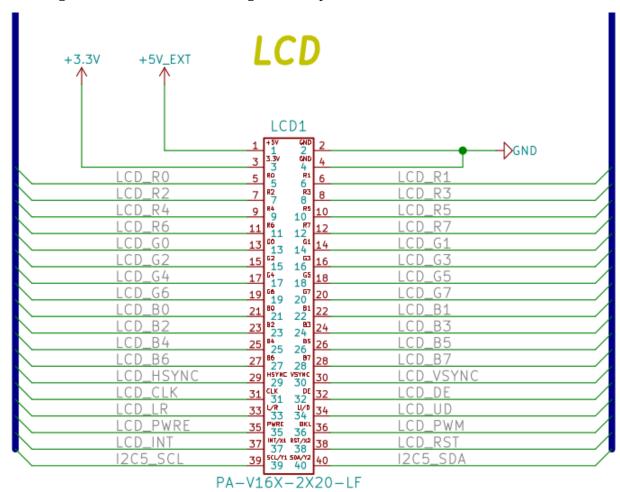
Power consumption (including SOM module) is:

- around 0.4 A during boot
- around 0.6A when working at full speed
- around 1.2A when working at full speed and charge the LiPo battery

## **Connectors**

#### **LCD**

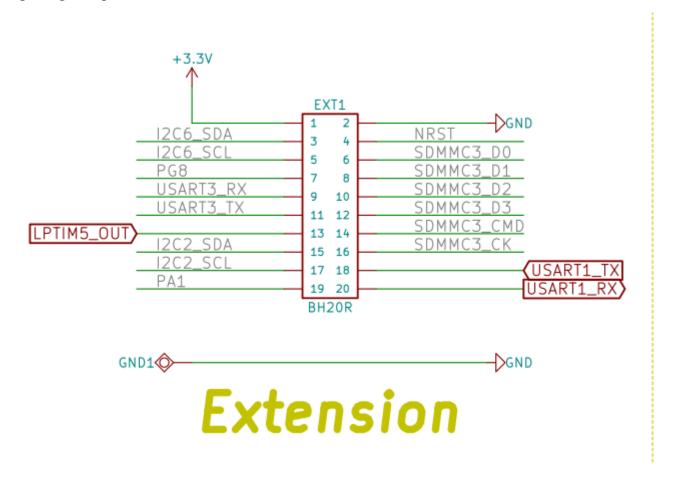
RGB LCD signals and I2C connector to digital touch panel interface.



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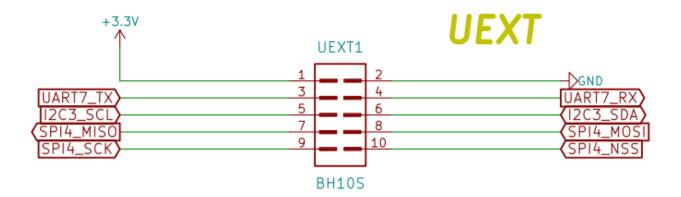
#### **GPIO**

Right angle 20 pin connector with 2x I2C, UART, SDMMC, 2 GPIO, NRST, +3.3V and GND.



#### **UEXT**

<u>UEXT</u> connector for attaching different modules and sensors to SPI, UART, I2C:



## **Revision History**

Revision 1.0 May 2021

## **Contact information**

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