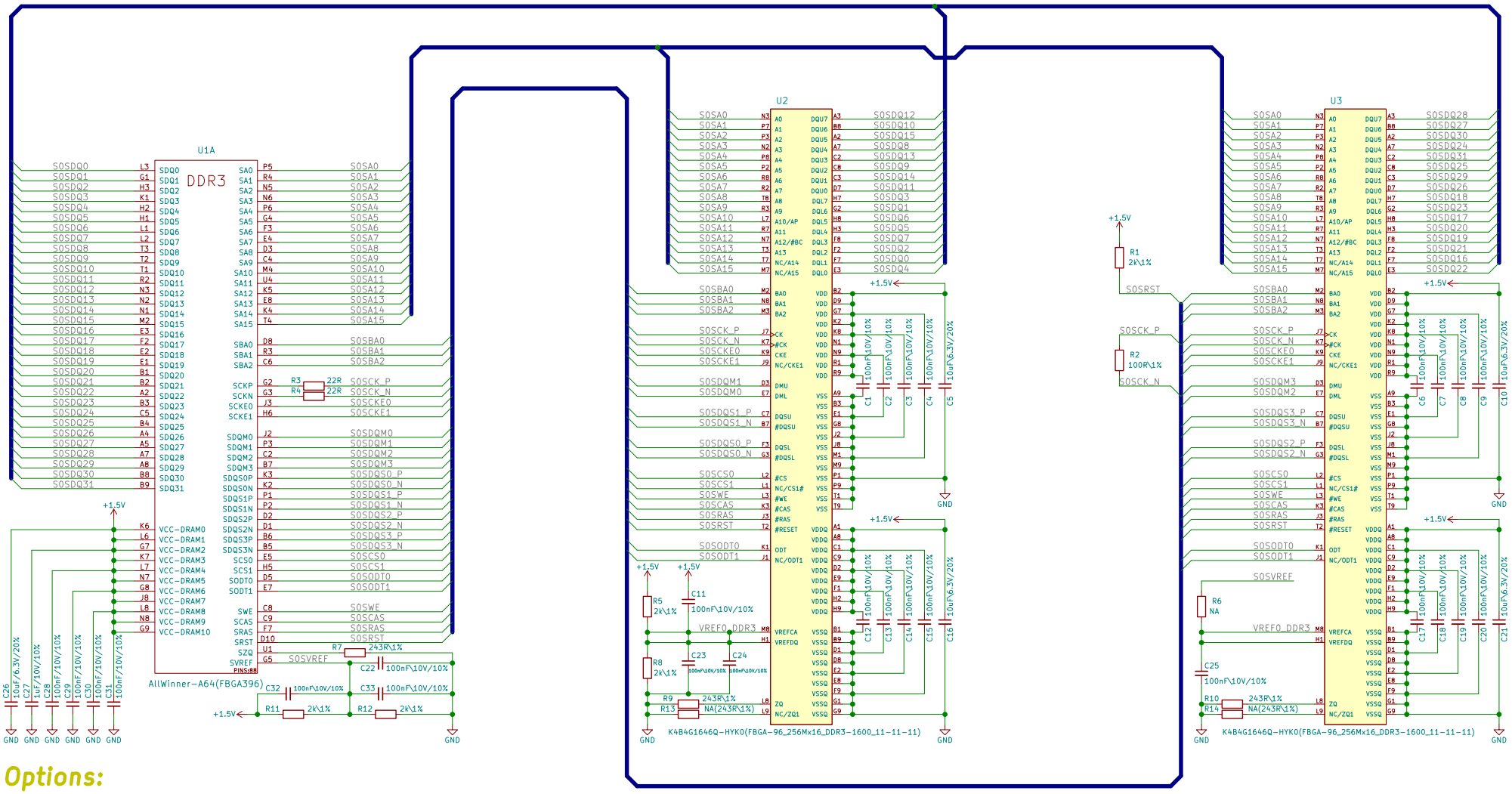
DDR3:1GByte



Options:

1. Use 2(DDR3 256Mx16 Memory chips)x4Gb = 1GByte, i.e. 2xH5TQ4G63MFR-PBC(or K4B4G1646Q-HYK0) -> Default
2. Use 2(DDR3 512Mx16 Memory chips)x8Gb = 2GBytes, i.e. 2xH5TC8G63AMR-PBA(or K4B8G1646Q-MYK0)

Note:

We have used a number of fully compatible, but different DDR3 memories due to supply unavailability.
In such cases the memory part name in the schematic might remain outdated.
It is recommended to always refer to the exact memory name printed on the component itself.

DDR3 Memory

<c> 2020
OLIMEX LTD, Bulgaria

Sheet: /
File: A64-OlinuXino_Rev_G.sch

Title: A64-OLinuXino

Size: A3	Date: 2020-02-11	Rev: G
KiCad E.D.A. kicad 5.1.5-52549c584ubuntu18.04.1		Id: 1/4

NAND Flash

Was removed from the design

eMMC

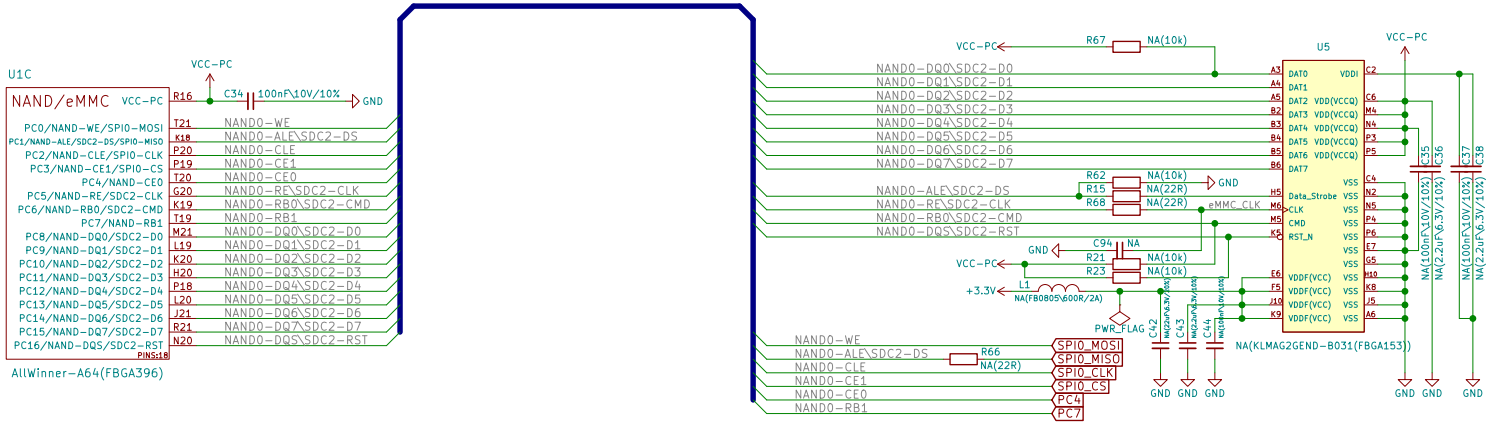
16G Bytes eMMC

Present in -eXG

SPI Flash

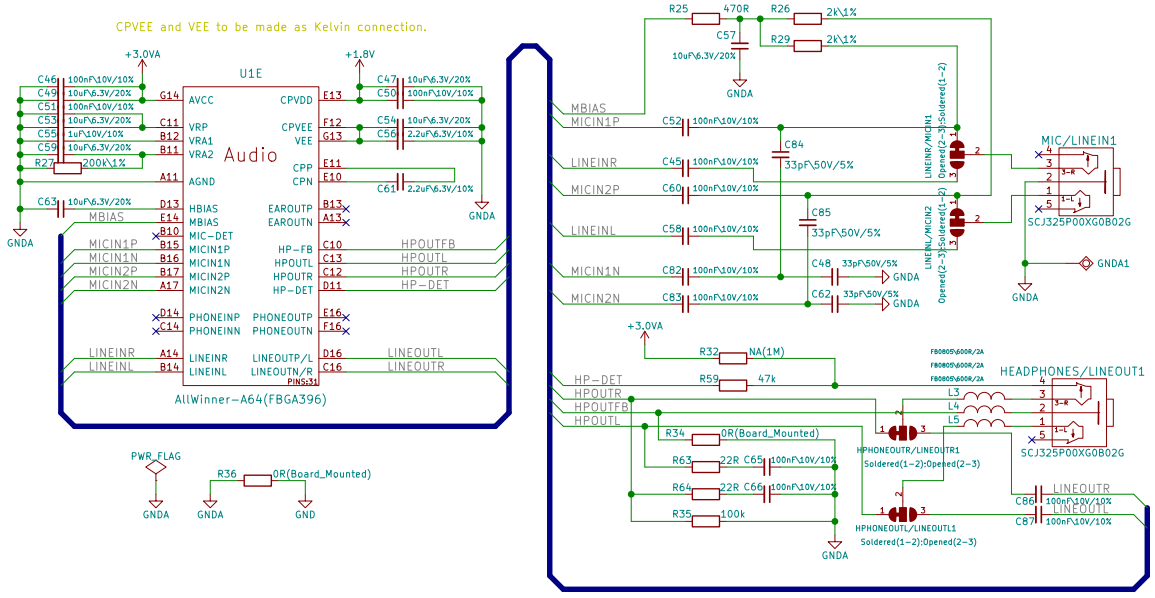
16M Bytes SPI Flash

Present in -sXM

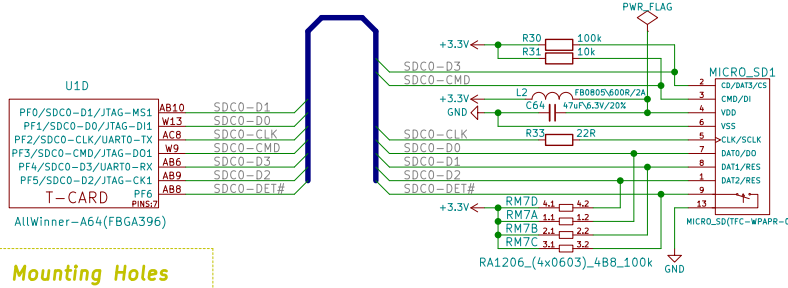


Audio

CPVEE and VEE to be made as Kelvin connection.



T-Card



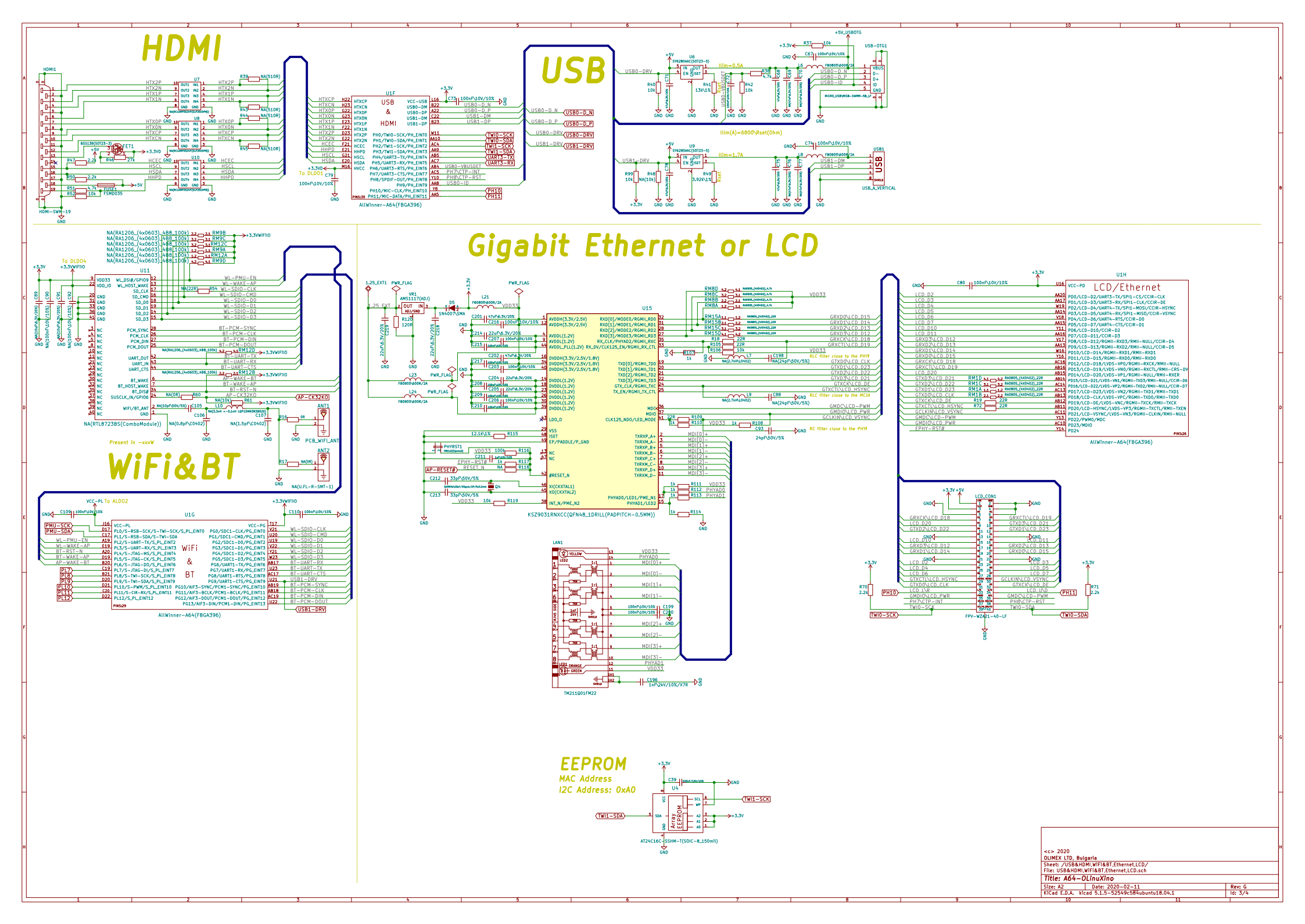
Mounting Holes

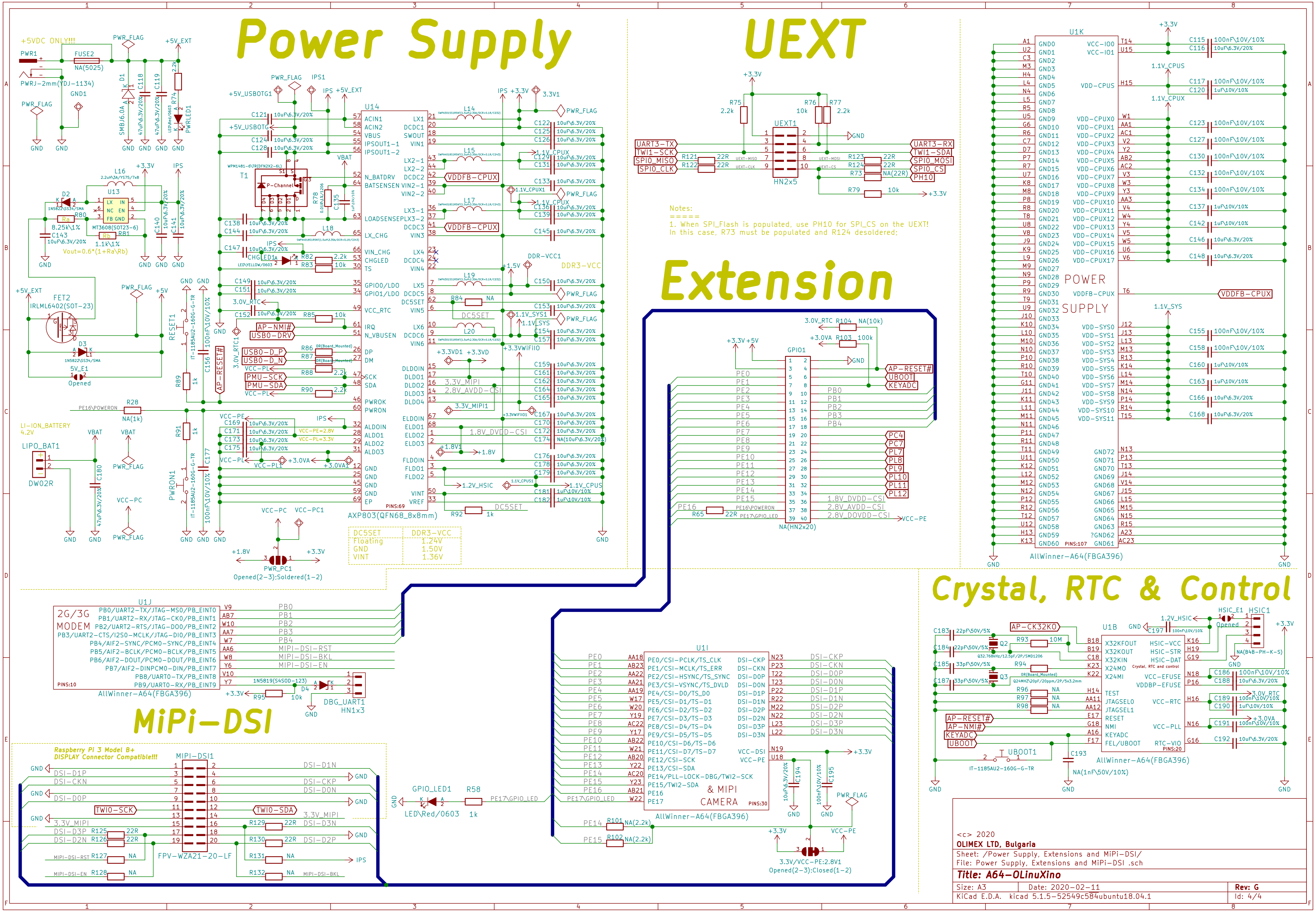
Mounting_hole1
Mounting_hole
Mounting_hole2
Mounting_hole
Mounting_hole3
Mounting_hole

Sheet: /NAND Flash , eMMC, T-Card and Audio/
File: NAND Flash , eMMC, T-Card and Audio.sch

Title: A64-OLinuXino

Size: A3	Date: 2020-02-11	Rev: G
KiCad E.D.A. kicad 5.1.5-52549c584ubuntu18.04.1		Id: 2/4


HDMI
USB
Gigabit Ethernet or LCD
WiFi&BT
EEPROM
MAC Address
I2C Address: 0xA0
AllWinner-A64(FBGA396)
KSZ9031RNXCC(QFN48_1DRILL(PADPITCH-0.5MM))
NA(RTL8723BS(ComboModule))
TM211Q01FM22
AT24C16C-SSHM-T(SOIC-8_150mil)
LCD/Ethernet
FPV-WZA21-A0-LF
<c> 2020
OLIMEX LTD, Bulgaria
Sheet: /USB&HDMI.WIFI&BT.Ethernet.LCD/
File: USB&HDMI.WIFI&BT.Ethernet.LCD.sch
Title: A64-OLinuXino
Size: A2
Date: 2020-02-11
Rev: G
KiCad E.D.A. kicad 5.1.5-52549c584ubuntu18.04.1
Id: 3/4



Power Supply
+5VDC ONLY!!!
AXP803(QFN68_8x8mm)
DC5SET | DDR3-VCC
Floating | 1.24V
GND | 1.50V
VINT | 1.36V
PWR_PC1
Opened(2-3):Soldered(1-2)
UEXT
Notes:
=====
1. When SPI_Flash is populated, use PH10 for SPI_CS on the UEXT!
In this case, R73 must be populated and R124 desoldered.
Extension
GPIO1
NA(HN2x20)
U1K
POWER SUPPLY
AllWinner-A64(FBGA396)
Crystal, RTC & Control
U1B
AllWinner-A64(FBGA396)
U1J
2G/3G MODEM
AllWinner-A64(FBGA396)
DBG_UART1
HN1x3
MiPi-DSI
Raspberry Pi 3 Model B+
DISPLAY Connector Compatible!!!
MIPI-DSI1
FPV-WZA21-20-LF
U1I
& MIPI CAMERA
AllWinner-A64(FBGA396)
GPIO_LED1
LED\Red/0603
3.3V/VCC-PE:2.8V1
Opened(2-3):Closed(1-2)
<c> 2020
OLIMEX LTD, Bulgaria
Sheet: /Power Supply, Extensions and MiPi-DSI/
File: Power Supply, Extensions and MiPi-DSI .sch
Title: A64-OLinuXino
Size: A3
Date: 2020-02-11
Rev: G
KiCad E.D.A. kicad 5.1.5-52549c5~84ubuntu18.04.1
Id: 4/4