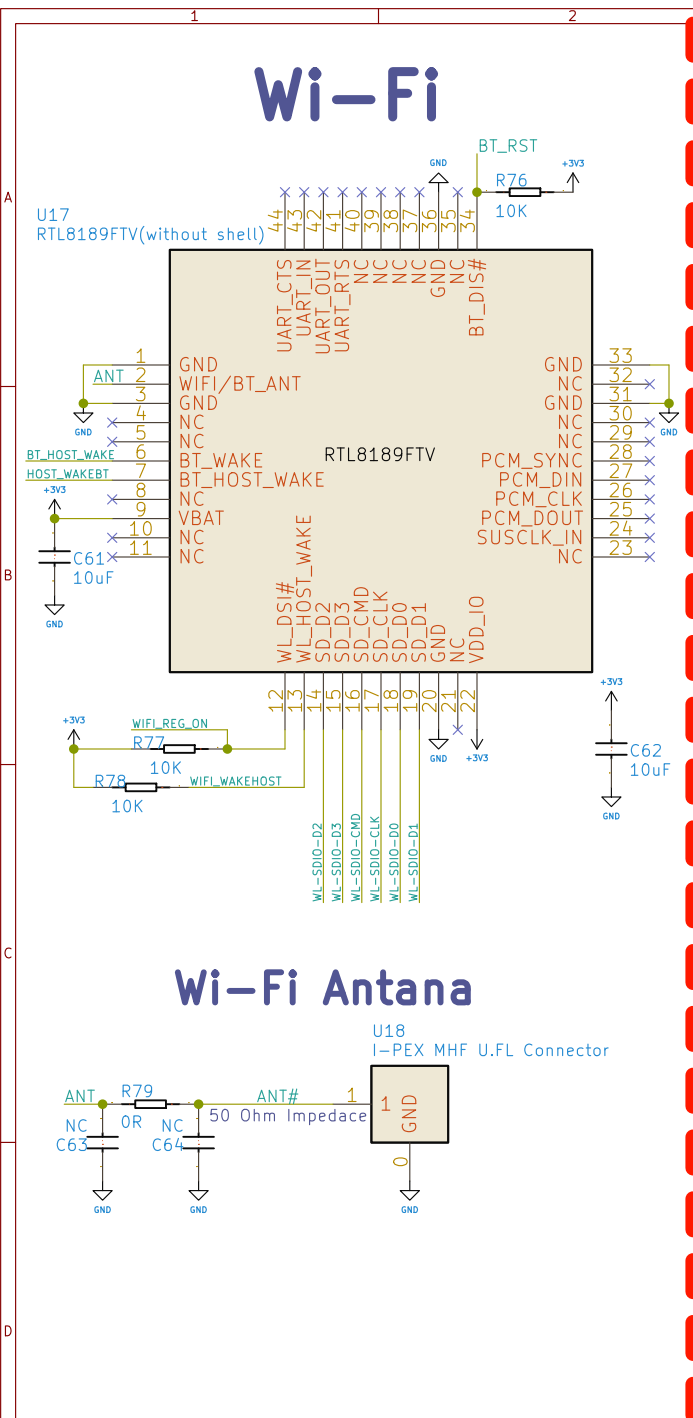


Wi-Fi

Wi-Fi Antenna



The schematic diagram illustrates the connections for the TF CARD. It shows six signal lines (SDC0-D2 to SDC0-D1) connected to the DAT2 to DAT1 pins of the TF CARD Socket. Each signal line is also connected to an ESD protection diode (ESD1 to ESD6) which is connected to ground. Power and ground connections are shown for the TF CARD Socket, including VDD, GND, and NC-1M. A capacitor C74 (10uF) is connected between the NC-1M pin and ground.

NOTE: VCC-CARD: fixed to 3.3V
VCC-CARD-DET: refer to the power domain of SDC-DET

TF CARD

34

TF CARD Socket	Signal
1	DAT2
2	DAT3/CS
3	CMD/MOSI
4	CLK
5	DAT0/MISO
6	DAT1

ESD1, ESD2, ESD3, ESD4, ESD5, ESD6

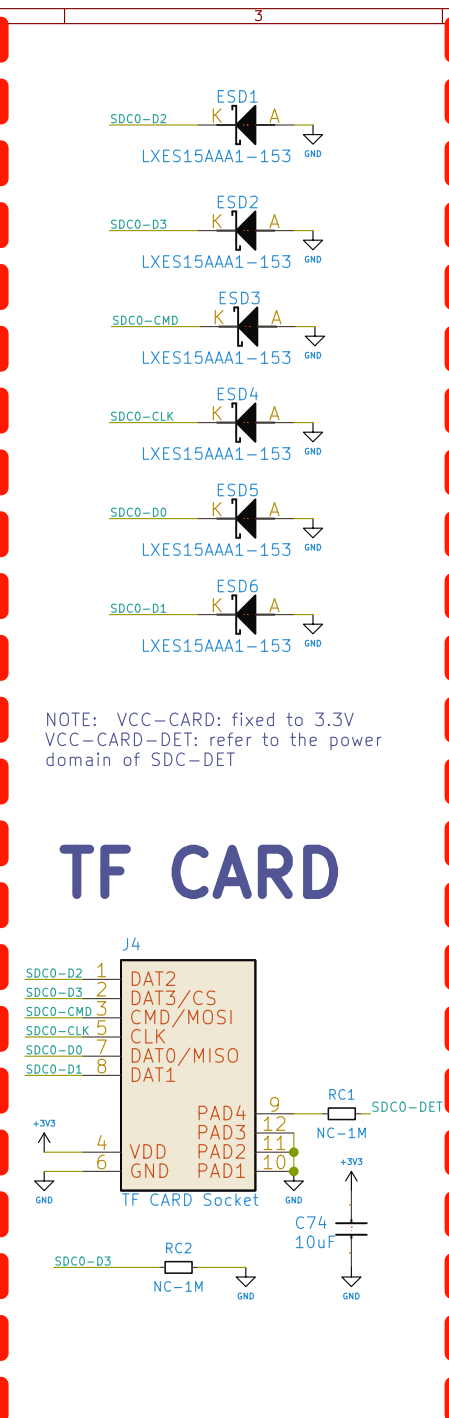
SDC0-D2, SDC0-D3, SDC0-CMD, SDC0-CLK, SDC0-D0, SDC0-D1

LXES15AAA1-153

VDD, GND, NC-1M

C74 10uF

SDC0-DET



Camera

Camera

BTB-2X12-0.5mm Female

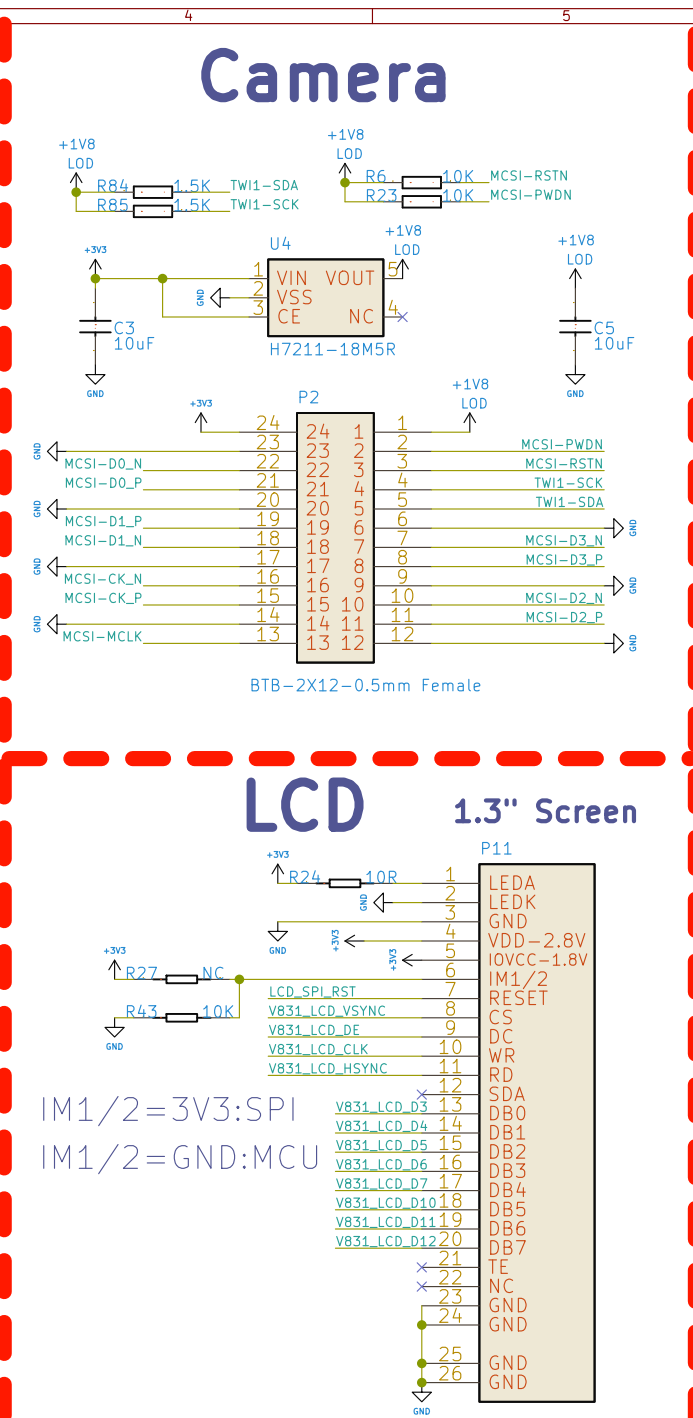
LCD

1.3" Screen

LCD

1.3" Screen

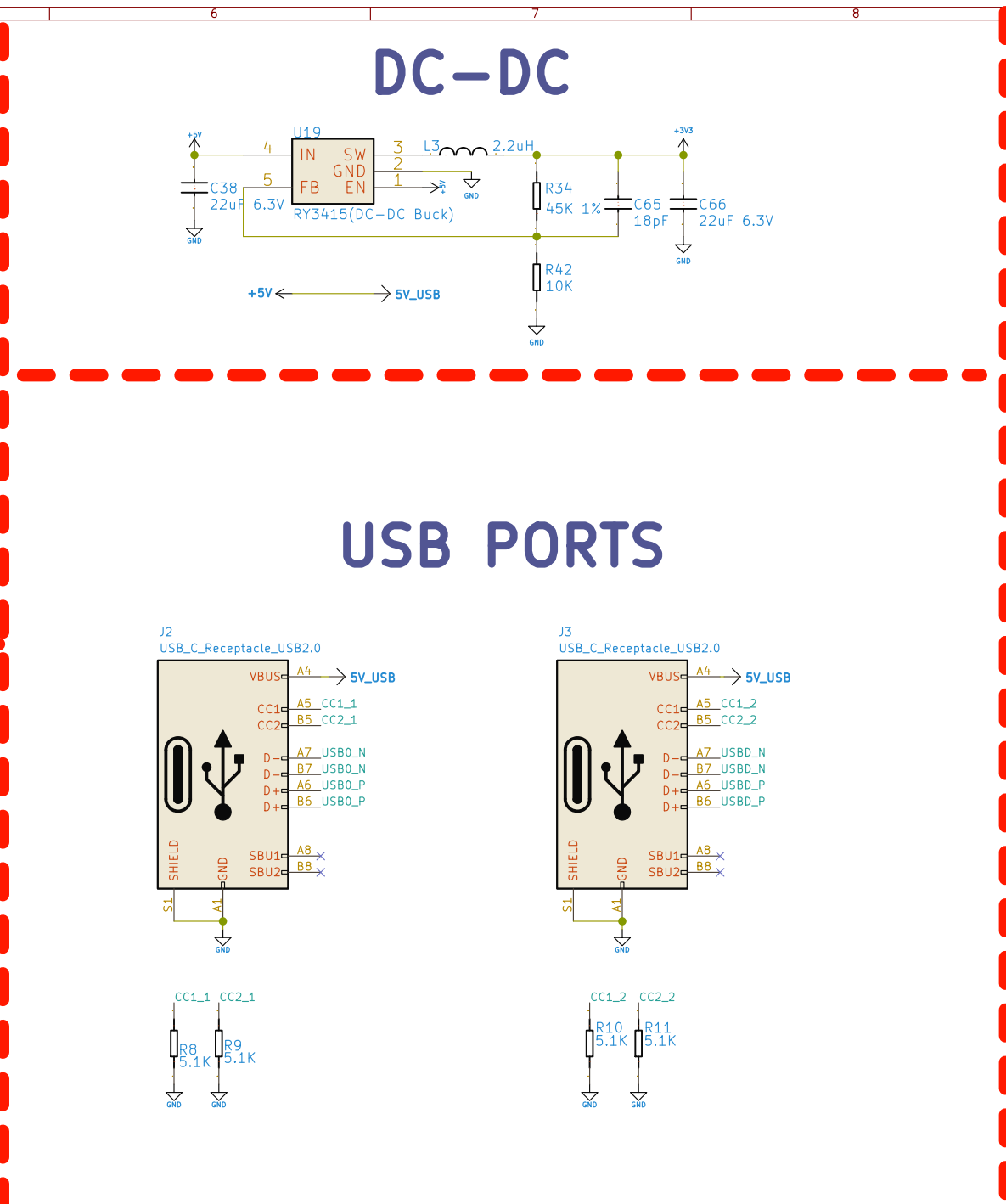
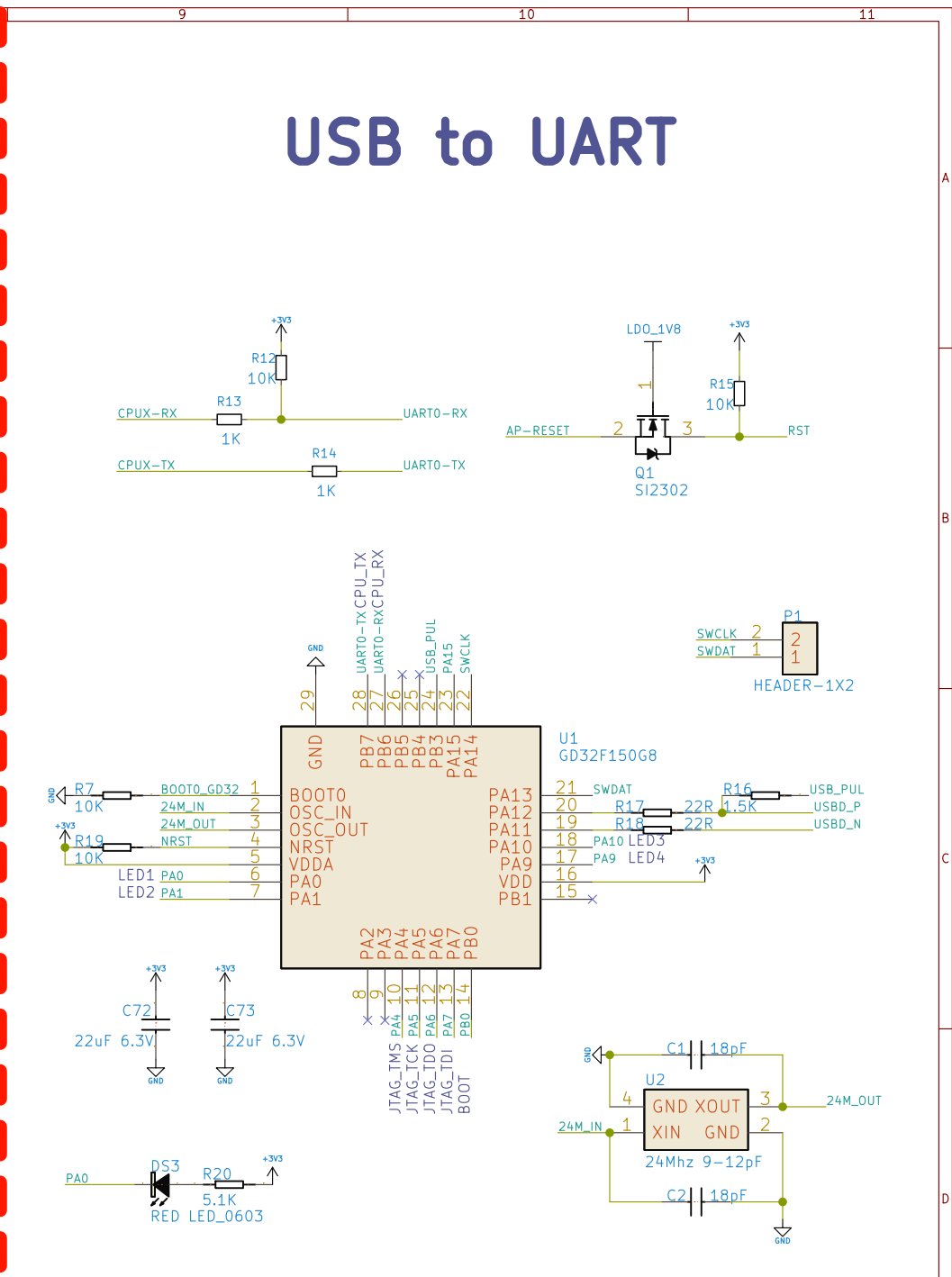
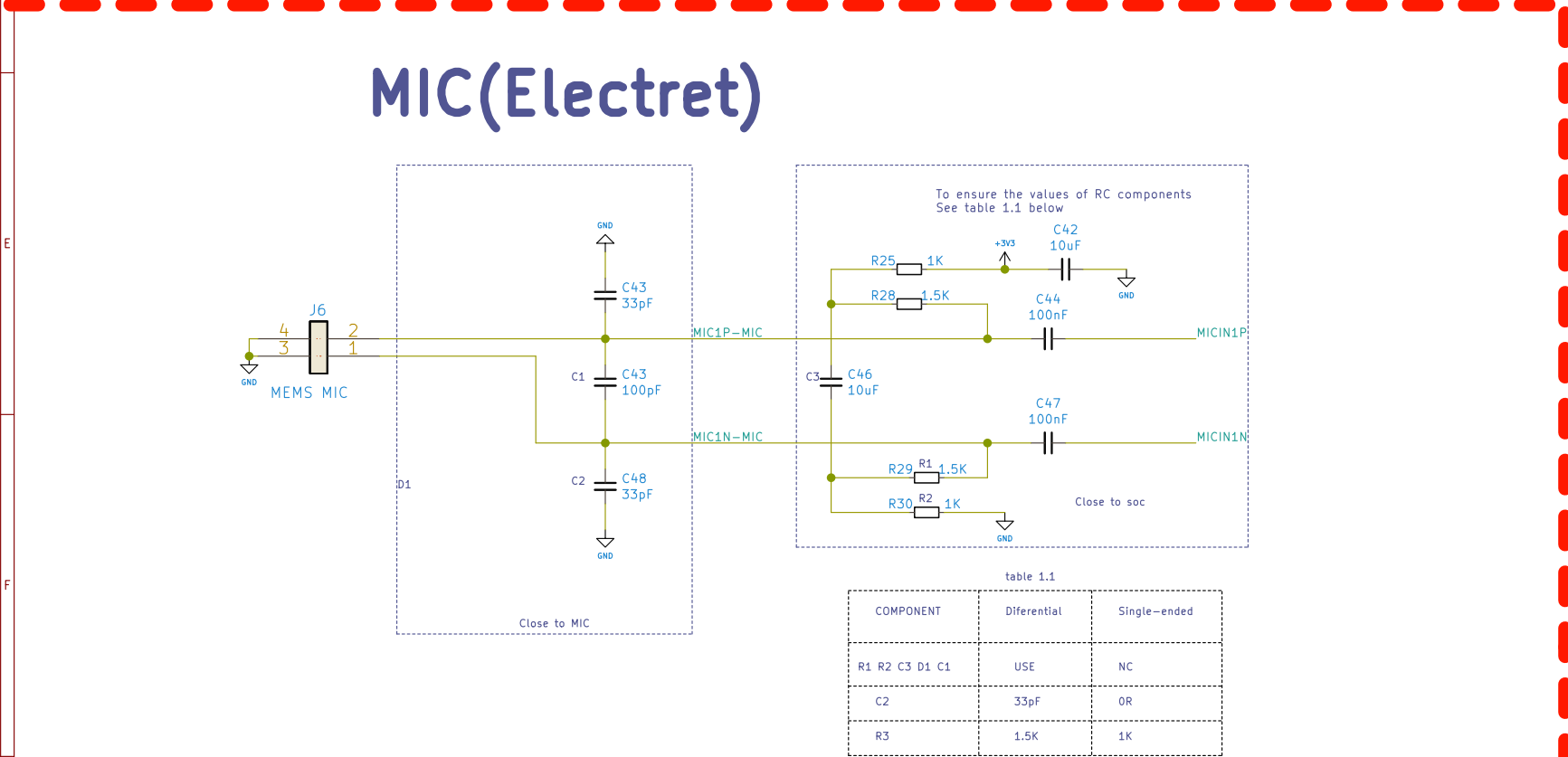
IM1/2=3V3:SPI
IM1/2=GND:MCU



DC-DC

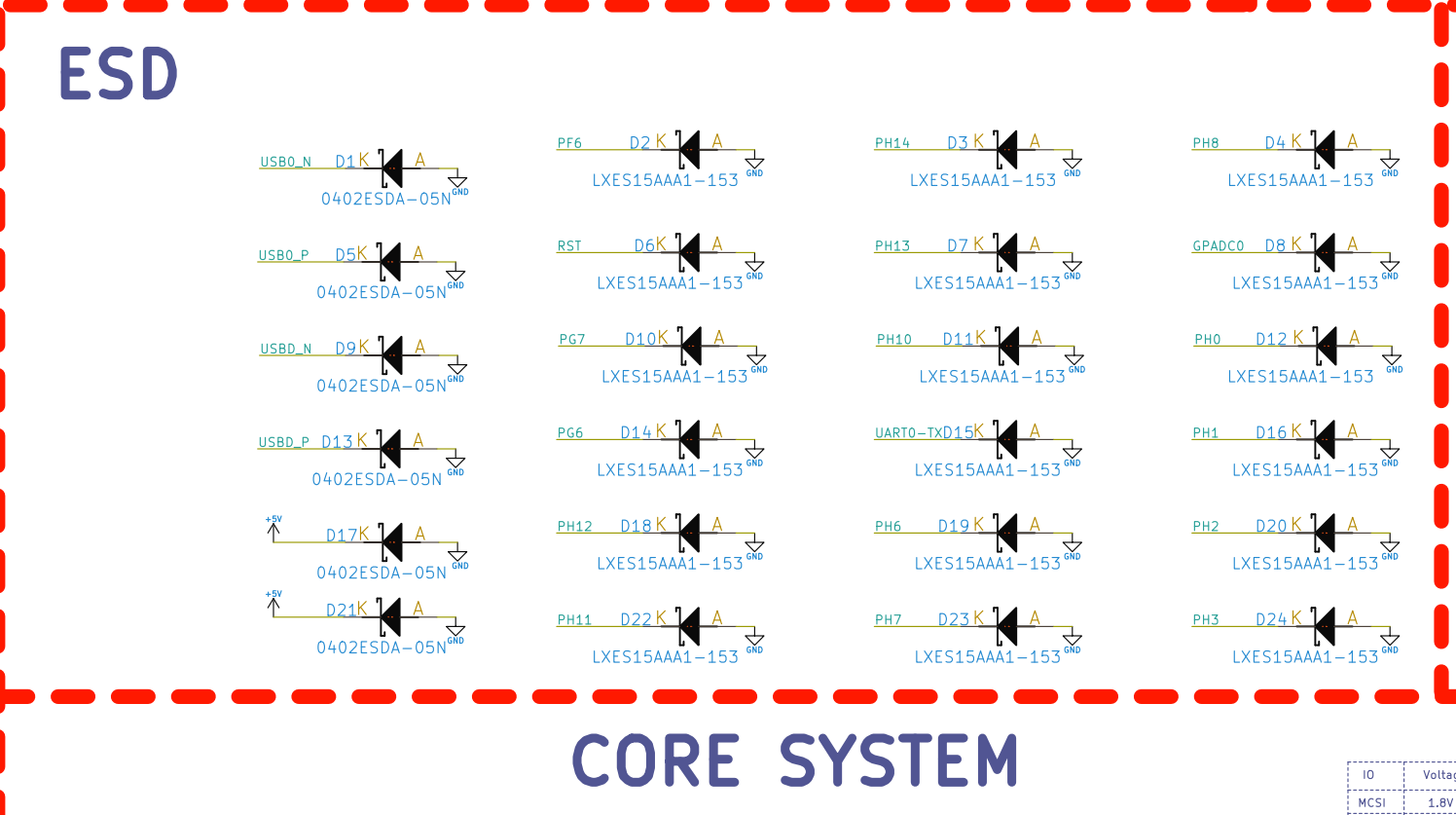
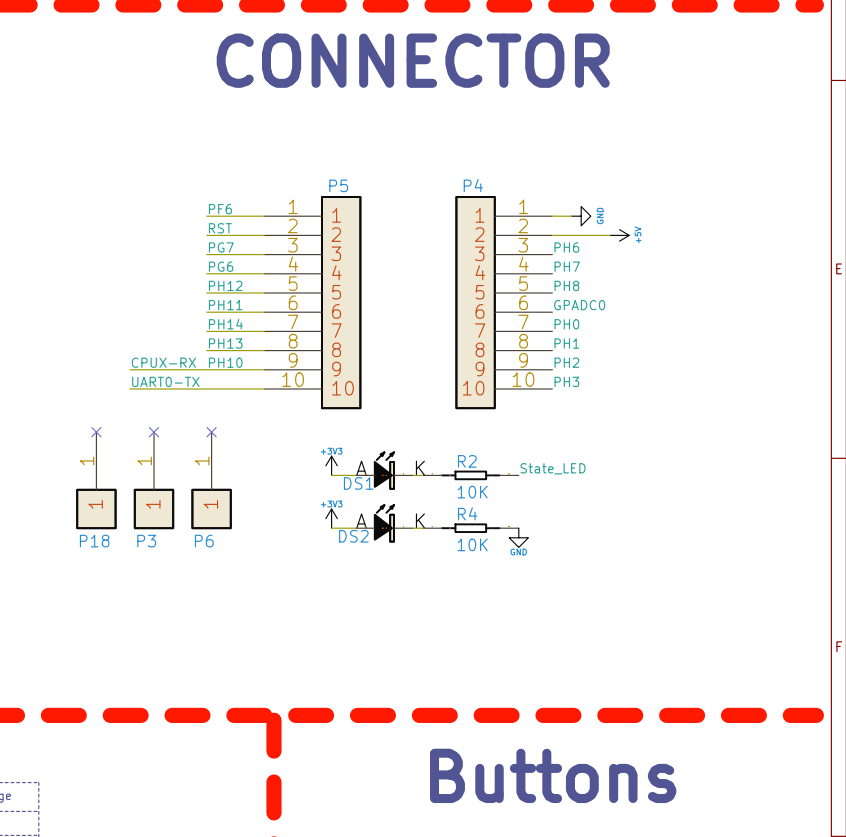
USB PORTS

USB PORTS

[illegible][illegible]

ESD protection circuit diagrams for various pins of the L9250A. The diagrams are organized into four columns. Each diagram shows a pin connected to a resistor (value in K or M) and a diode connected to ground (GND). The pins and their resistor values are:

- Column 1: USB0_N (D1K), USB0_P (D5K), USB1_N (D9K), USB1_P (D13K), +5V (D17K), +5V (D21K).
- Column 2: PF6 (D2K), B5T (D6K), PG7 (D10K), PG6 (D14K), PH12 (D18K), PH11 (D22K).
- Column 3: PH14 (D3K), PH13 (D7K), PH10 (D11K), UART0-TXD15K (D15K), PH6 (D19K), PH7 (D23K).
- Column 4: PH8 (D4K), GPADC0 (D8K), PH0 (D12K), PH1 (D16K), PH2 (D20K), PH3 (D24K).

[illegible]

Audio

The schematic diagram illustrates an audio circuit. At the top, a red dashed border contains the word "Audio" in a large, bold, black font. Below this, the circuit is shown with various components and their connections.

Top Section:

- U7: AUDIO-PA (NS4150)** is the central component. Its pins are connected as follows:
 - Pin 1 (CTRL): Connected to a 100nf capacitor (C18) to GND and a 50K resistor (R39) to the +5V supply.
 - Pin 2 (BYPASS): Connected to a 100nf capacitor (C19) to GND.
 - Pin 3 (INP): Connected to a 50K resistor (R40) to the +5V supply.
 - Pin 4 (INN): Connected to GND.
 - Pin 5 (VoN): Connected to GND.
 - Pin 6 (VCC): Connected to the +5V supply.
 - Pin 7 (GND): Connected to GND.
 - Pin 8 (VoP): Connected to the output of the op-amp (U8).
- Power Supply:** A +5V supply is connected to the circuit. A 22uF capacitor (C25) is connected between the +5V supply and GND.
- Other Components:** A 10K resistor (R38) is connected between the +5V supply and GND. A 100nf capacitor (C20) is connected between GND and the input of the op-amp (U8).

Bottom Section:

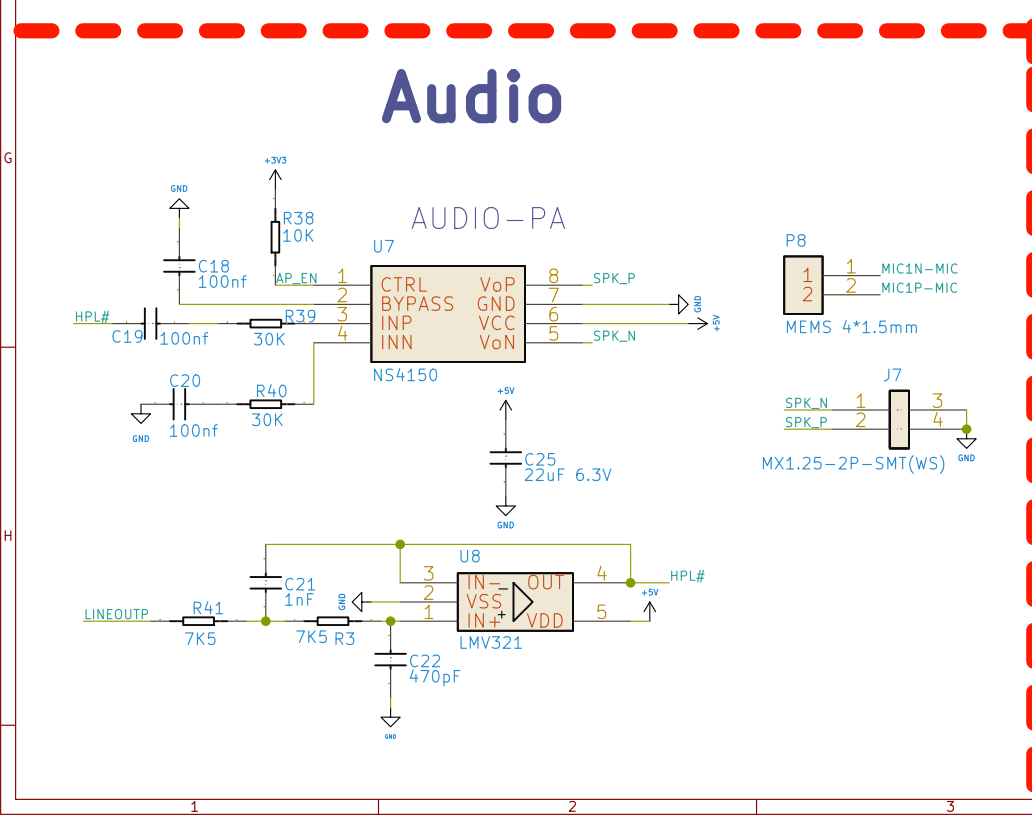
- U8: LMV321** is an op-amp. Its pins are connected as follows:
 - Pin 1 (IN-): Connected to the output of the AUDIO-PA (U7).
 - Pin 2 (VSS): Connected to GND.
 - Pin 3 (IN+): Connected to the output of the AUDIO-PA (U7).
 - Pin 4 (OUT): Connected to the output of the op-amp.
 - Pin 5 (VDD): Connected to the +5V supply.
- Other Components:** A 100nf capacitor (C21) is connected between the output of the op-amp and GND. A 7K5 resistor (R41) is connected between the output of the op-amp and GND. A 470pF capacitor (C22) is connected between the output of the op-amp and GND.

Right Side:

- P8: MEMS 4*1.5mm** is a microphone. Its pins are connected as follows:
 - Pin 1: Connected to MIC1N-MIC.
 - Pin 2: Connected to MIC1P-MIC.
- J7: MX1.25-2-SMT(WS)** is a connector. Its pins are connected as follows:
 - Pin 1: Connected to SPK_N.
 - Pin 2: Connected to SPK_P.
 - Pin 3: Connected to GND.
 - Pin 4: Connected to GND.

Labels:

- HPL#** is a label for the input signal.
- LINEOUTP** is a label for the output signal.
- SPK_N** and **SPK_P** are labels for the speaker outputs.
- MEMS 4*1.5mm** is a label for the microphone.
- MX1.25-2-SMT(WS)** is a label for the connector.



3-Axial Acc sensor

PS=1, I2C mode

U3 MSA301

PH12 8 TWI2_SDA

PH11 12 TWI2_SCK

5V

1.0V

9

8 CSB

7 GND

6 INT2

5 INT1

4 SDO

3 SDIO

2 VDDIO

1 NC

C4 100nF

C6 100nF

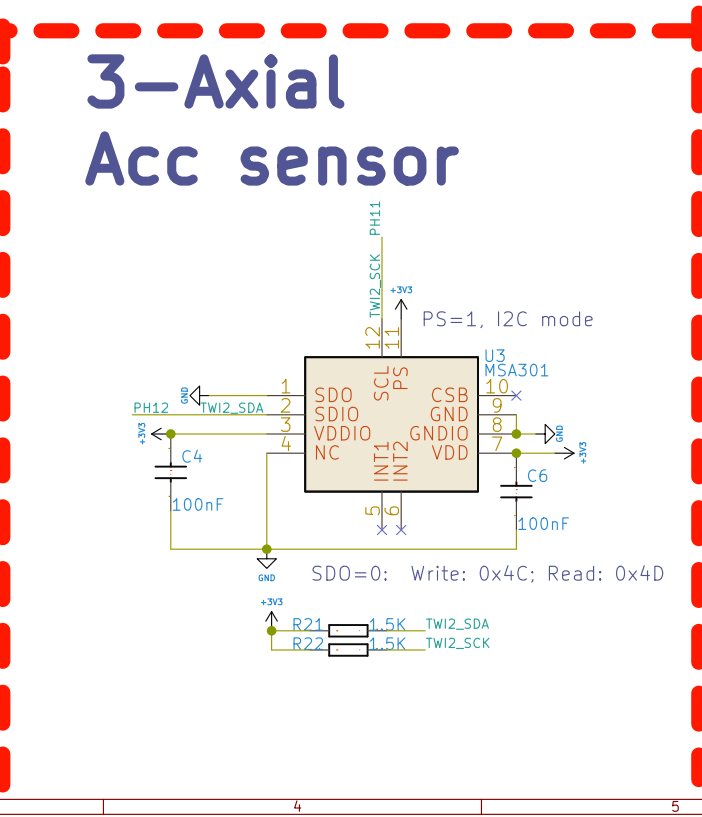
R21 5V

R22 GND

5V

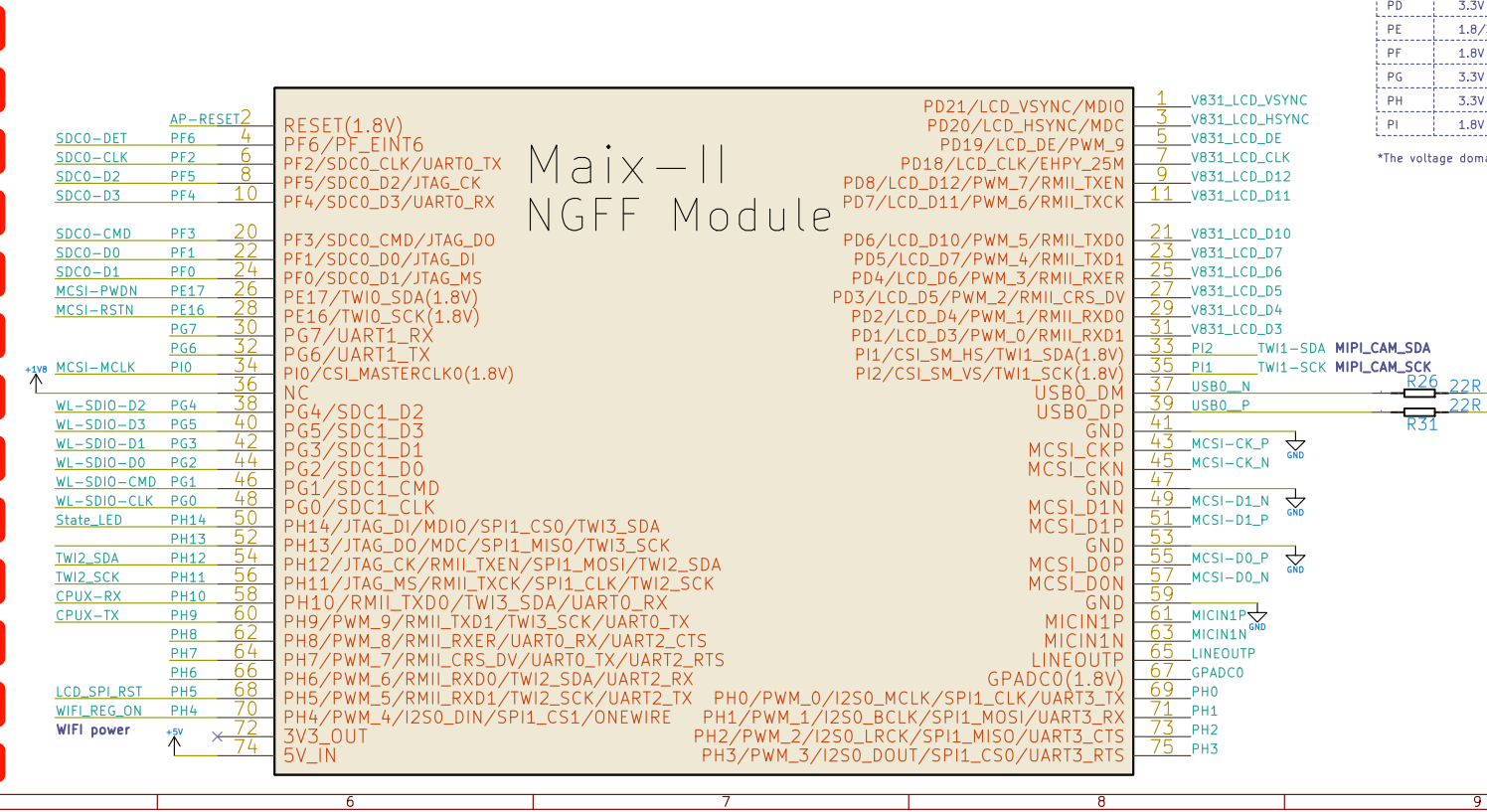
GND

SDO=0: Write: 0x4C; Read: 0x4D



Maix-III NGFF Module

Module Pin	Module Name	NGFF Pin	NGFF Name
AP-RESET2	RESET(1.8V)	4	VB31_LCD_VSYNC
PF6	PF6/PF_EINT6	5	VB31_LCD_HSYNC
SDC0-DET	PF2	6	VB31_LCD_D6
SDC0-CLK	PF5	8	VB31_LCD_CLK
SDC0-D2	PF8	9	VB31_LCD_D12
SDC0-D3	PF4	11	VB31_LCD_D11
SDC0-CMD	PF3	21	VB31_LCD_D10
SDC0-D0	PF1	22	VB31_LCD_D7
SDC0-D1	PF0	23	VB31_LCD_D4
MCS1-PWM0	PE17	27	VB31_LCD_D5
MCS1-RSTN	PE16	28	VB31_LCD_D4
PG7	PG7	29	VB31_LCD_D5
PG6	PG6	30	VB31_LCD_D4
MCS1-MCLK	PG4	31	VB31_LCD_D3
WL-SDIO-D2	PG4	35	PI2 - TWI1-SDA MIPLCAM_SDA
WL-SDIO-D3	PG5	35	PI2 - TWI1-SCK MIPLCAM_SDA
WL-SDIO-D1	PG3	37	USB0_N
WL-SDIO-D0	PG2	39	USB0_P
WL-SDIO-CMD	PG1	41	USB0_DM
WL-SDIO-CLK	PG0	43	MCS1_CK_P
State_LED	PH14	45	MCS1_CK_N
PH13	PH13	47	GND
PH12	PH12	51	MCS1_D1_N
PH11	PH11	51	MCS1_D1_P
PH10	PH10	53	MCS1_D0_P
PH9	PH9	55	MCS1_D0_N
PH8	PH8	57	GND
PH7	PH7	61	MICIN1_P
PH6	PH6	63	MICIN1_N
WLFIRST_RST	PH5	65	LINEOUTP
LCP_REG_ON	PH4	67	GPADC0_L1_BV
WIFI power	PH4	71	PH0
		73	PH1
		75	PH2
		77	PH3
		79	PH4
		81	PH5
		83	PH6
		85	PH7
		87	PH8
		89	PH9
		91	PH10
		93	PH11
		95	PH12
		97	PH13
		99	PH14
		101	PH15
		103	PH16
		105	PH17
		107	PH18
		109	PH19
		111	PH20
		113	PH21
		115	PH22
		117	PH23
		119	PH24
		121	PH25
		123	PH26
		125	PH27
		127	PH28
		129	PH29
		131	PH30
		133	PH31
		135	PH32
		137	PH33
		139	PH34
		141	PH35
		143	PH36
		145	PH37
		147	PH38
		149	PH39
		151	PH40
		153	PH41
		155	PH42
		157	PH43
		159	PH44
		161	PH45
		163	PH46
		165	PH47
		167	PH48
		169	PH49
		171	PH50
		173	PH51
		175	PH52
		177	PH53
		179	PH54
		181	PH



3.3V

main of PF is selected by the software.

USB0_N
USB0_P

GPADC0
OR
R1
R5
5.1K
0.162V
KEY S1
KEY S2
KEY S3
0V
RST

10 11

