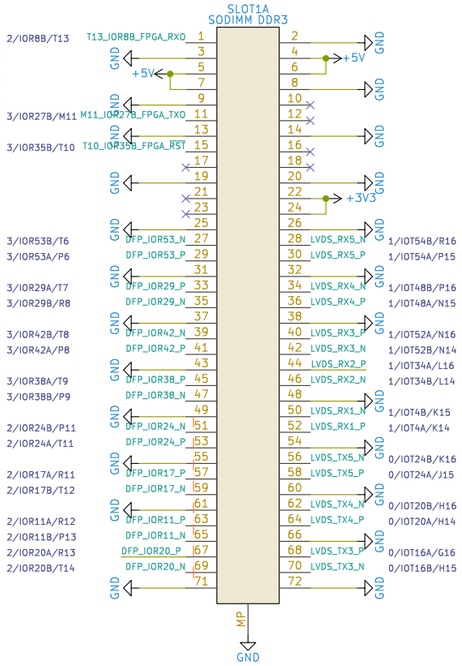
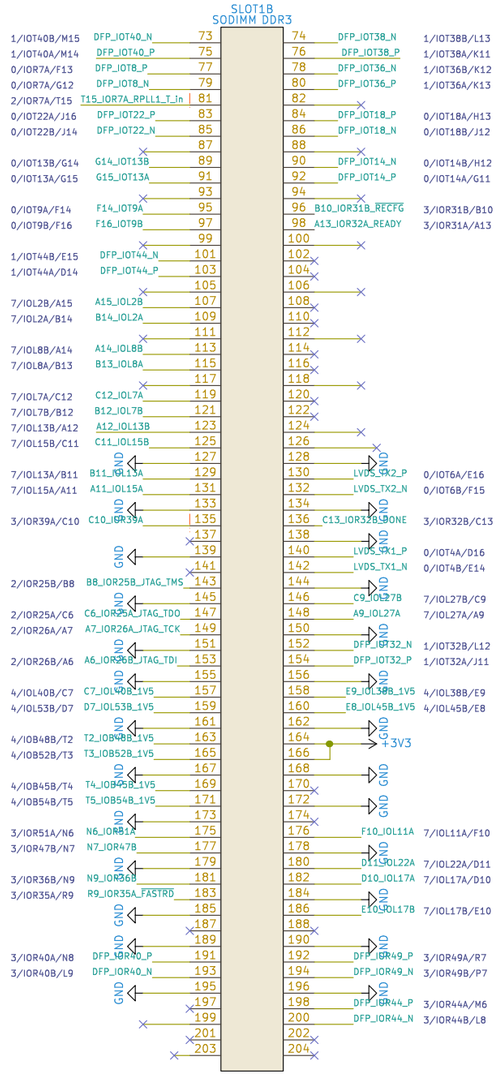
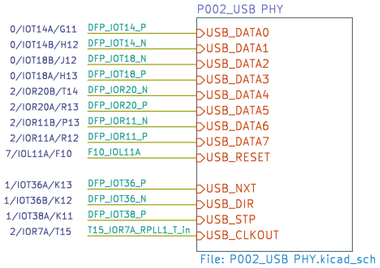
Tang Nano 20K Dock

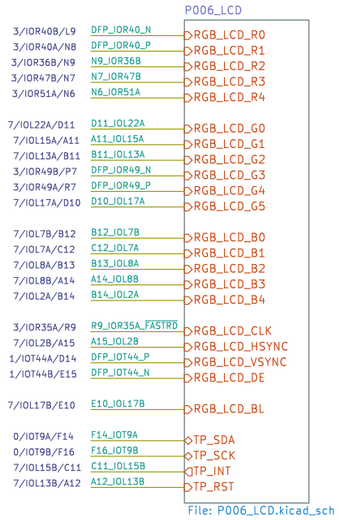
Revision History

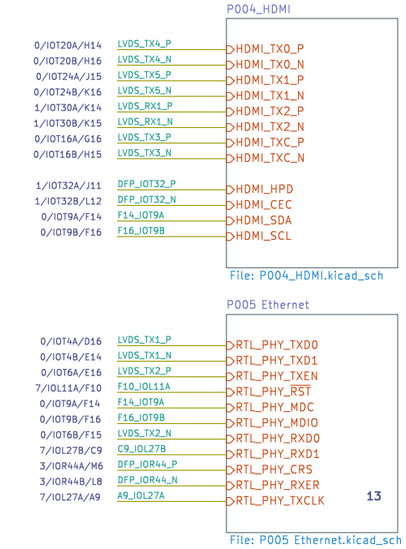
Version	Date	Change Note
7101	2022/02/21	First edition

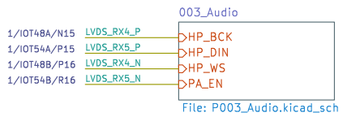


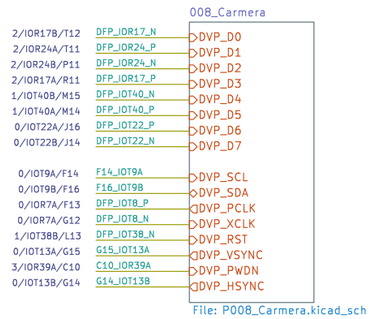


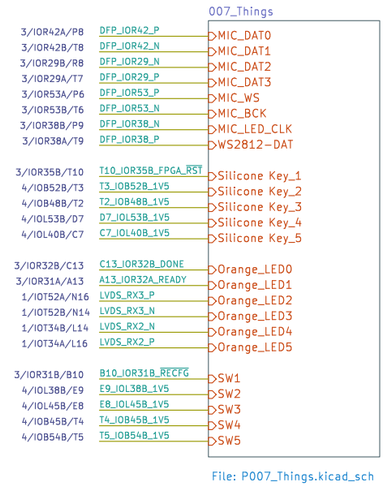












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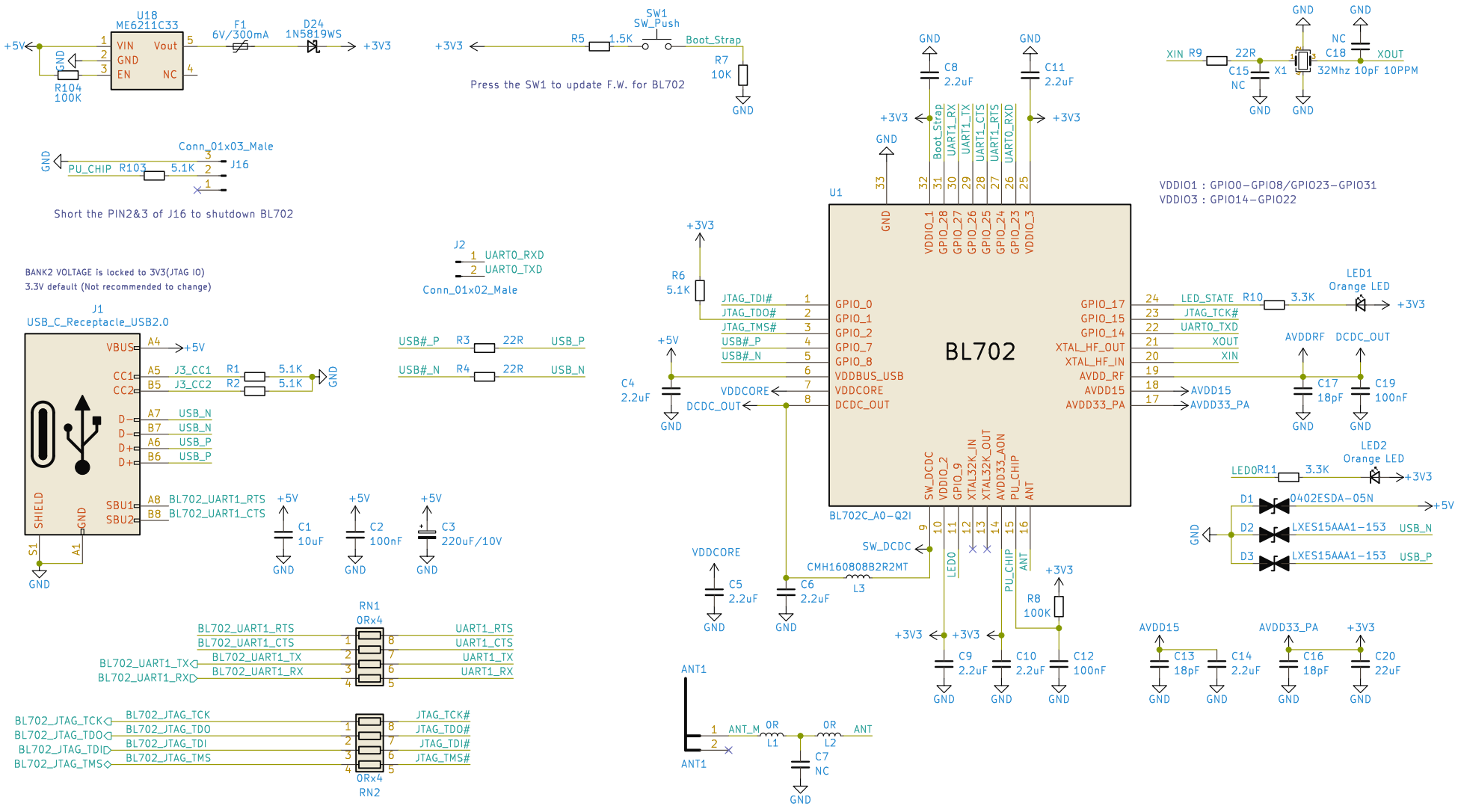
Size: A3	Date: 2023-09-12	**Rev: 1.1**
KiCad E.D.A. kicad (6.99.0-1732-g4cd48cd5c9)		Id: 1/9


U18
ME6211C33
VIN
GND
EN
Vout
NC
F1
6V/300mA
D24
1N5819WS
+5V
+3V3
R104
100K
SW1
SW_Push
R5
1.5K
Boot_Strap
R7
10K
Press the SW1 to update F.W. for BL702
Conn_01x03_Male
J16
PU_CHIP R103
5.1K
Short the PIN2&3 of J16 to shutdown BL702
BANK2 VOLTAGE is locked to 3V3(JTAG IO)
3.3V default (Not recommended to change)
J1
USB_C_Receptacle_USB2.0
VBUS
CC1
CC2
D-
D+
SHIELD
SBU1
SBU2
J3_CC1
J3_CC2
R1
R2
5.1K
USB_N
USB_P
BL702_UART1_RTS
BL702_UART1_CTS
J2
UART0_RXD
UART0_TXD
Conn_01x02_Male
USB#_P
USB#_N
R3
R4
22R
USB_P
USB_N
C1
10uF
C2
100nF
C3
220uF/10V
RN1
0Rx4
BL702_UART1_TX
BL702_UART1_RX
UART1_RTS
UART1_CTS
UART1_TX
UART1_RX
RN2
BL702_JTAG_TCK
BL702_JTAG_TDO
BL702_JTAG_TDI
BL702_JTAG_TMS
JTAG_TCK#
JTAG_TDO#
JTAG_TDI#
JTAG_TMS#
Remove the RN2 to use External JTAG
U1
BL702
BL702C_A0-Q2I
GPIO_0
GPIO_1
GPIO_2
GPIO_7
GPIO_8
VDDBUS_USB
VDDCORE
DCDC_OUT
GPIO_17
GPIO_15
GPIO_14
XTAL_HF_OUT
XTAL_HF_IN
AVDD_RF
AVDD15
AVDD33_PA
SW_DCDC
VDDIO_2
GPIO_9
XTAL32K_IN
XTAL32K_OUT
AVDD33_AON
PU_CHIP
ANT
LEDO
VDDIO_1
GPIO_28
GPIO_27
GPIO_26
GPIO_25
GPIO_24
GPIO_23
VDDIO_3
Boot_Strap
UART1_RX
UART1_TX
UART1_CTS
UART1_RTS
UART0_RXD
JTAG_TDI#
JTAG_TDO#
JTAG_TMS#
VDDIO1 : GPIO0-GPIO8/GPIO23-GPIO31
VDDIO3 : GPIO14-GPIO22
R6
5.1K
C4
2.2uF
C5
2.2uF
C6
2.2uF
CMH160808B2R2MT
L3
C8
2.2uF
C11
2.2uF
C9
2.2uF
C10
2.2uF
C12
100nF
R8
100K
XIN R9
22R
C15
NC
X1
C18
NC
XOUT
32Mhz 10pF 10PPM
LED1
Orange LED
R10
3.3K
LED2
Orange LED
LEDOR11
3.3K
D1
0402ESDA-05N
D2
LXES15AAA1-153
USB_N
D3
LXES15AAA1-153
USB_P
C17
18pF
C19
100nF
C13
18pF
C14
2.2uF
C16
18pF
C20
22uF
ANT1
ANT_M
0R
L1
L2
C7
NC
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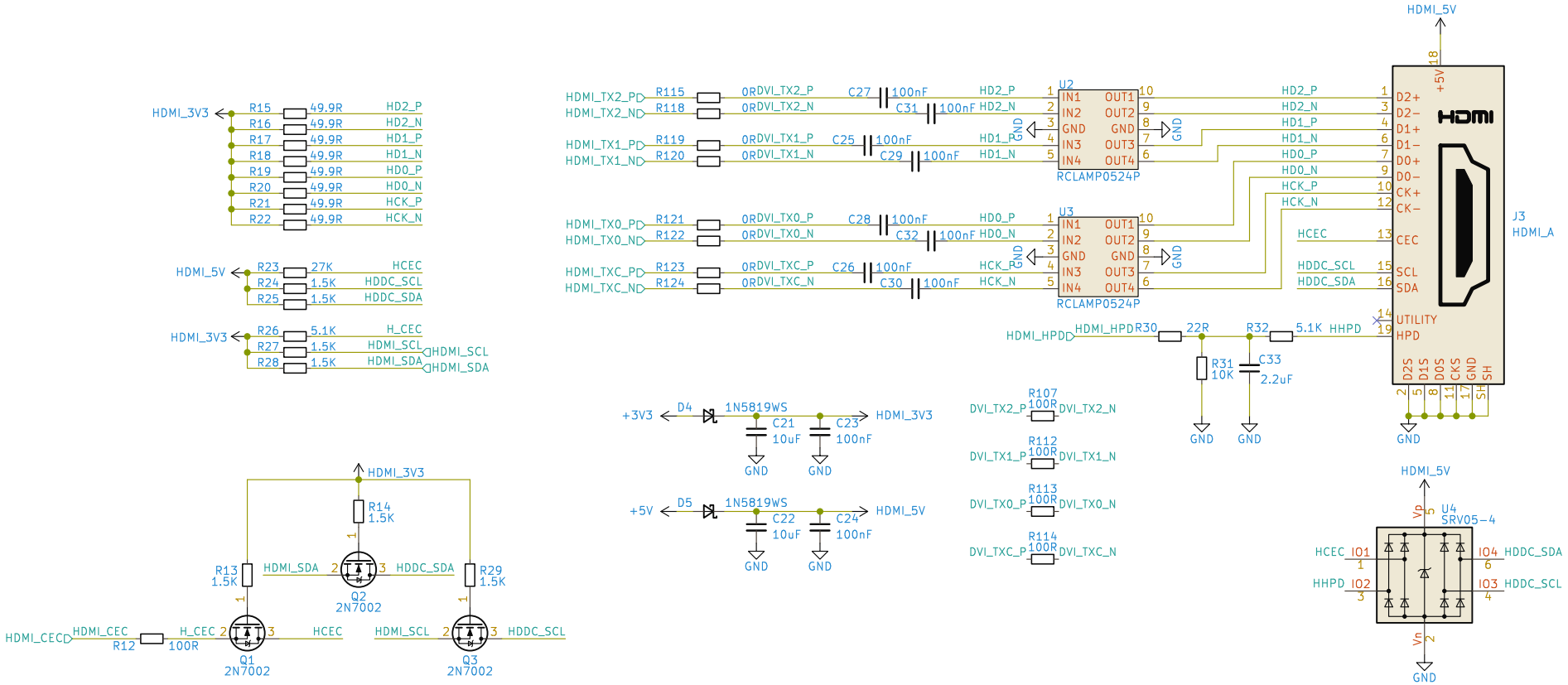
Size: A4
Date: 2023-09-12
Rev: 1.1
KiCad E.D.A. kicad (6.99.0-1732-g4cd48cd5c9)
Id: 2/9

HDMI_TX/RX



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Size: A4	Date: 2023-09-12	**Rev: 1.1**
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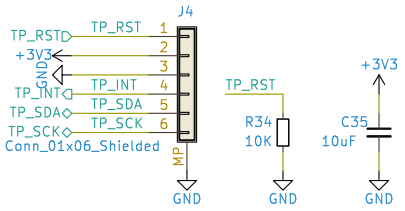
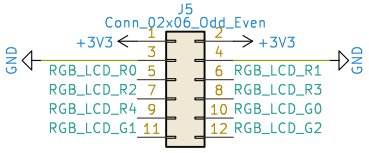
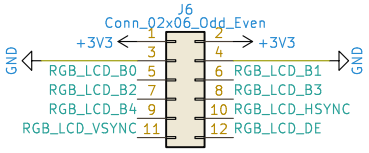
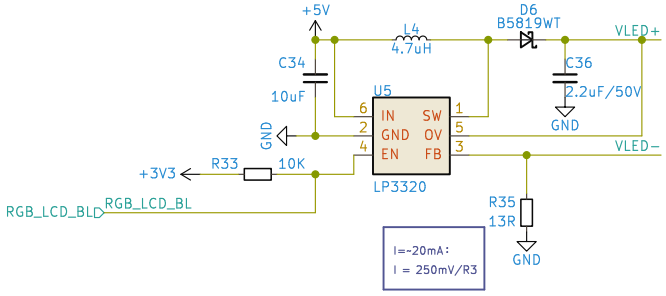
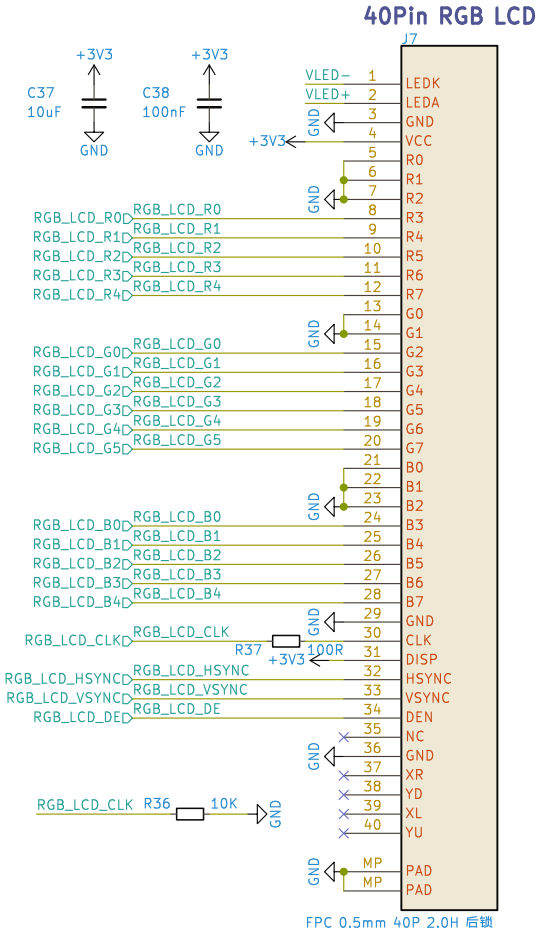
RGB LCD











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Size: A4	Date: 2023-09-12	**Rev: 1.1**
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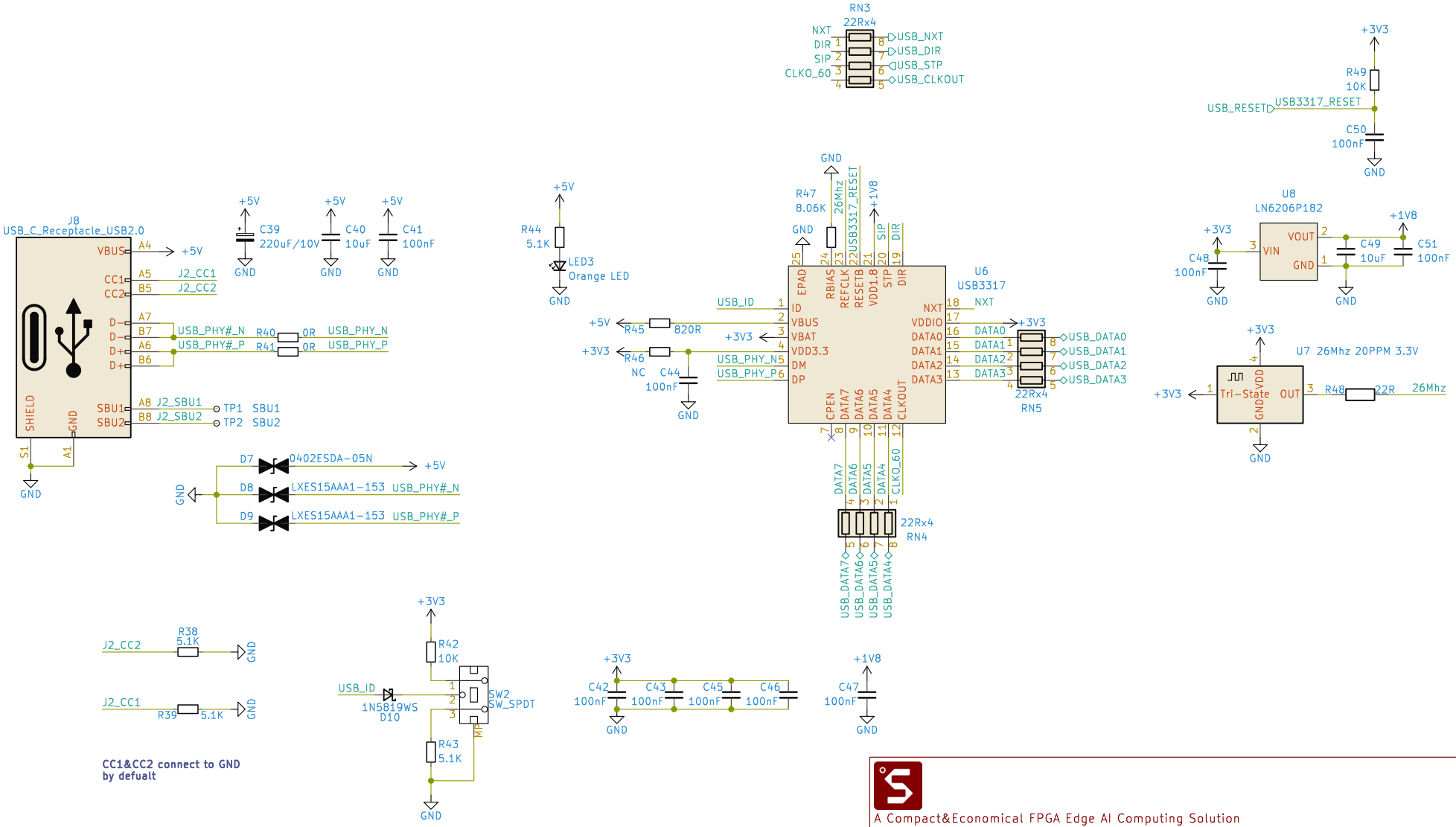
USB 2.0 PHY-IN BANK7



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Size: A4	Date: 2023-09-12	**Rev: 1.1**
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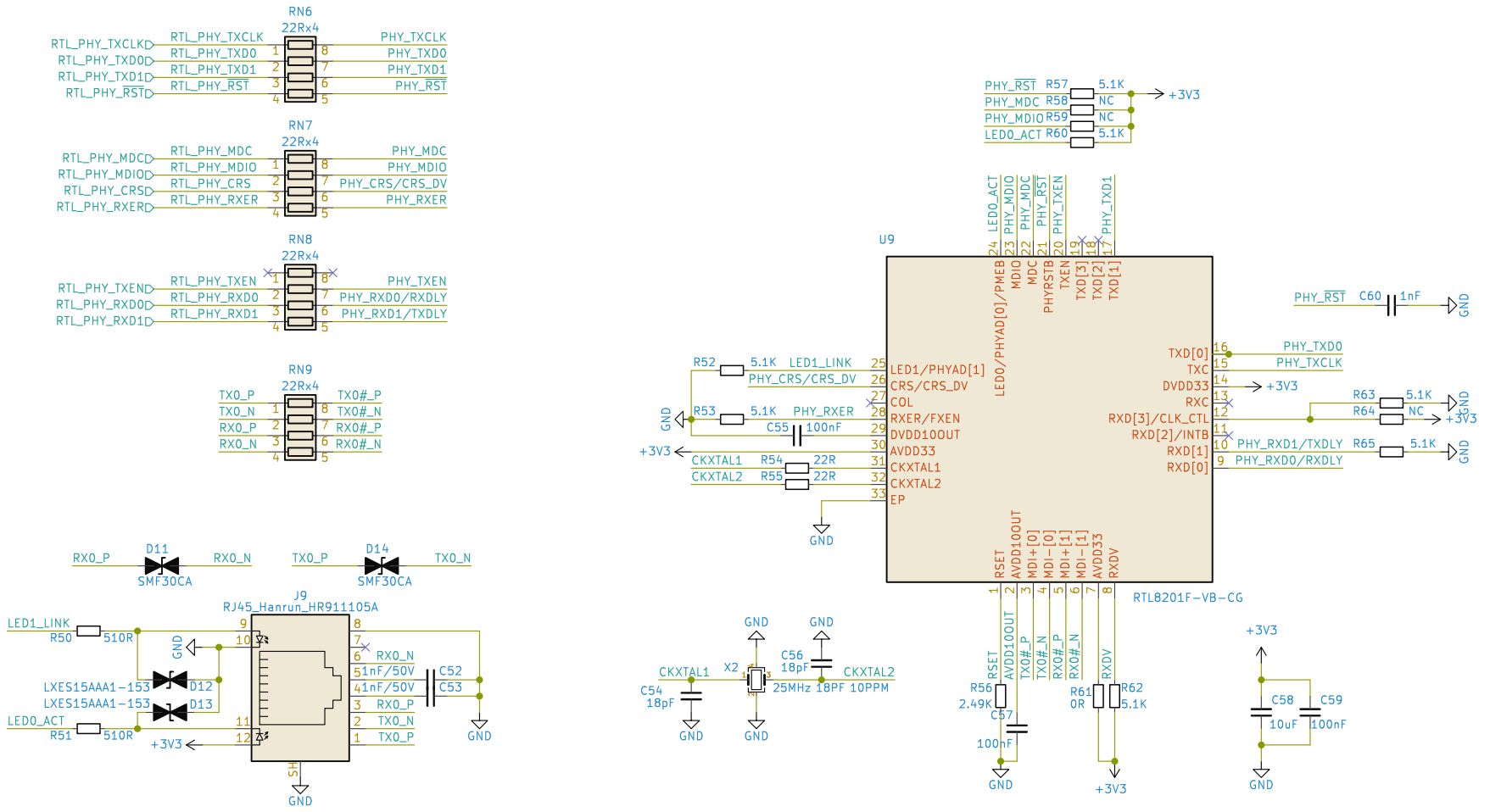

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Size: A4	Date: 2023-09-12	**Rev: 1.1**
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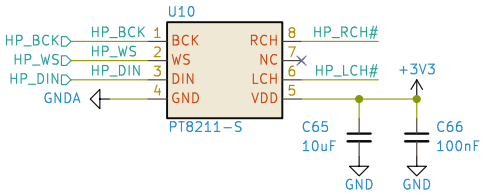
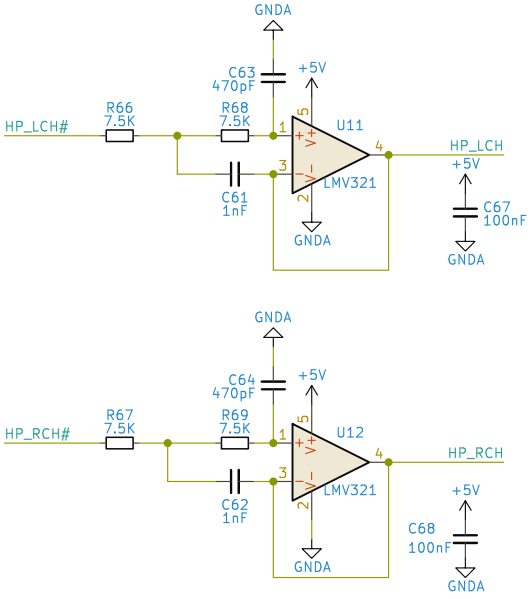
Audio

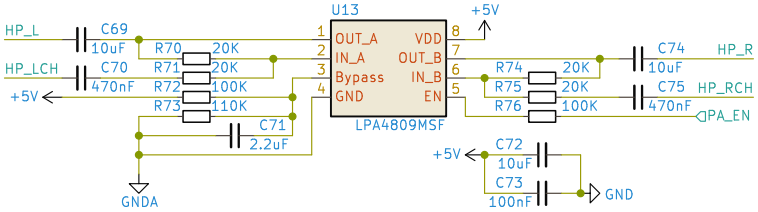
STEREO DAC



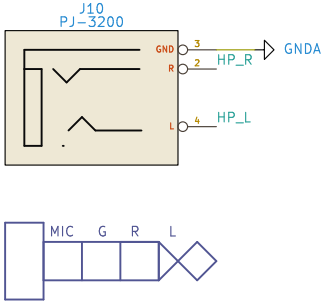
Low-Pass Filter



HEADPHONE AMP.



HEADPHONE JACK 3.5MM



When the jack is unpluged, L/R_DET is connected to L/R.

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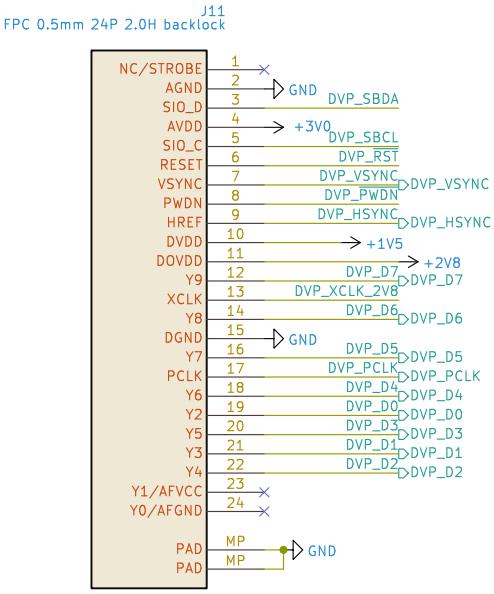
Sheet: /003_Audio/

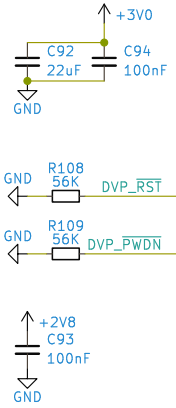
File: P003_Audio.kicad_sch

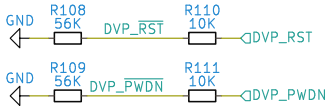
Title: Tang_Primer_20K-Dock_3713

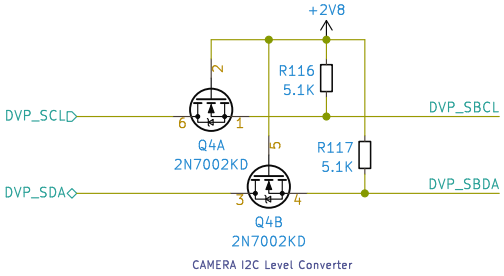
Size: A4	Date: 2023-09-12	**Rev: 1.1**
KiCad E.D.A. kicad (6.99.0-1732-g4cd48cd5c9)		Id: 8/9

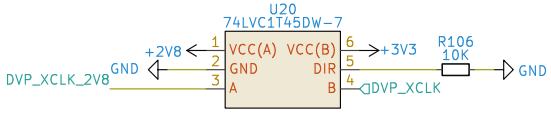
DVP Carmera

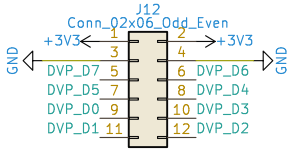


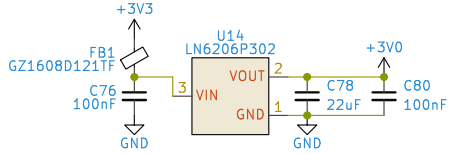


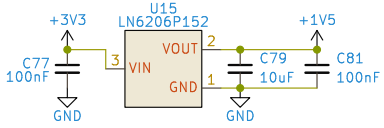


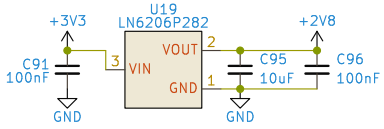












NOTICE:
DOVDD refers to I/O Bank voltage

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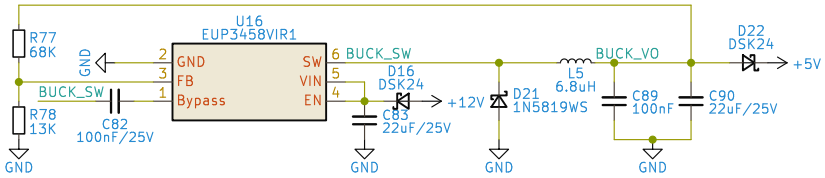
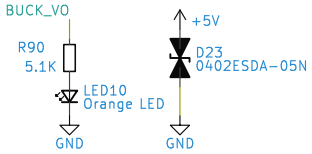
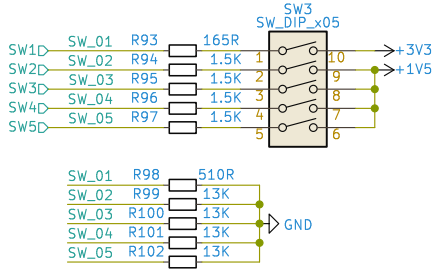
Sheet: /008_Carmera/		
File: P008_Carmera.kicad_sch		
Title: Tang_Primer_20K-Dock_3713		
Size: A4	Date: 2023-09-12	**Rev: 1.1**
KiCad E.D.A. kicad (6.99.0-1732-g4cd48cd5c9)		Id: 9/9

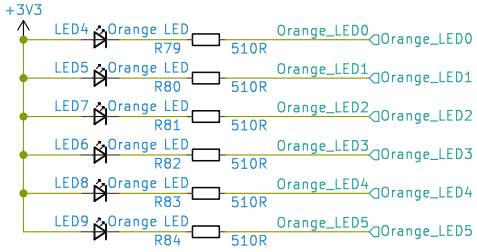
DC-IN BUCK



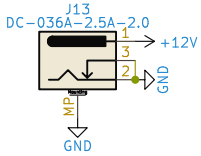


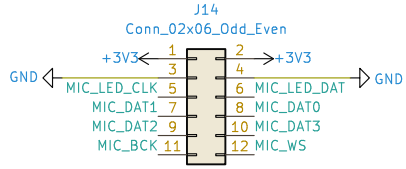


LED x 6

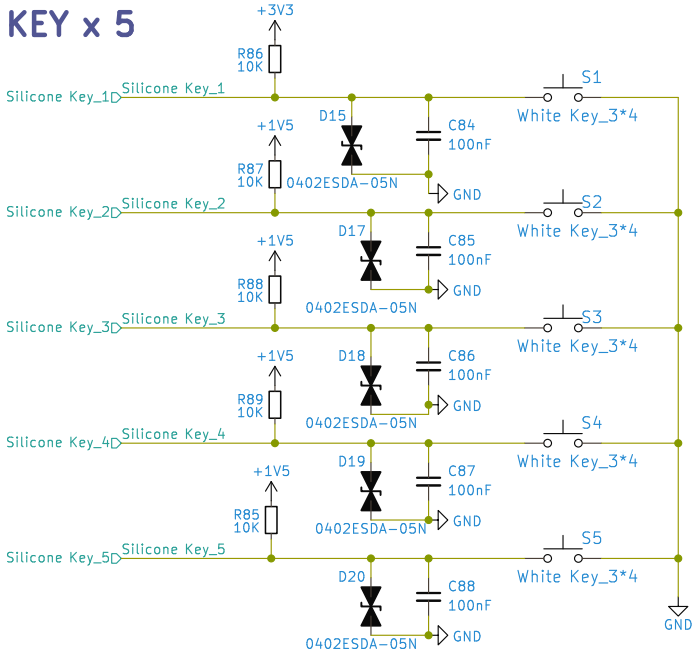


DC-IN JACK

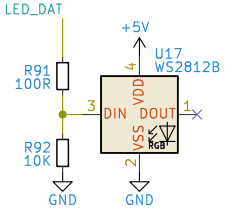




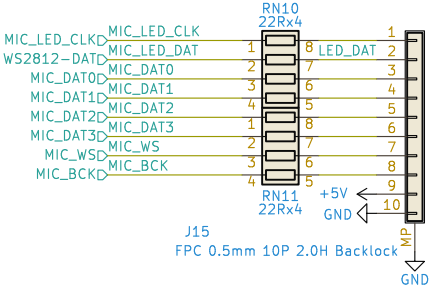
KEY x 5



WS2812B



MIC Array Conn.



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