

1 2 3 4 5 6 7 8



NDH

Sheet: /  
File: Processeur\_Barre\_Son.kicad\_sch

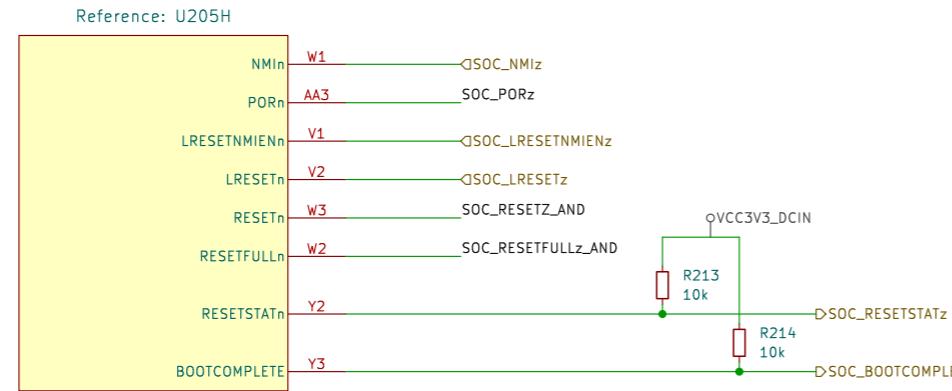
**Title: Barre de son (base saine)**

Size: A3 Date: 2025-05-16  
KiCad E.D.A. 9.0.0

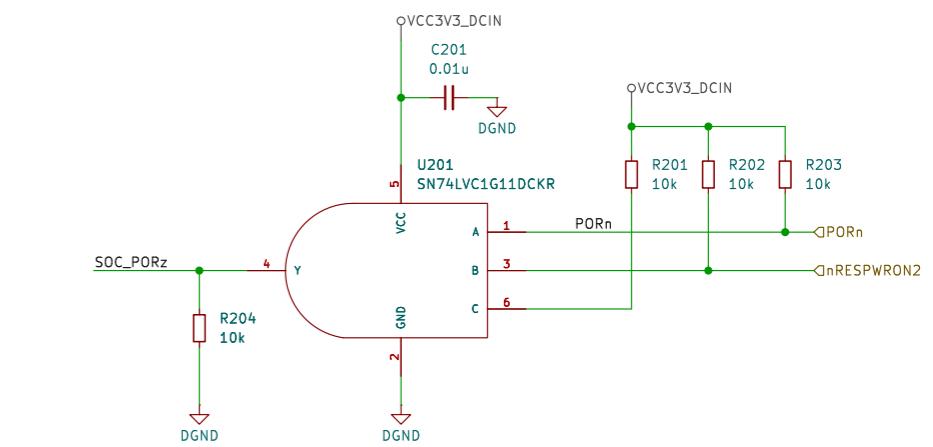
Rev: 1.0  
Id: 1/42

1 2 3 4 5 6 7 8

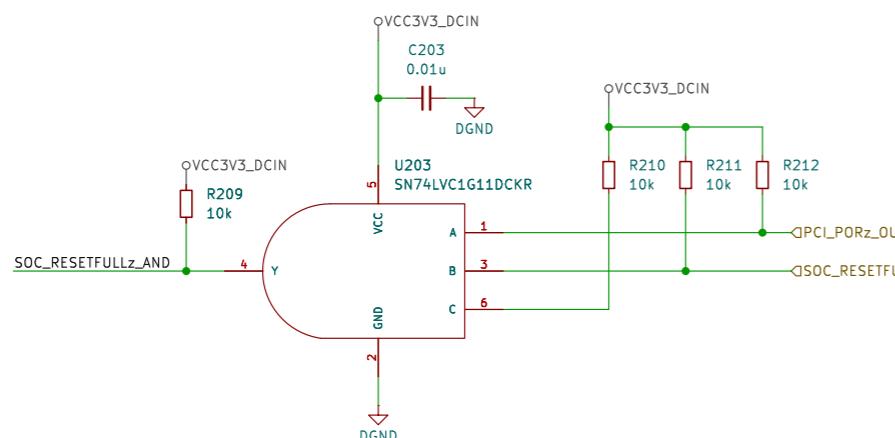
## Soc RESET



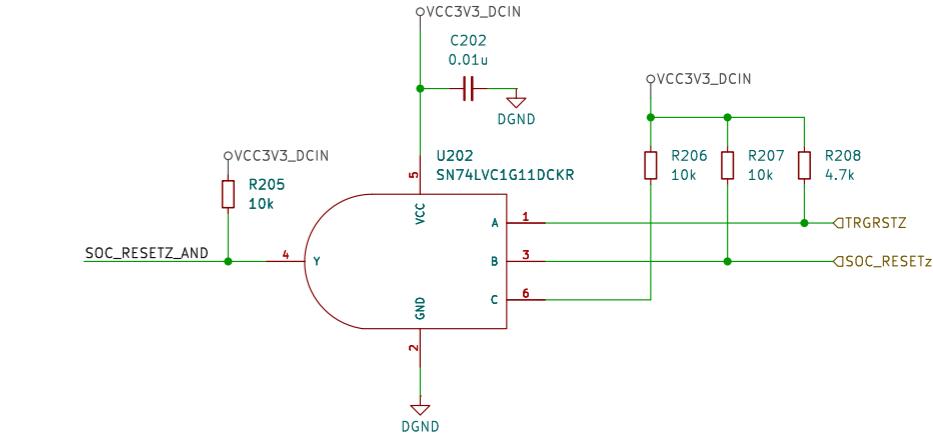
## POWER ON RESET



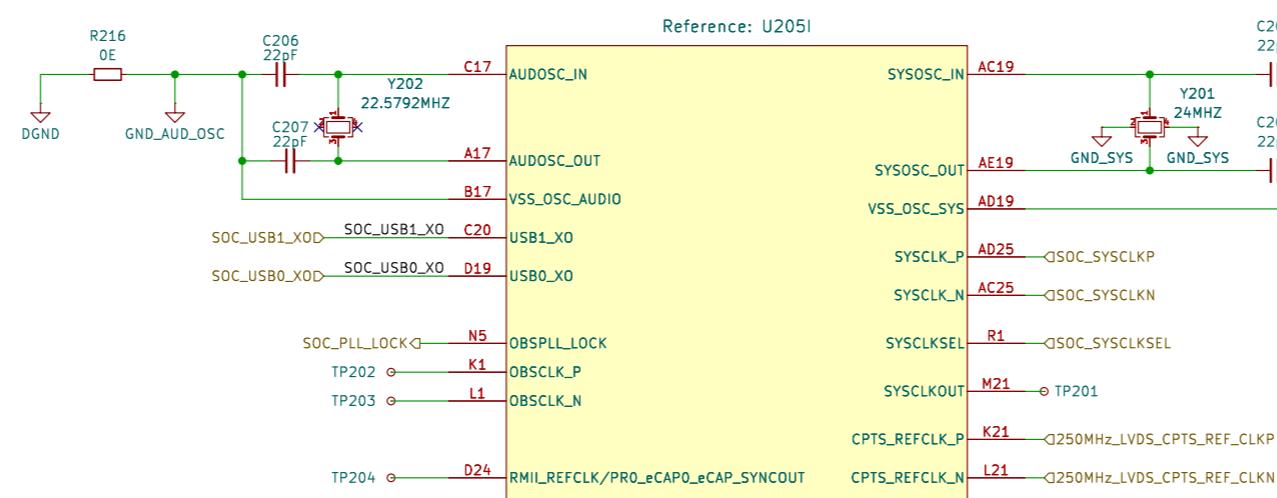
## FULL RESET



## WARM RESET



## SoC CLOCK



NDH

Sheet: /SOC CLOCK & RESET/  
File: soc\_clock\_reset.kicad\_sch

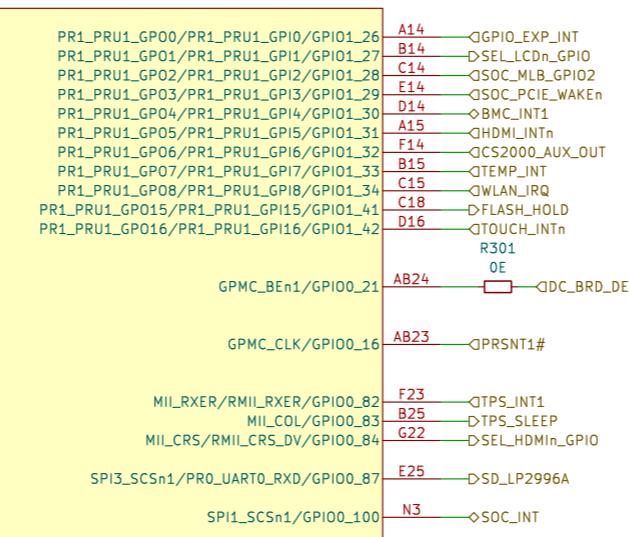
Title: Barre de son (base saine)

Size: A3 Date: 2025-05-16  
KiCad E.D.A. 9.0.0

Rev: 1.0  
Id: 2/42

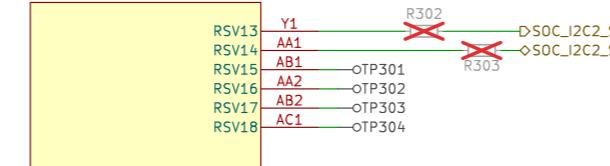
## SoC GPIOs

Reference: U301C

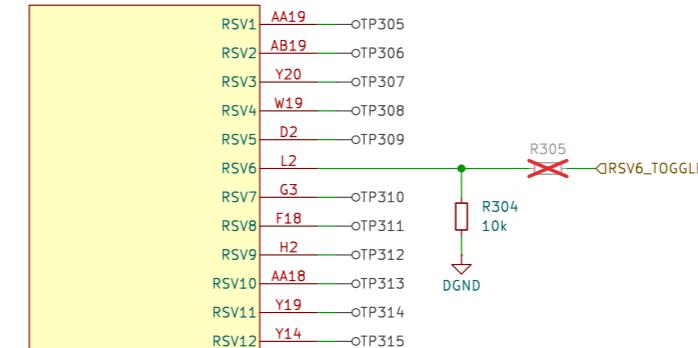


## RESERVED PINS

Reference: U301Y



Reference: U301S



### NDH

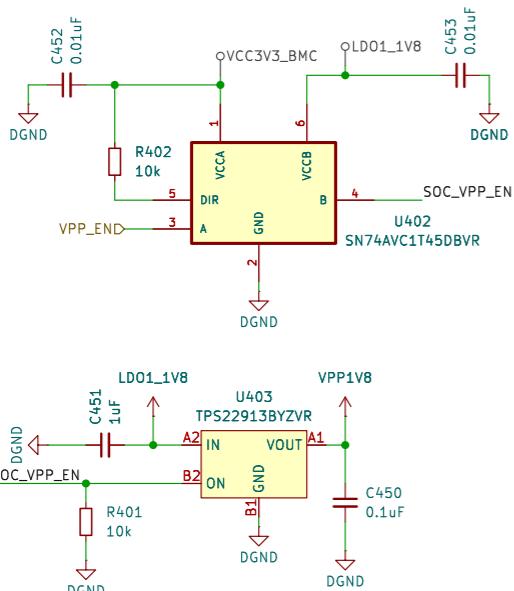
Sheet: /SOC GPIO, SMART REFLEX & TEST OUT/  
File: SOC\_GPIO\_SMART\_REFLEX\_TEST\_OUT\_sch.kicad\_sch

### Title: Barre de son (base saine)

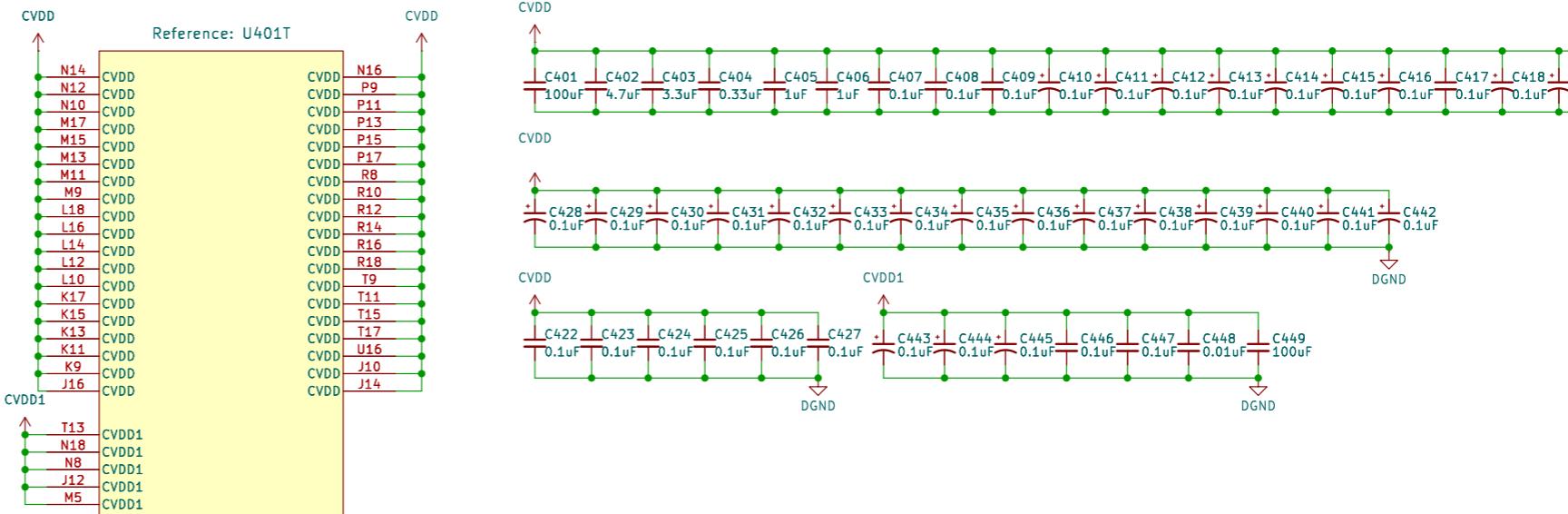
Size: A3 Date: 2025-05-16  
KiCad E.D.A. 9.0.0

Rev: 1.0  
Id: 3/42

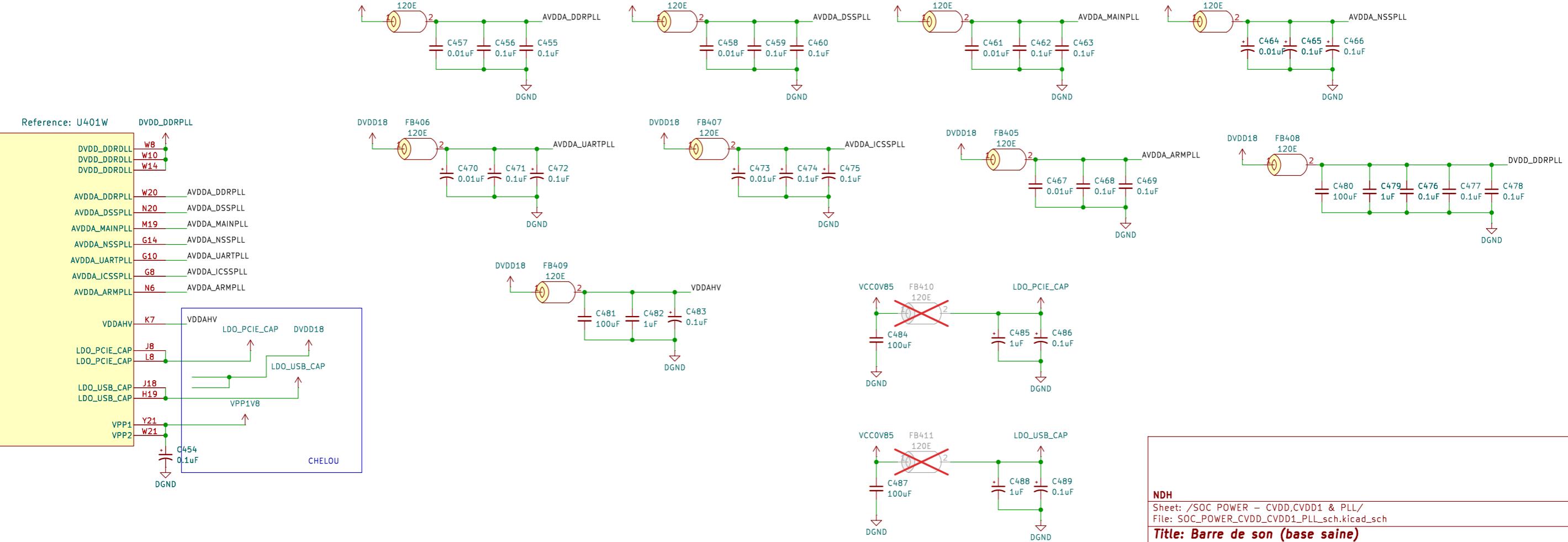
## VPP POWER GENERATION



## SoC POWER - CVDD,CVDD1



## SoC POWER - PLL



NDH

Sheet: /SOC POWER - CVDD,CVDD1 & PLL/  
File: SOC\_POWER\_CVDD\_CVDD1\_PLL\_sch.kicad\_sch

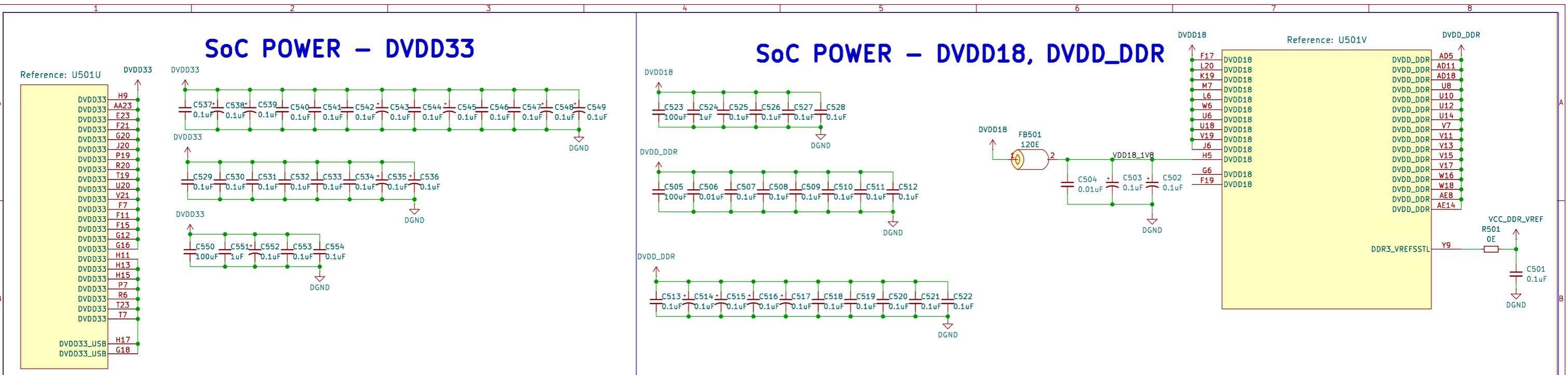
Title: Barre de son (base saine)

Size: A3 Date: 2025-05-16

KiCad E.D.A. 9.0.0

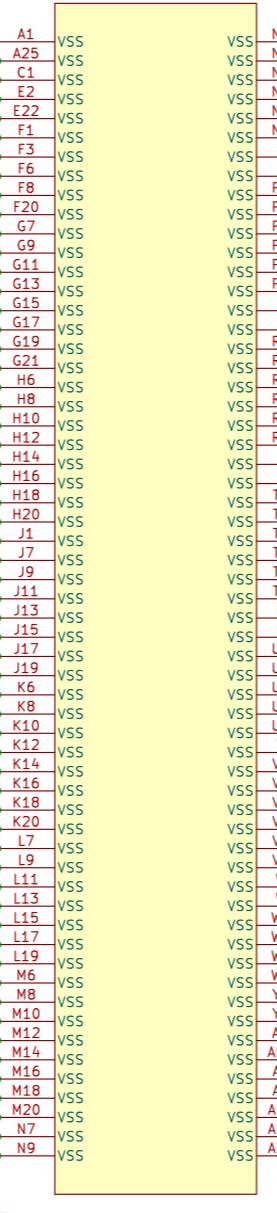
Rev: 1.0

Id: 4/42



## SOC POWER – VSS

Reference: U501X



NDH

Sheet: /SOC POWER – DVDD33, DVDD18, DVDD\_DDR & VSS/  
File: SOC\_POWER\_DVDD33\_DVDD18\_DVDD\_DDR\_VSS.kicad\_sch

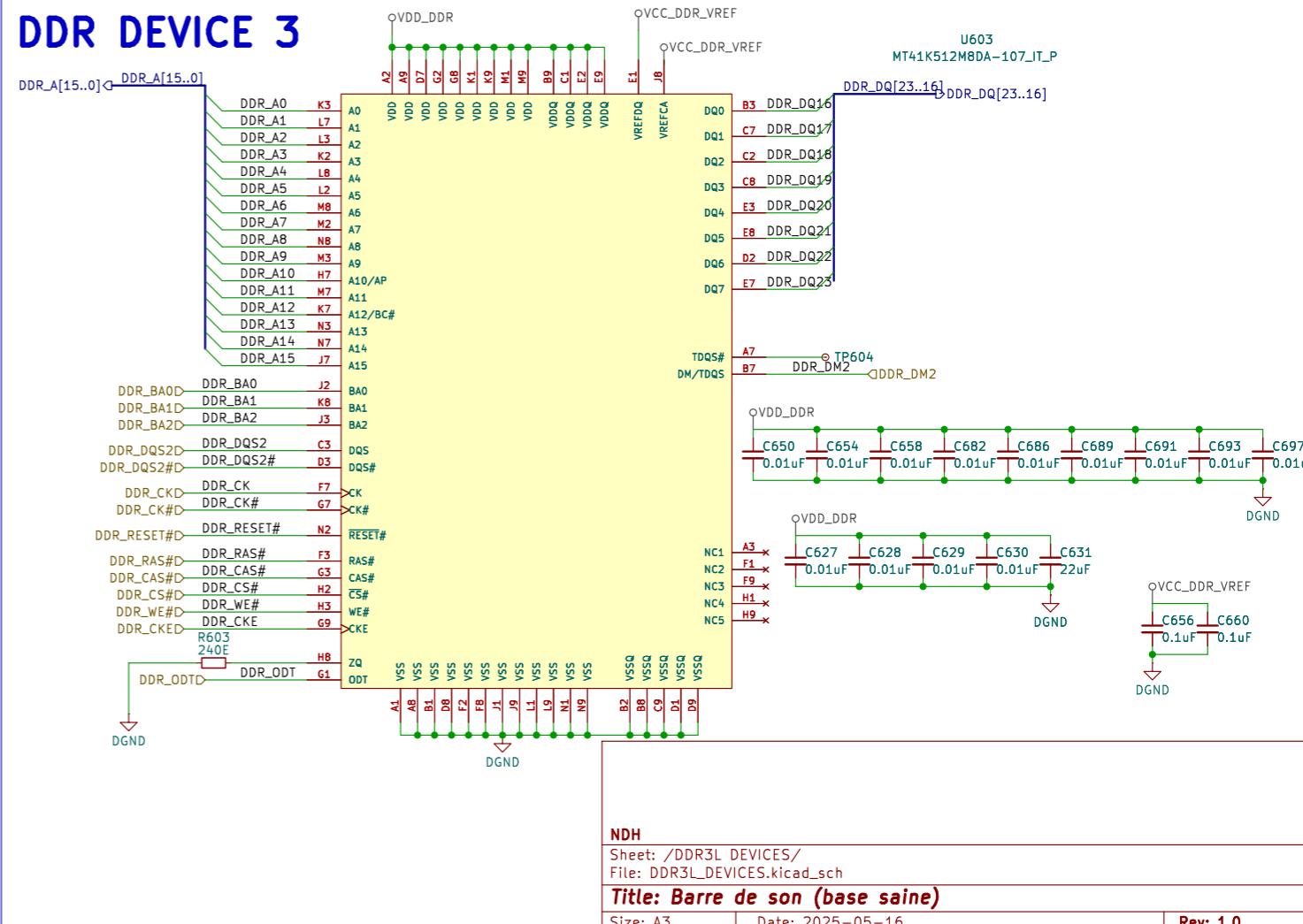
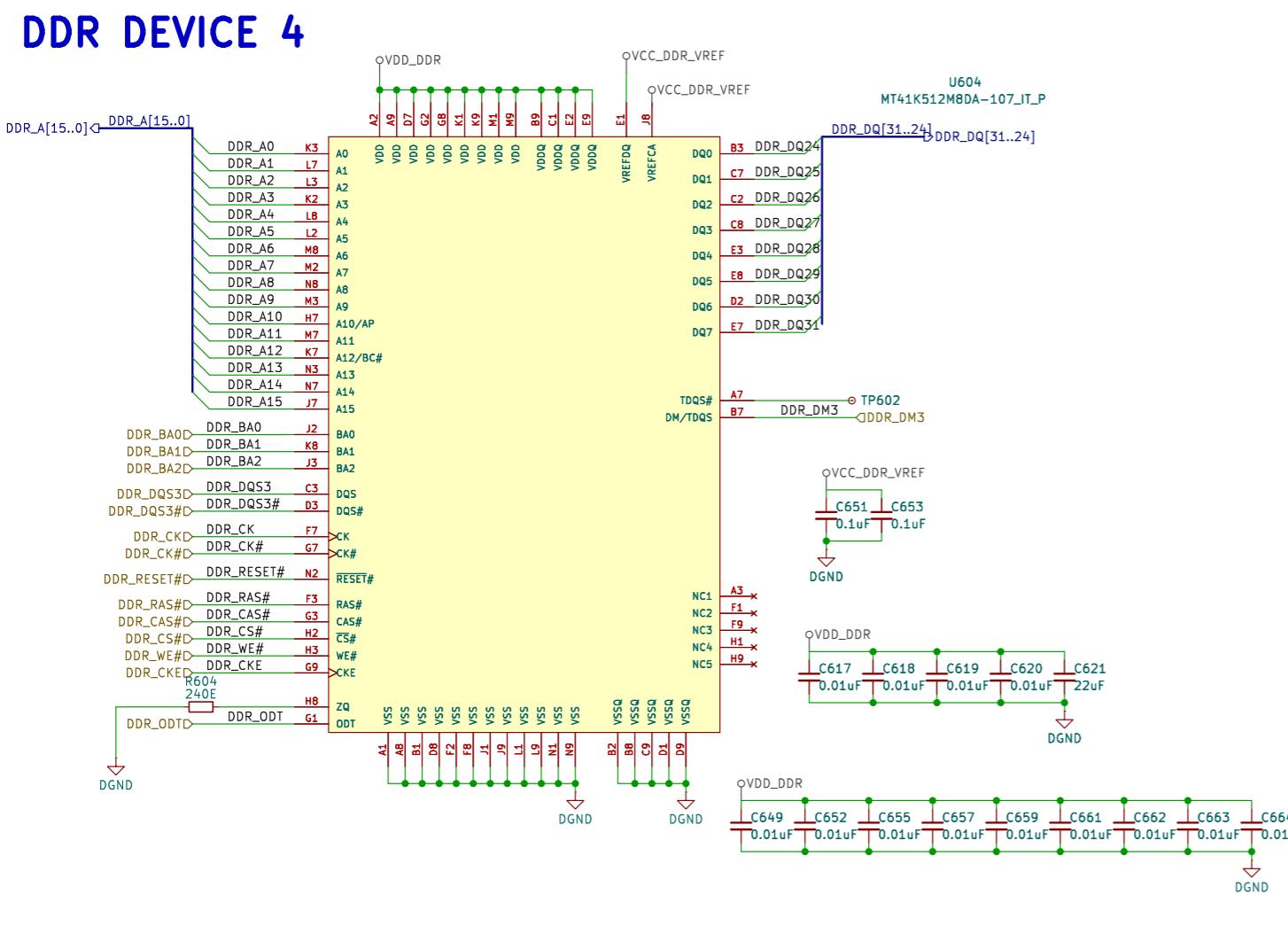
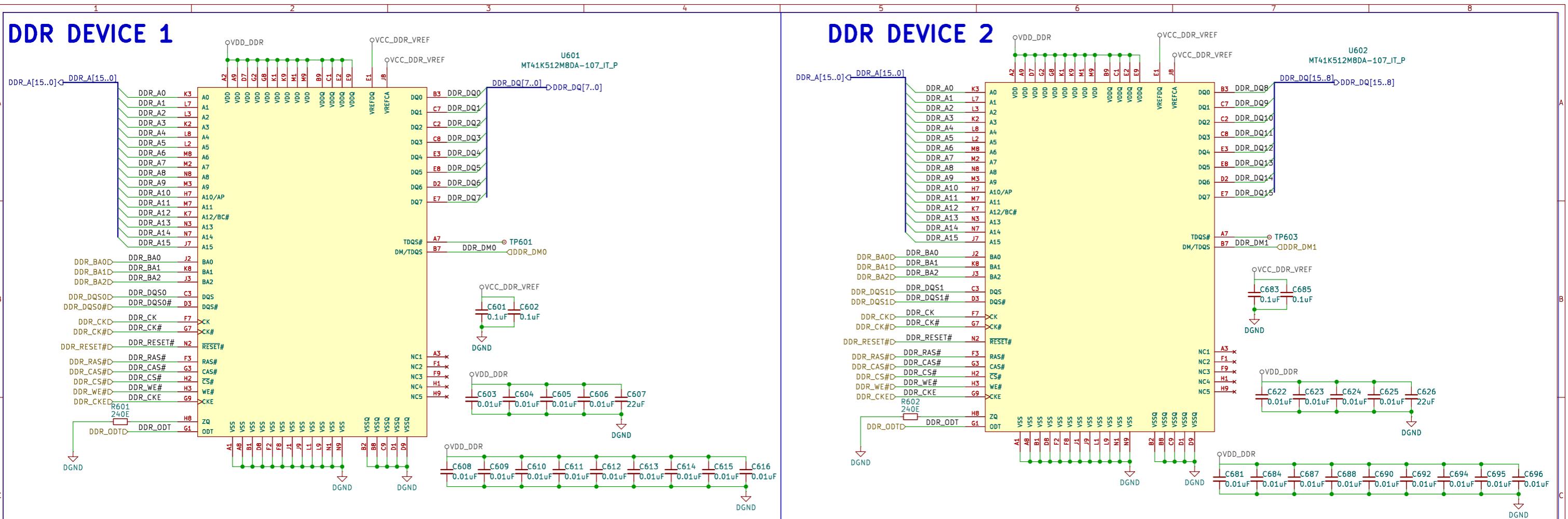
Title: Barre de son (base saine)

Size: A3 Date: 2025-05-16

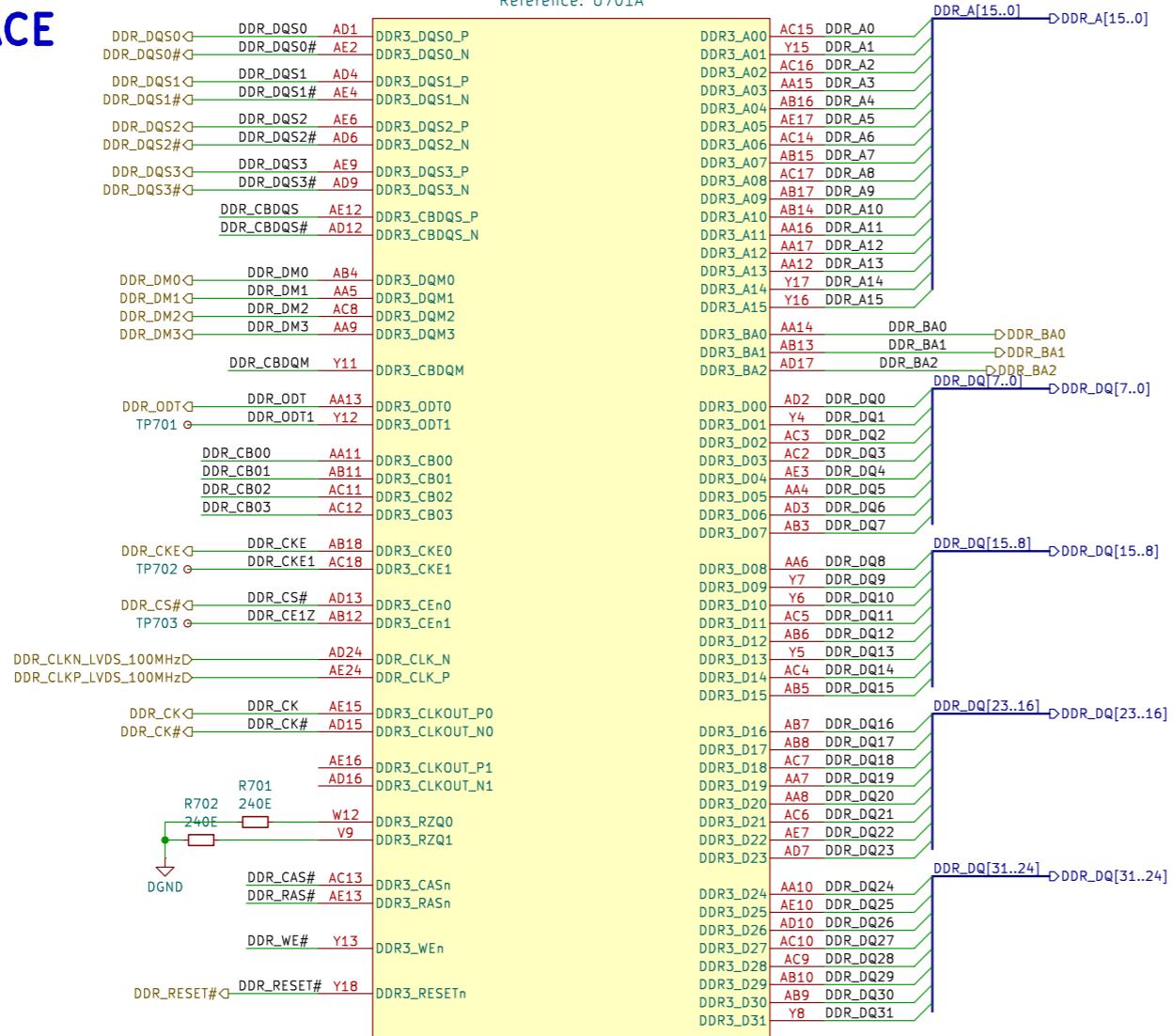
KiCad E.D.A. 9.0.0

Rev: 1.0

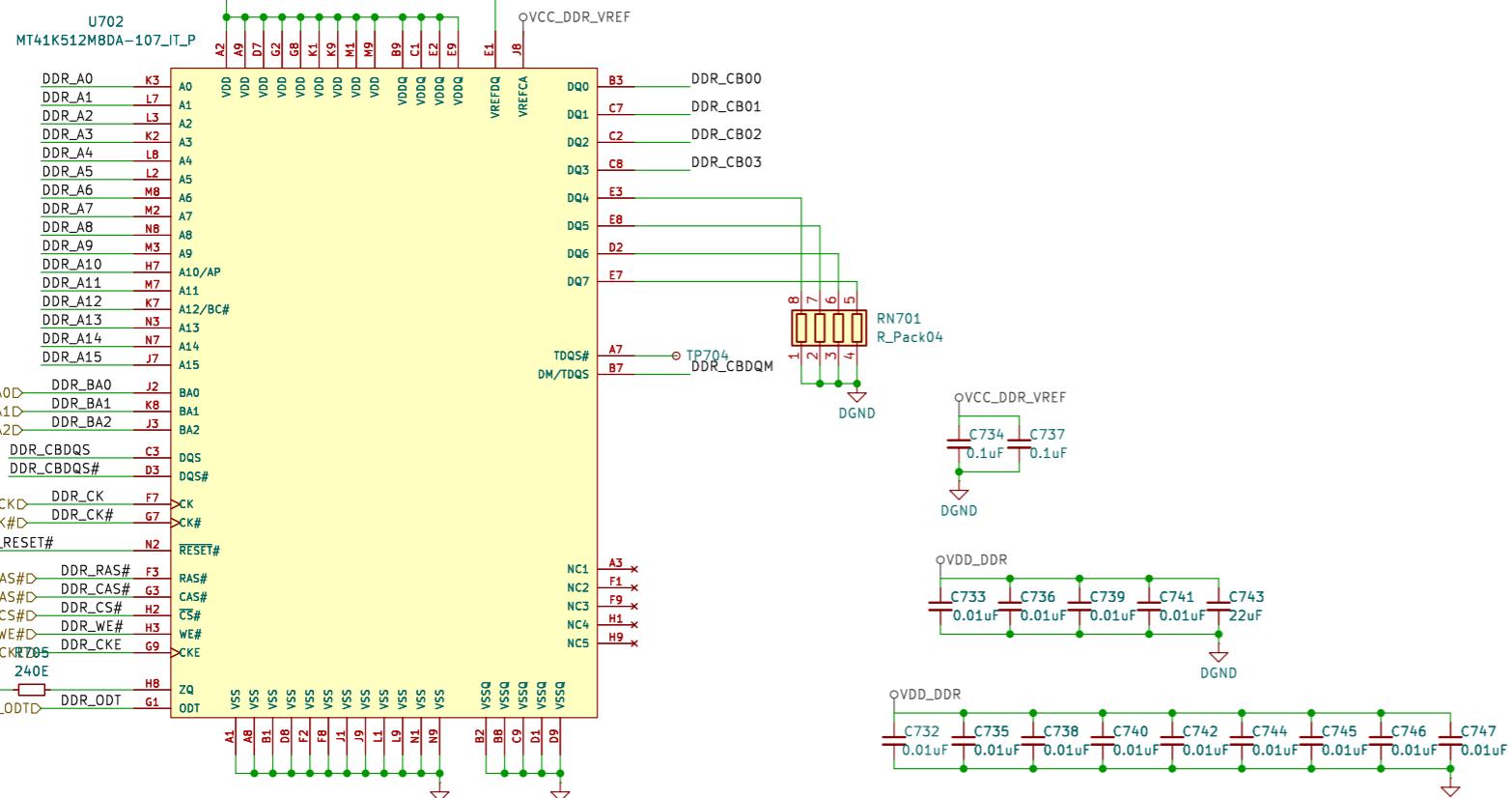
Id: 5/42



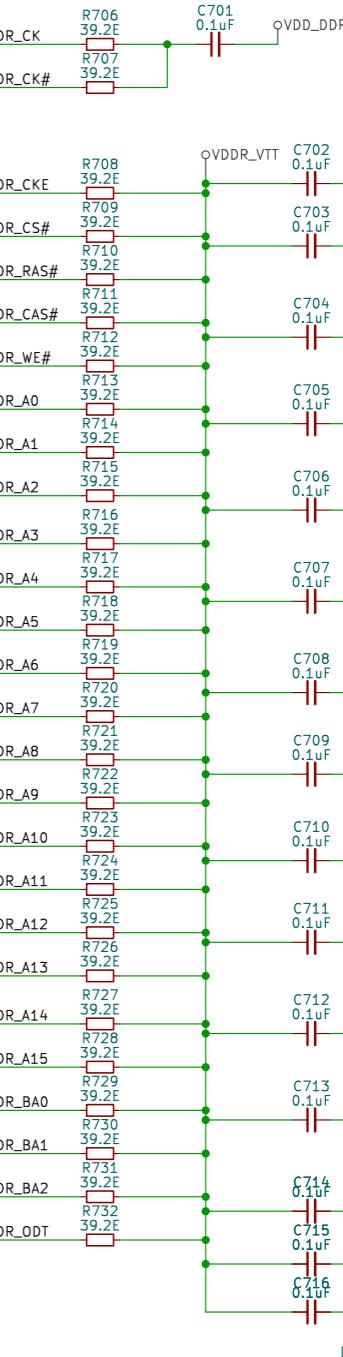
# SoC DDR INTERFACE



# ECC DEVICE



# ECC DEVICE DDR TERMINATION



NDH

Sheet: /SOC DDR MODULE, ECC & TERMINATION/  
File: SOC\_DDR\_MODULE\_ECC\_TERMINATION.kicad\_sch

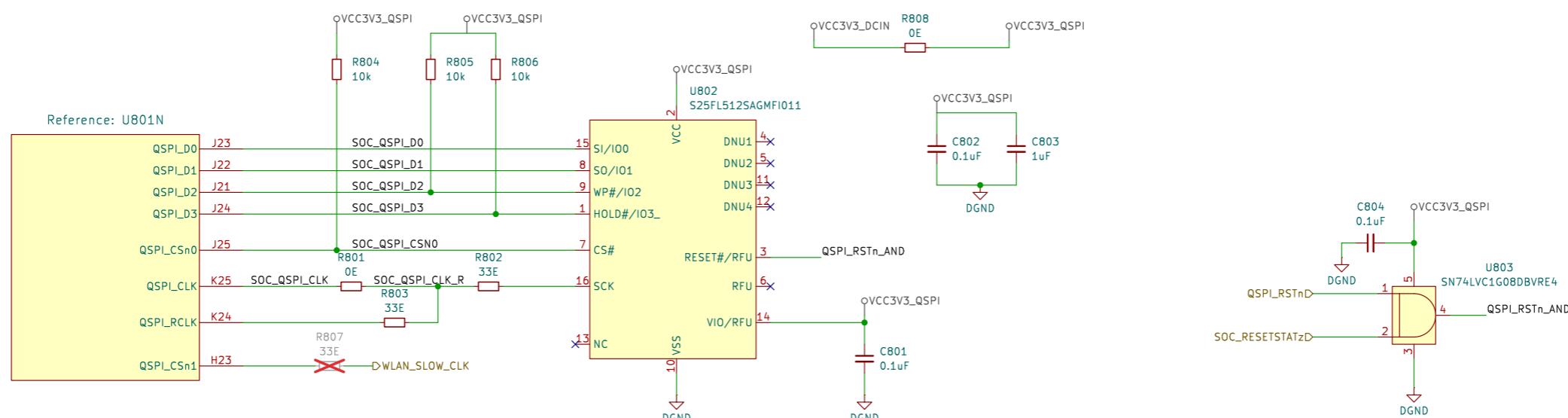
Title: Barre de son (base saine)

Size: A3 Date: 2025-05-16  
KiCad E.D.A. 9.0.0

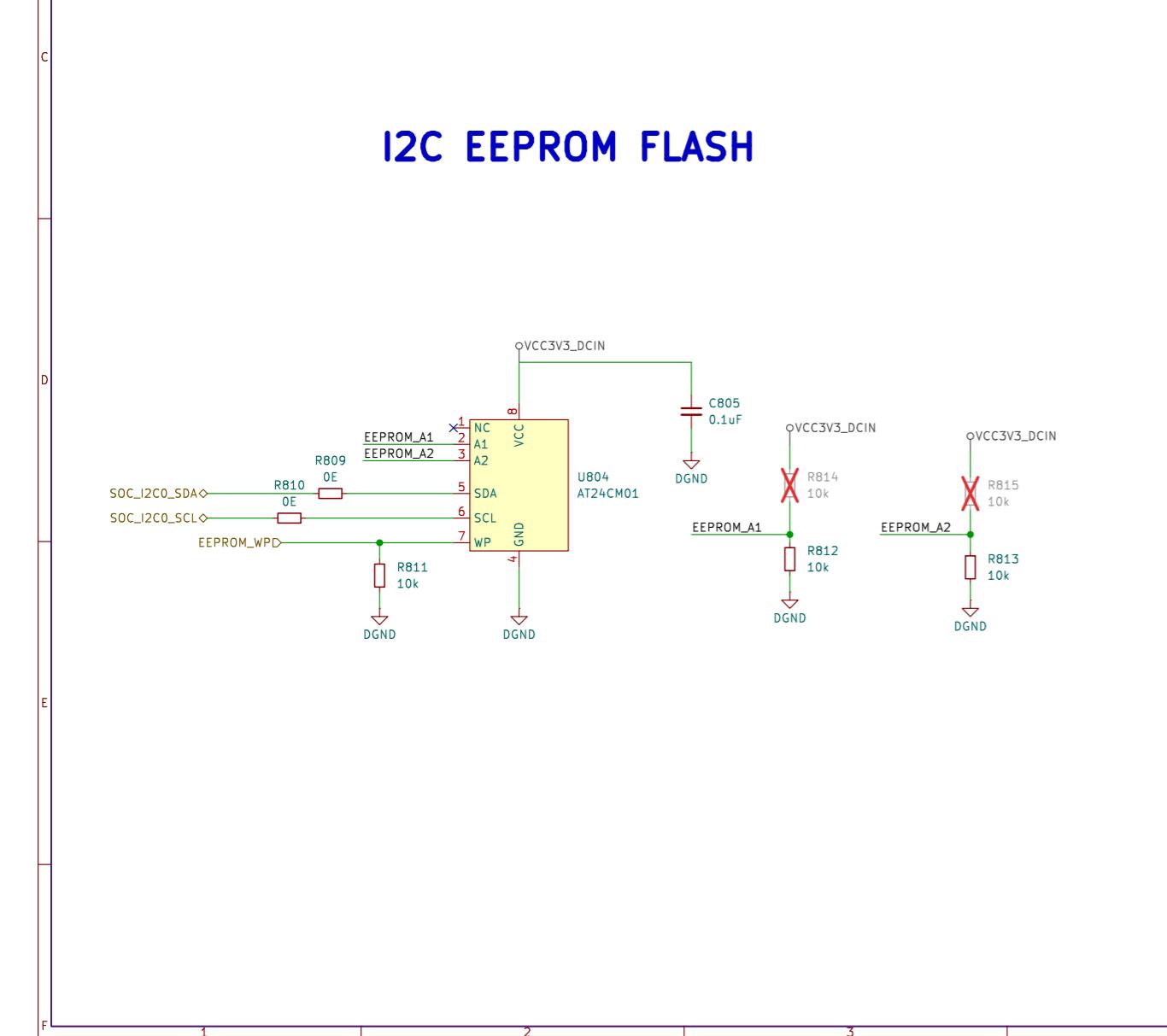
Rev: 1.0  
Id: 7/42

1 2 3 4 5 6 7 8

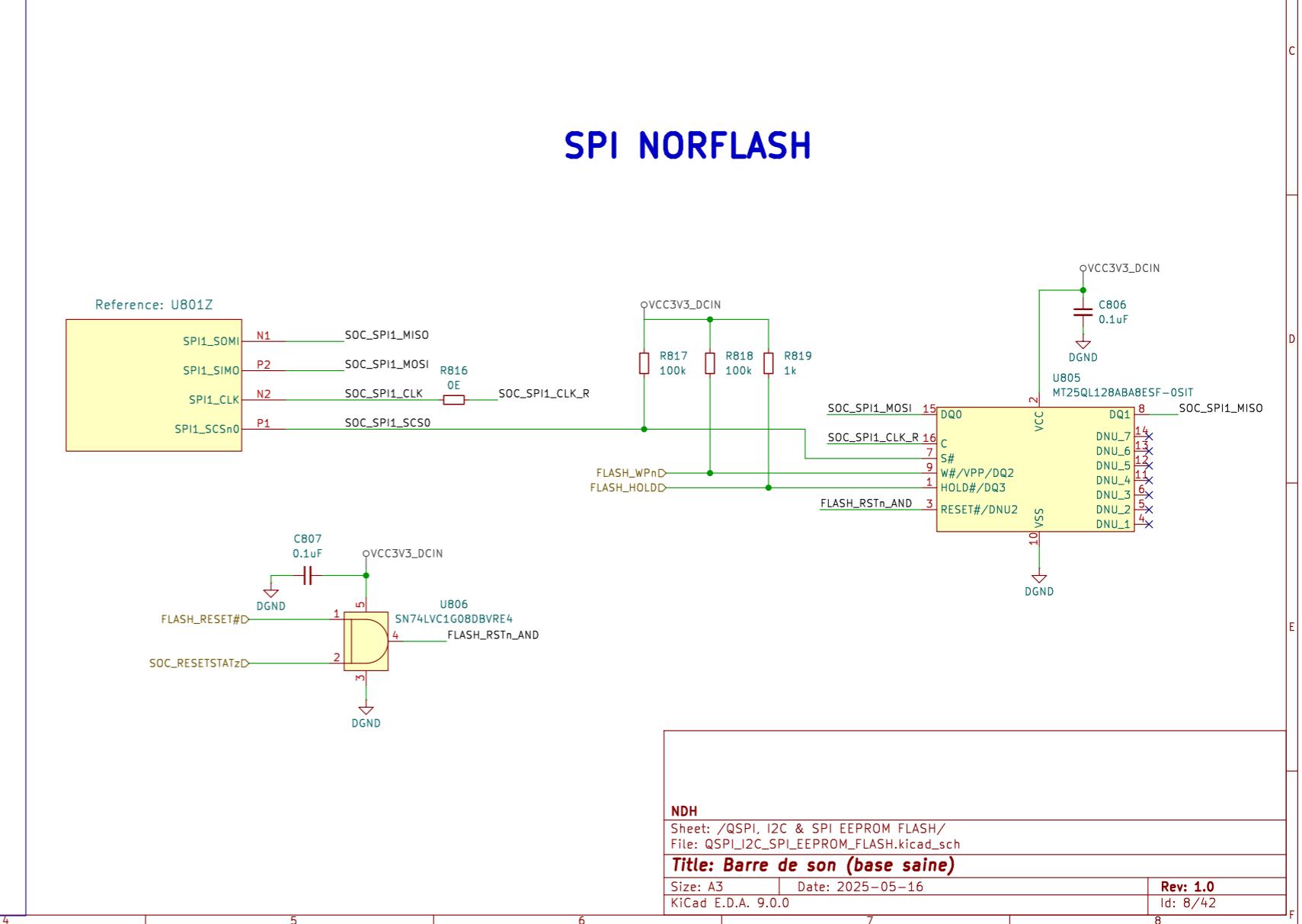
## QSPI

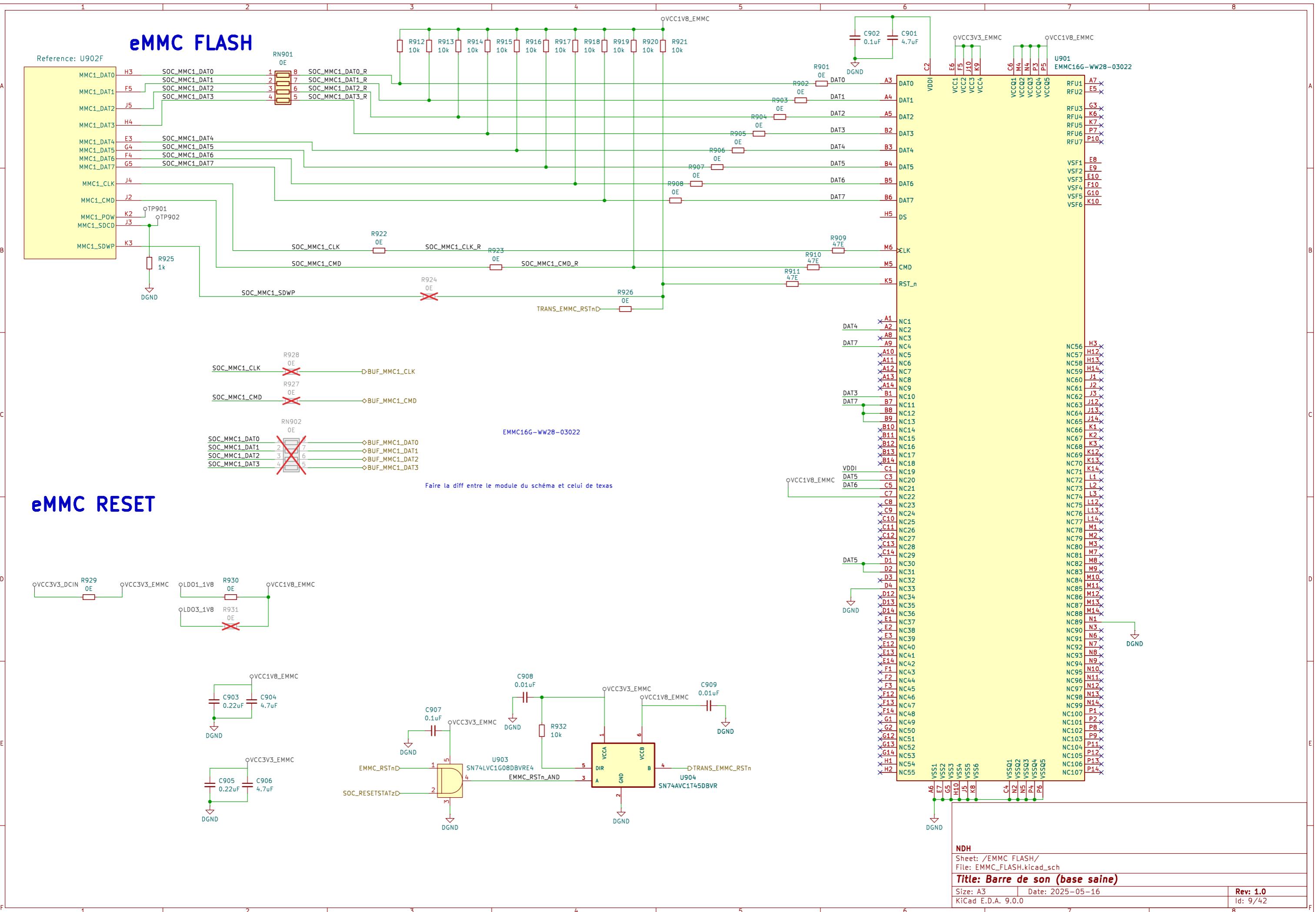


## I2C EEPROM FLASH

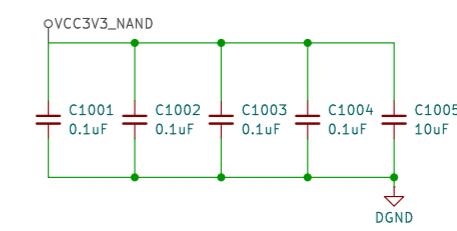
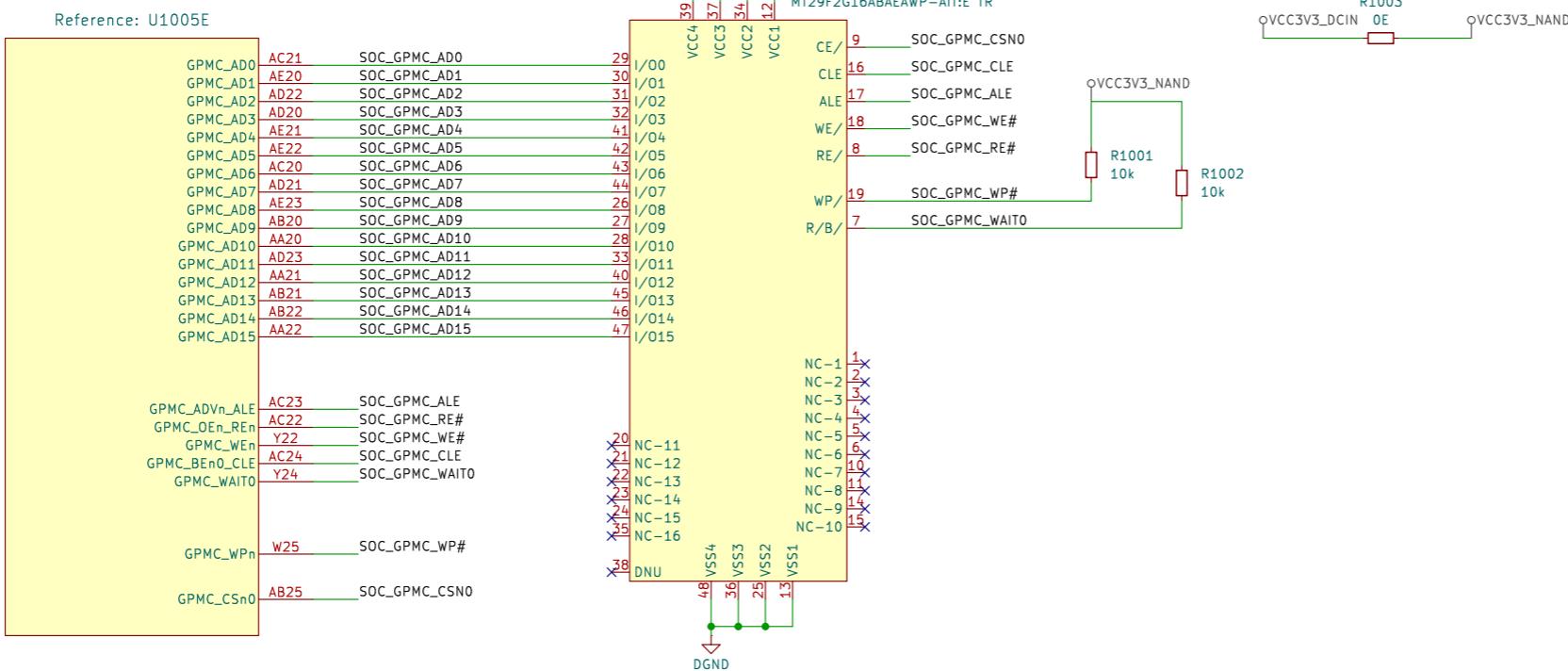


## SPI NORFLASH

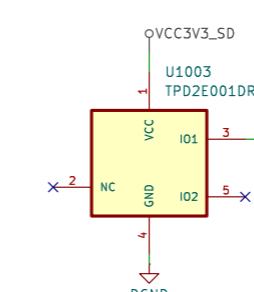
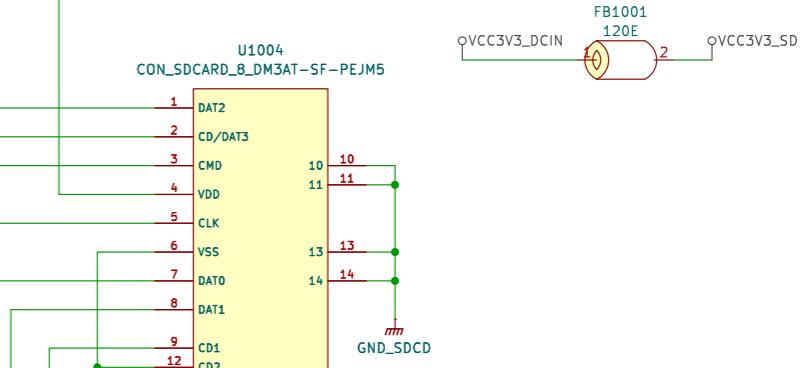
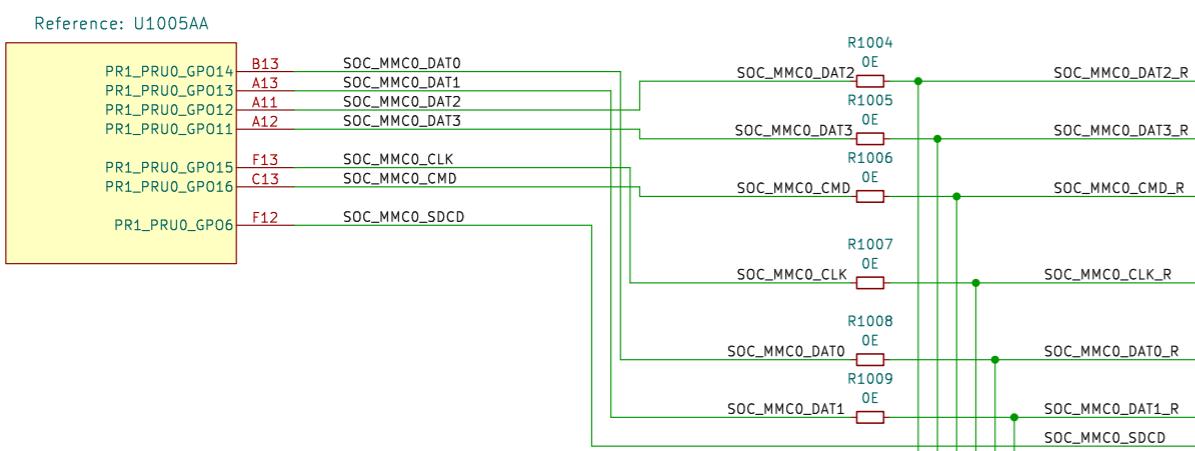




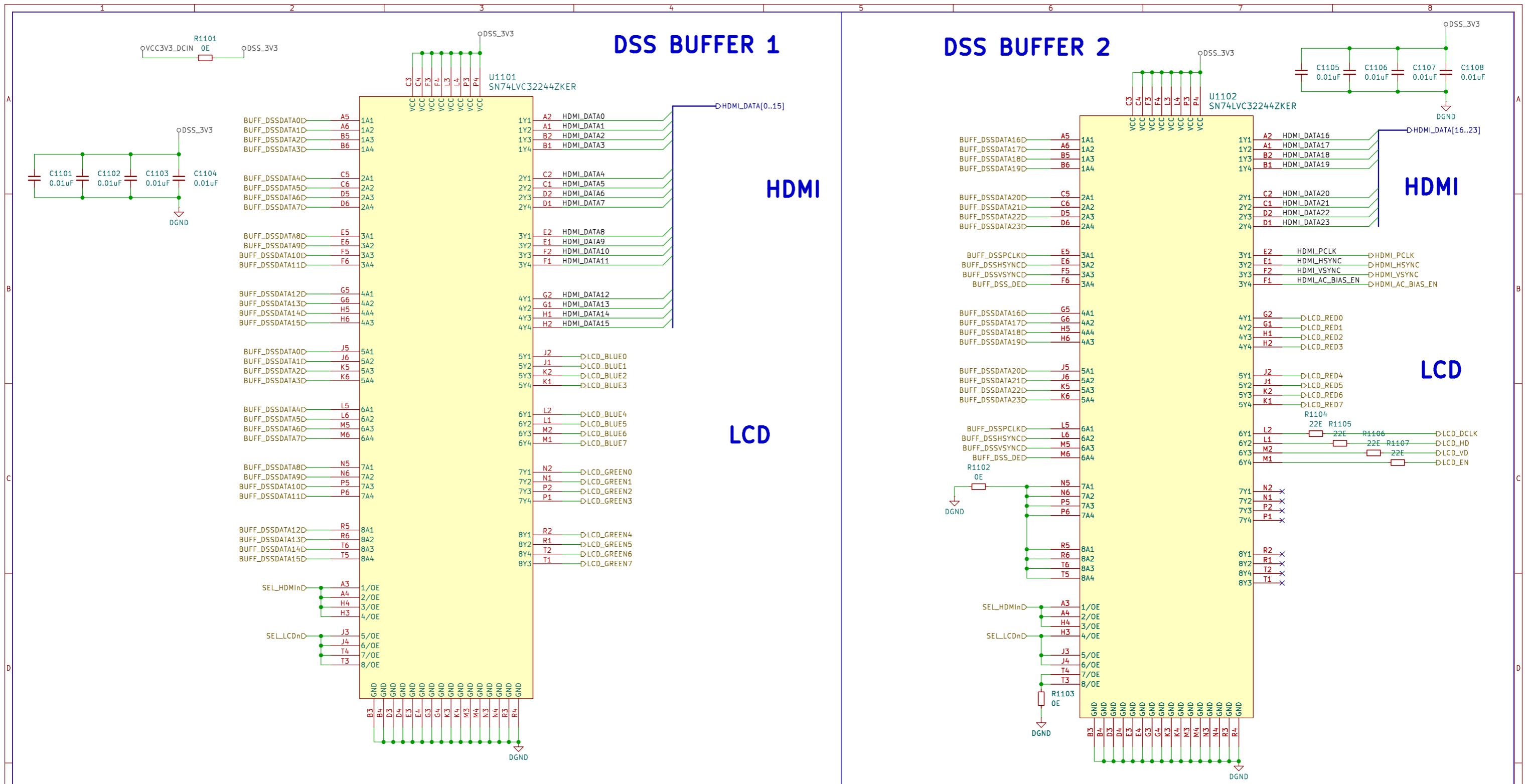
## NAND Flash



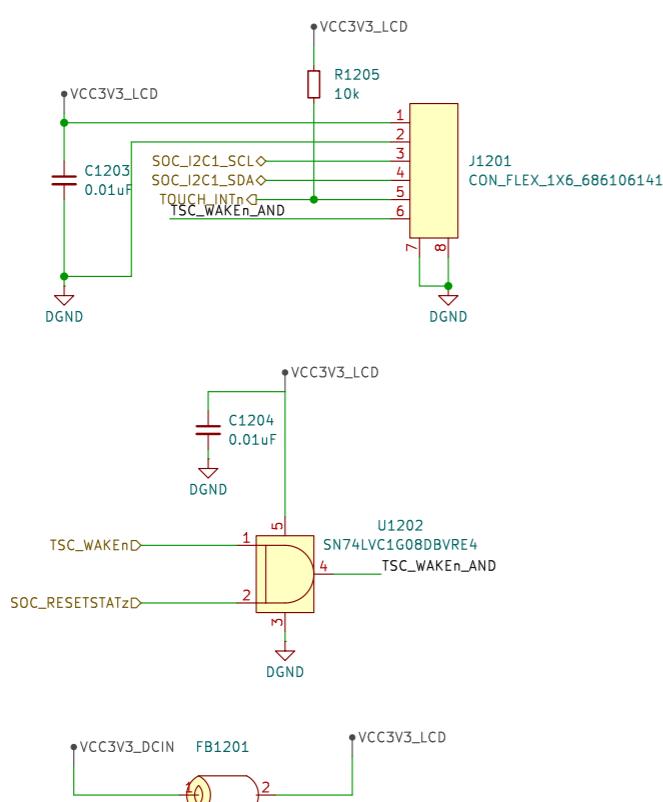
## MICRO SD CARD



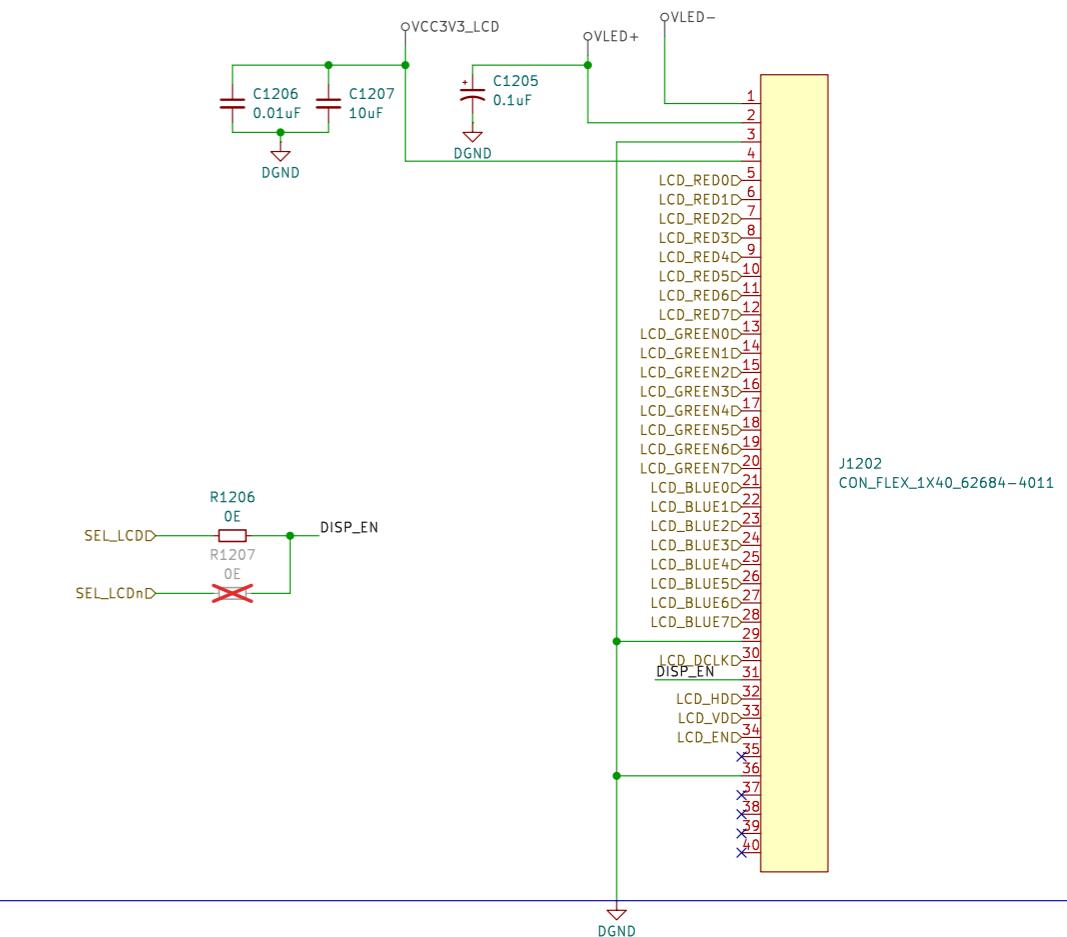
**NDH**  
Sheet: /NAND FLASH & SD CARD/  
File: NAND\_FLASH\_and\_SD\_CARD.kicad\_sch  
**Title: Barre de son (base saine)**  
Size: A3 Date: 2025-05-16  
KiCad E.D.A. 9.0.0 Rev: 1.0  
Id: 10/42



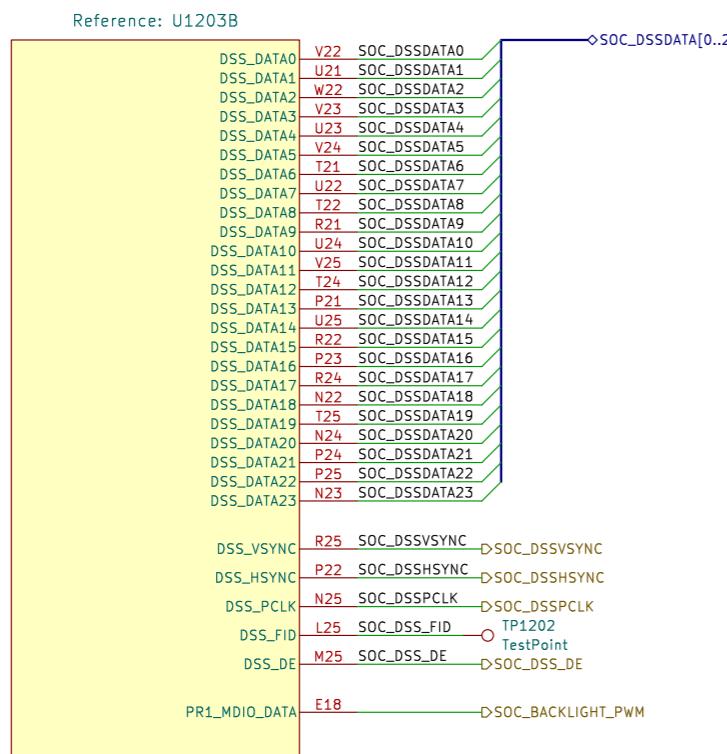
## TOUCH SCREEN CONNECTOR



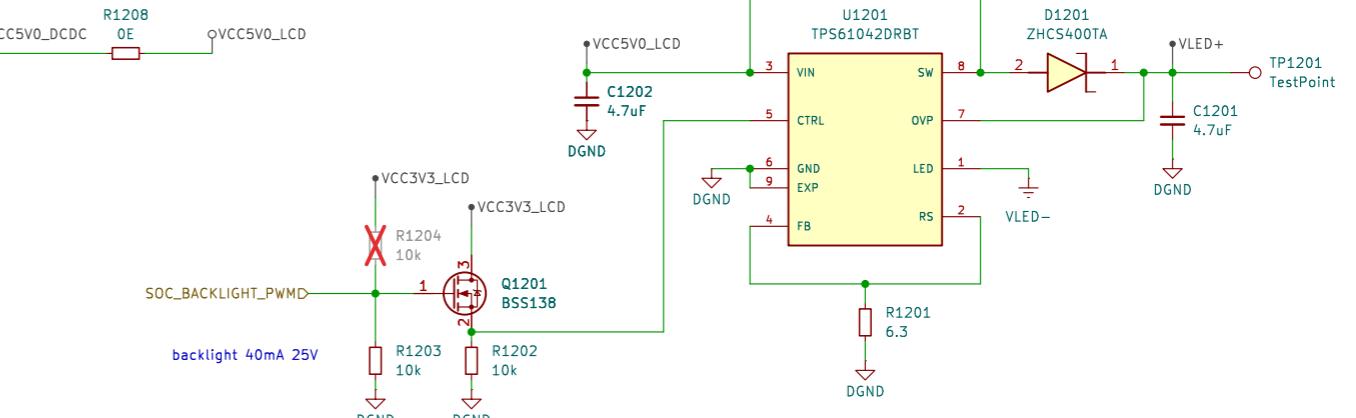
## LCD CONNECTOR



## SOC DSS



## BACKLIGHT POWER



NDH

Sheet: /LCD & TOUCH SCREEN/  
File: LCD\_and\_TOUCH\_SCREEN.kicad\_sch

Title: Barre de son (base saine)

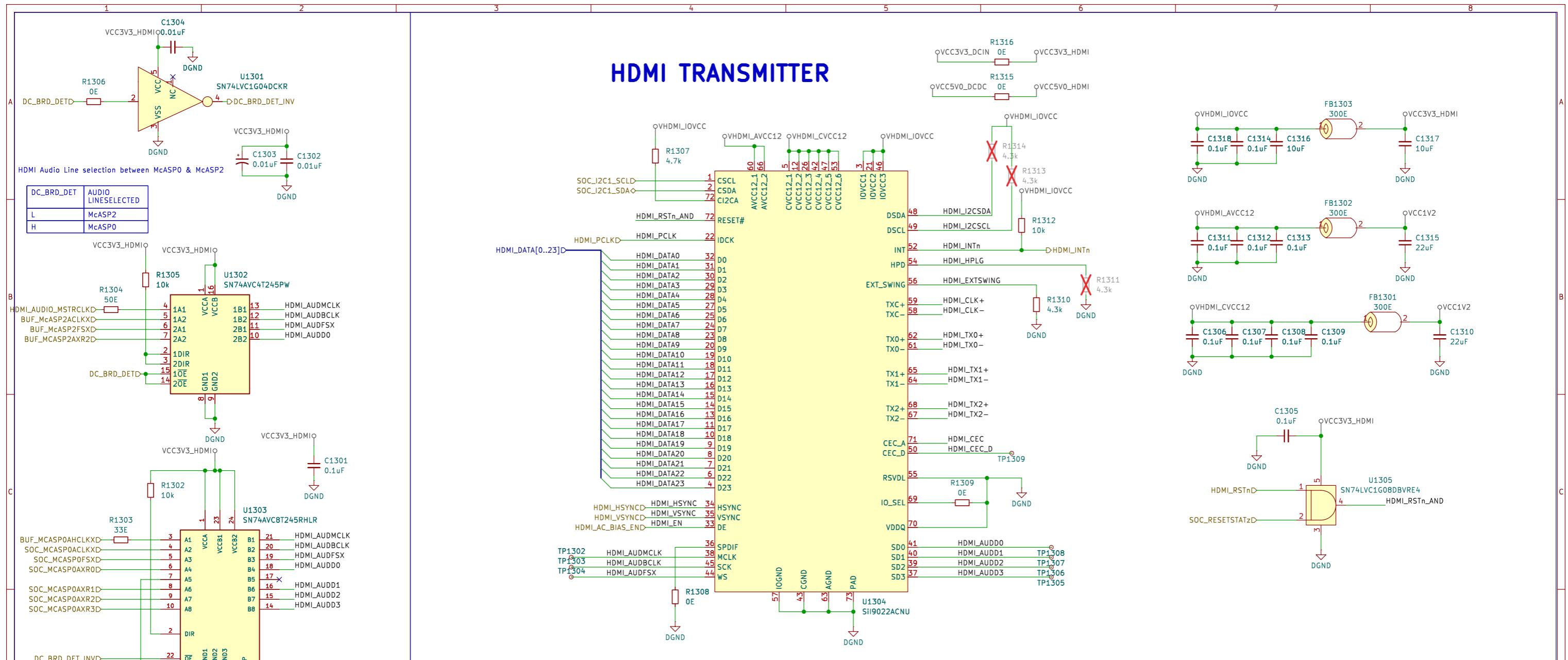
Size: A3 Date: 2025-05-16

KiCad E.D.A. 9.0.0

Rev: 1.0

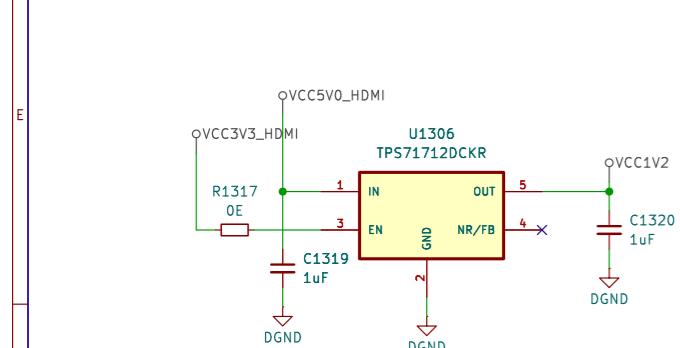
Id: 12/42

# HDMI TRANSMITTER



# HDMI ESD DEVICE

# HDMI 1.2V GENERATION



# HDMI CONNECTOR



NDH

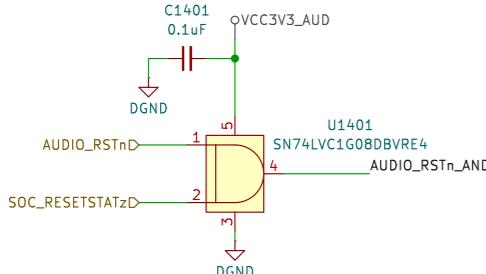
Sheet: /HDMI TRASMITTER/  
File: HDMI\_TRASMITTER.kicad\_sch

Title: Barre de son (base saine)

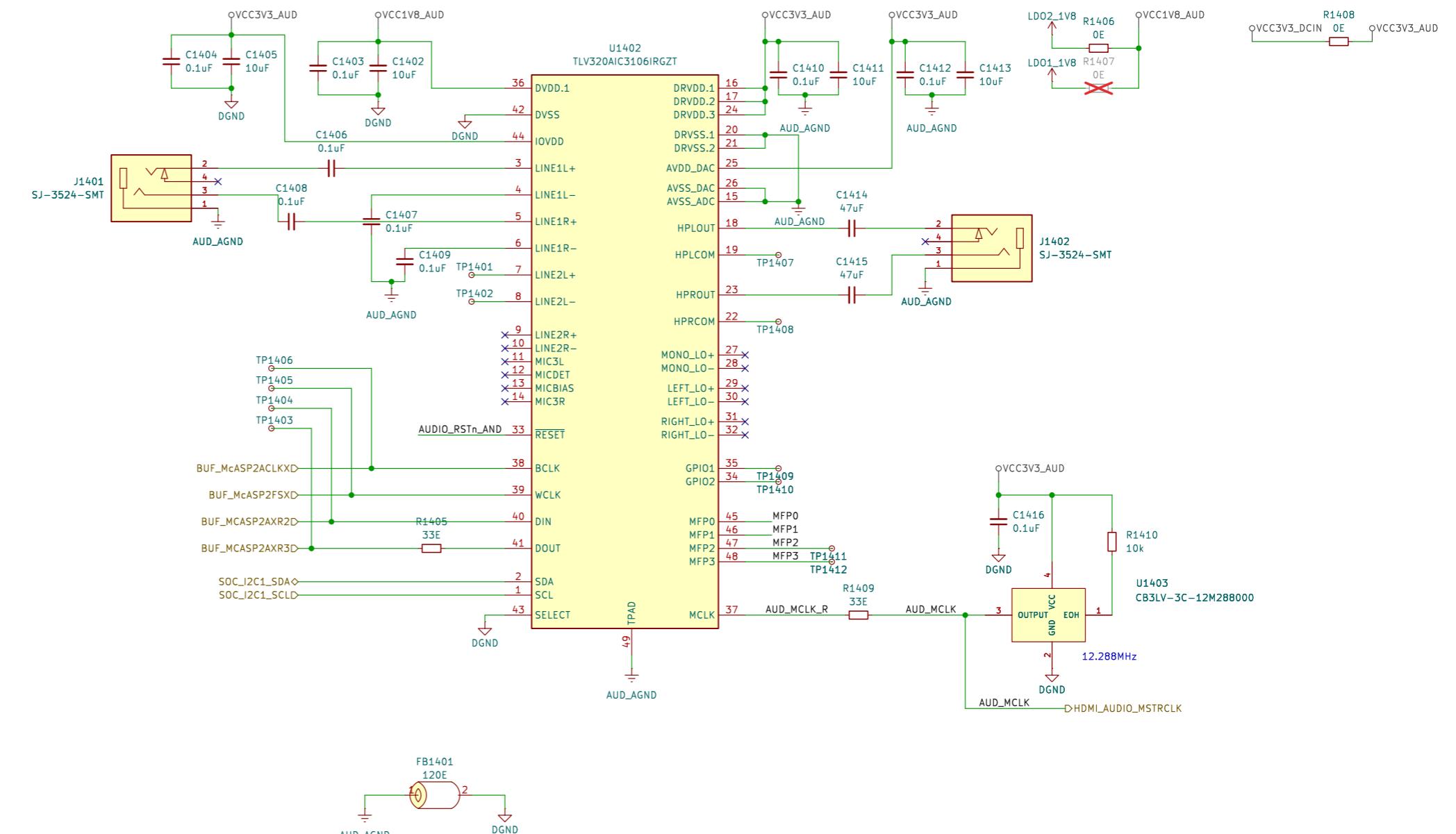
Size: A3 Date: 2025-05-16  
KiCad E.D.A. 9.0.0

Rev: 1.0  
Id: 13/42

## AUDIO CODEC RESET



## AUDIO CODEC



CODEC I2C ADDRESS SELECTION

MFP0	MFP1	ADDRESS
L	L	1A
L	H	1B
H	L	1C
H	H	1D

NDH

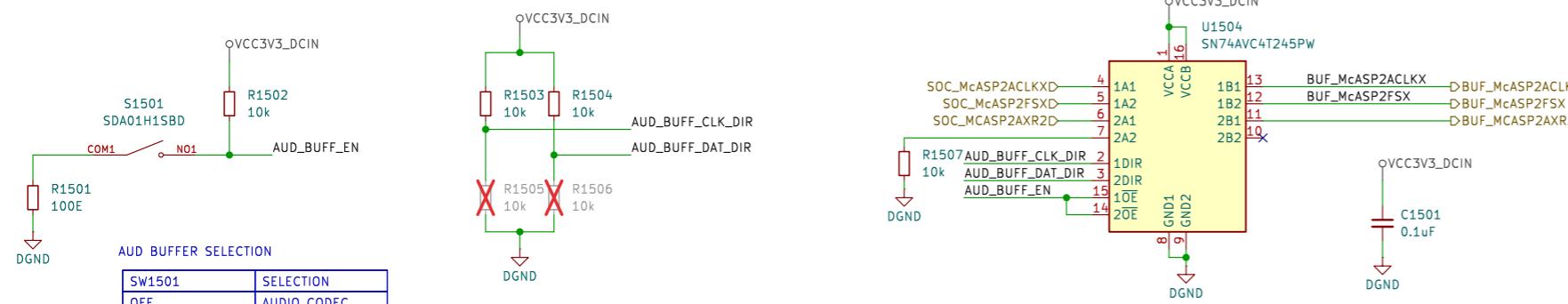
Sheet: /AUDIO\_CODEC/  
File: AUDIO\_CODEC.kicad\_sch

Title: Barre de son (base saine)

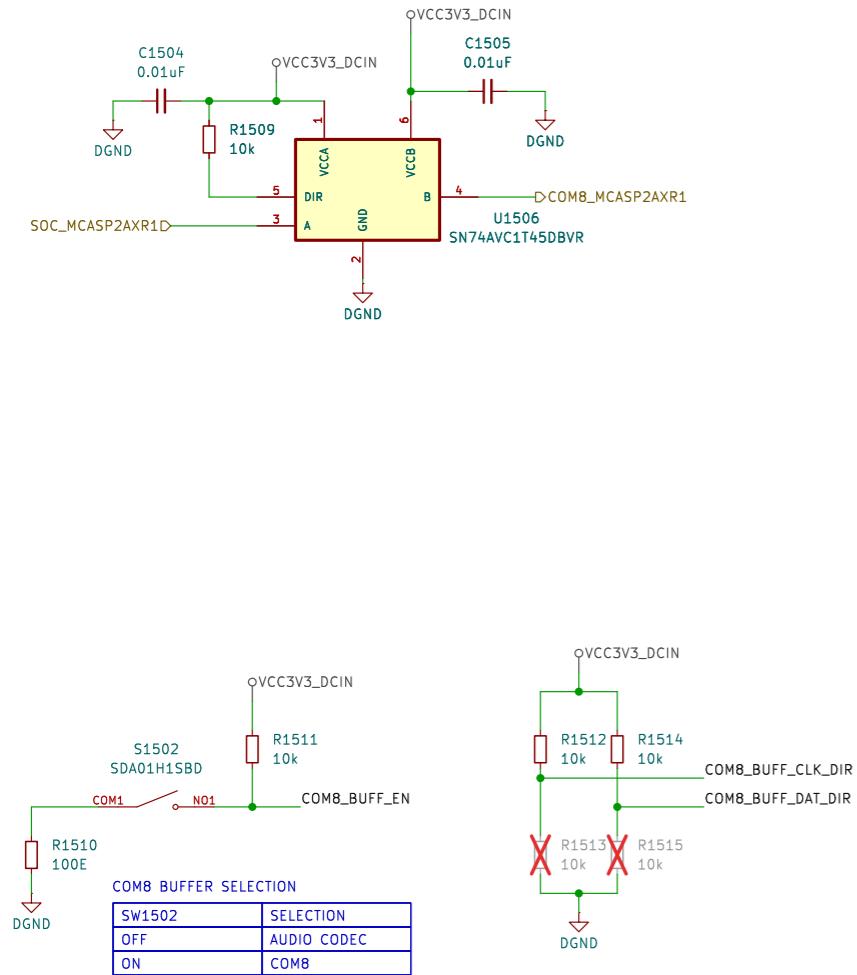
Size: A3 Date: 2025-05-16  
KiCad E.D.A. 9.0.0

Rev: 1.0  
Id: 14/42

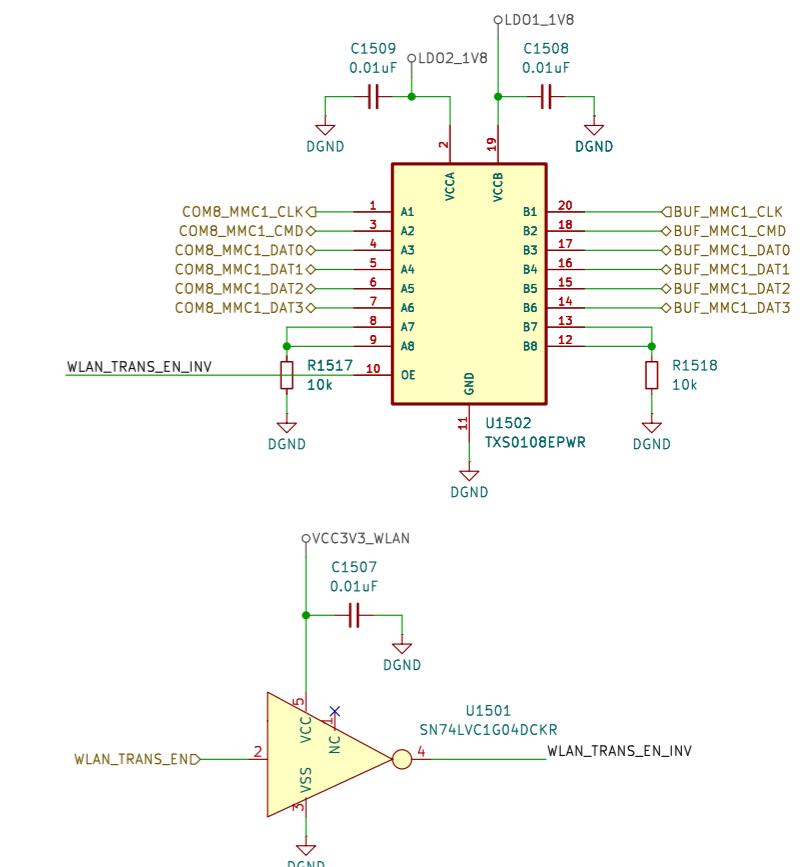
## AUDIO BUFFER



## COM8 BUFFER



## COM8 SDIO BUFFER



NDH

Sheet: /MCASP2\_BUFFERS\_FOR\_COM8 , HDMI& AUDIO\_CODEC/  
File: MCASP2\_BUFFERS\_FOR\_COM8\_HDMI\_and\_AUDIO\_CODEC.kicad\_sch

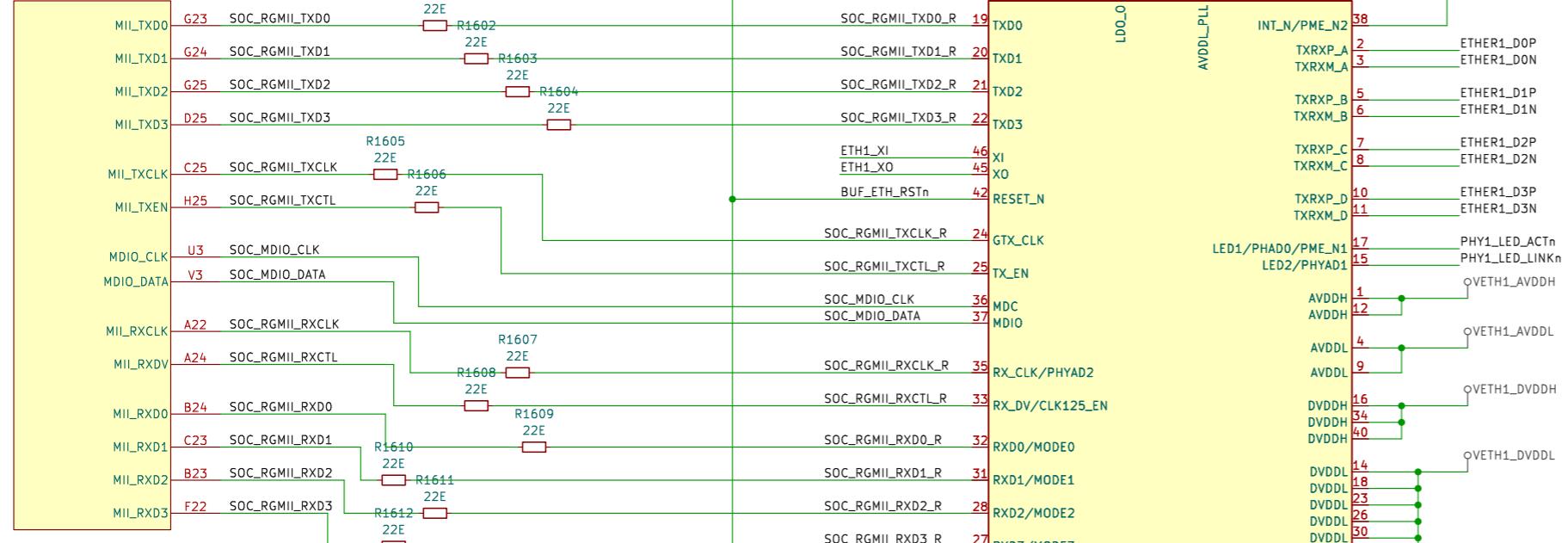
Title: Barre de son (base saine)

Size: A3 Date: 2025-05-16  
KiCad E.D.A. 9.0.0

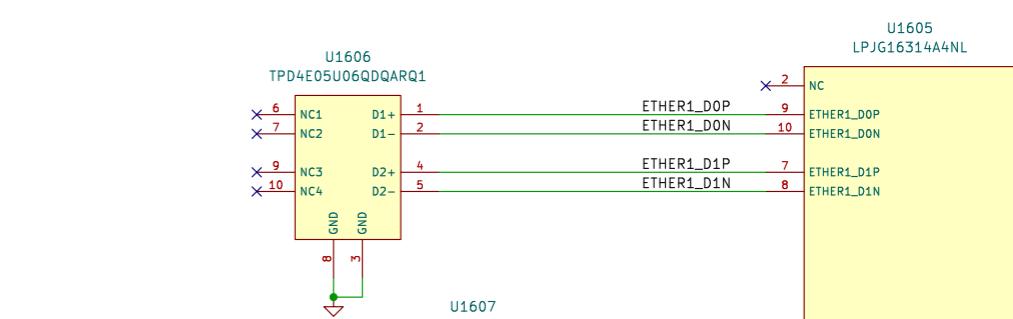
Rev: 1.0  
Id: 15/42

## ETHERNET PHY

Reference: U1602G

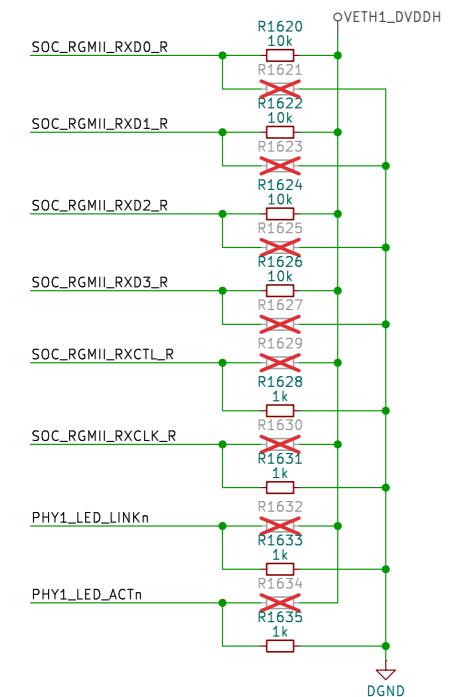


## ETHERNET CONNECTOR



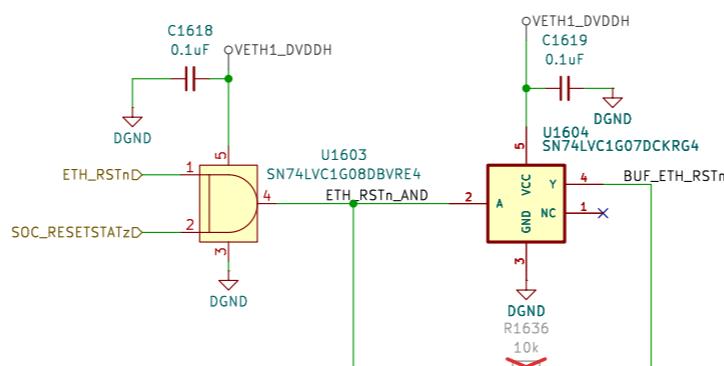
## ETHERNET ESD DEVICES

## ETHERNET MODE CONFIGURATION



RxD[3:0]	MODE
0 0 0 0	NAND TREE
0 1 1 1	CHIP POWER DOWN
1 1 0 0	RGMII MODE – ADVERTISE 1000 BASE-T FULL DUPLEX ONLY
1 1 0 1	RGMII MODE – ADVERTISE 1000 BASE-T FULL & HALF DUPLEX ONLY
1 1 1 0	RGMII MODE – ADVERTISE ALL CAPABILITIES(10/100/1000 SPEED HALF / FULL DUPLEX).EXCEPT 1000 BASE-T HALF DUPLEX
1 1 1 1	RGMII MODE – ADVERTISE ALL CAPABILITIES(10/100/1000 SPEED HALF / FULL DUPLEX)

## ETHERNET RESET



NDH

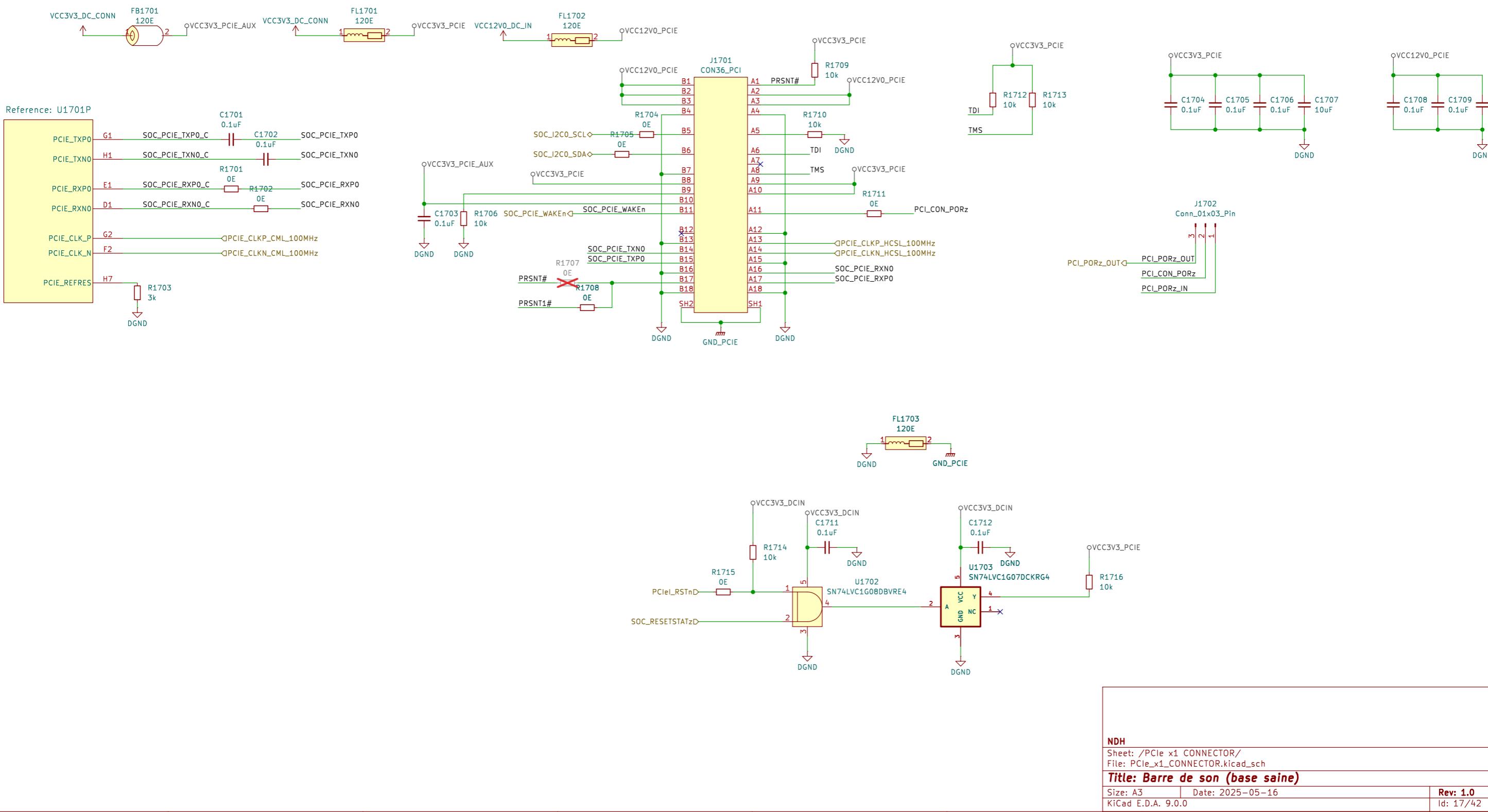
Sheet: /ETHERNET PHY/  
File: ETHERNET\_PHY.kicad\_sch

Title: Barre de son (base saine)

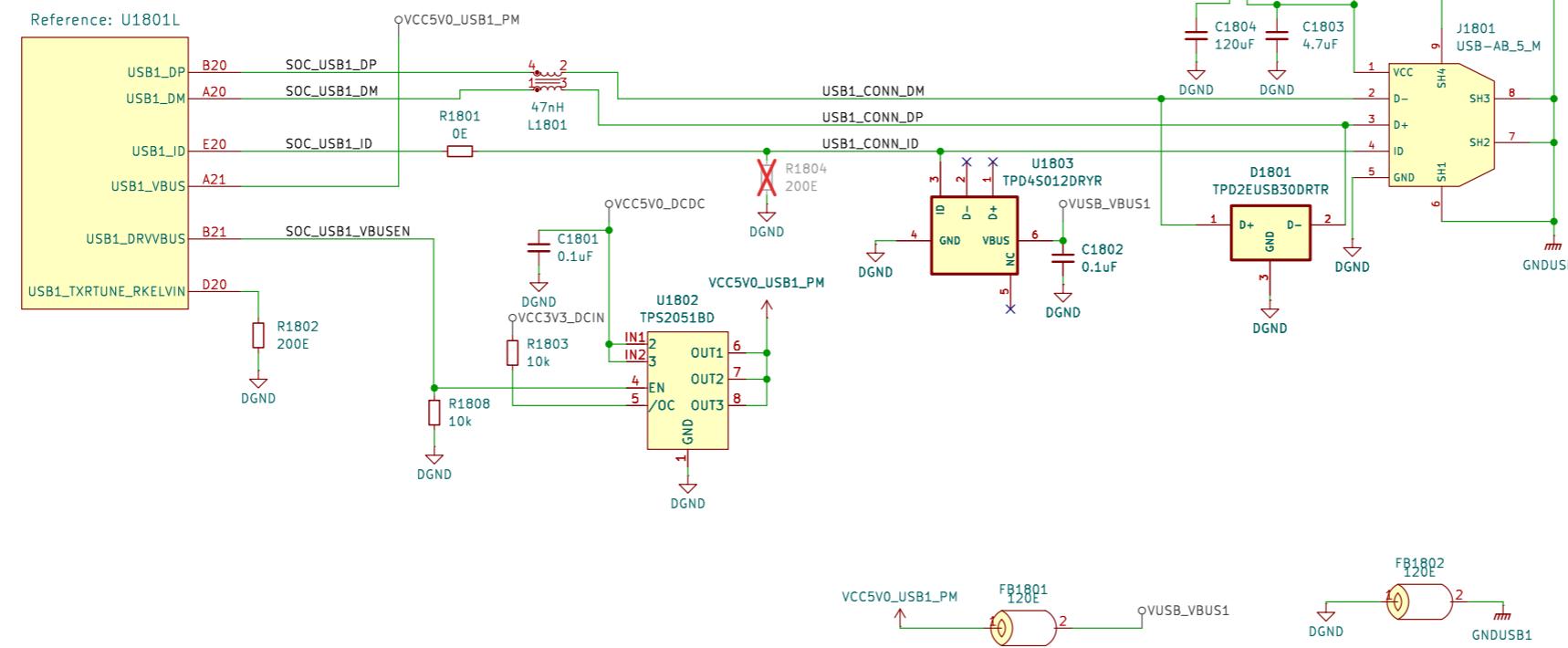
Size: A3 Date: 2025-05-16  
KiCad E.D.A. 9.0.0

Rev: 1.0  
Id: 16/42

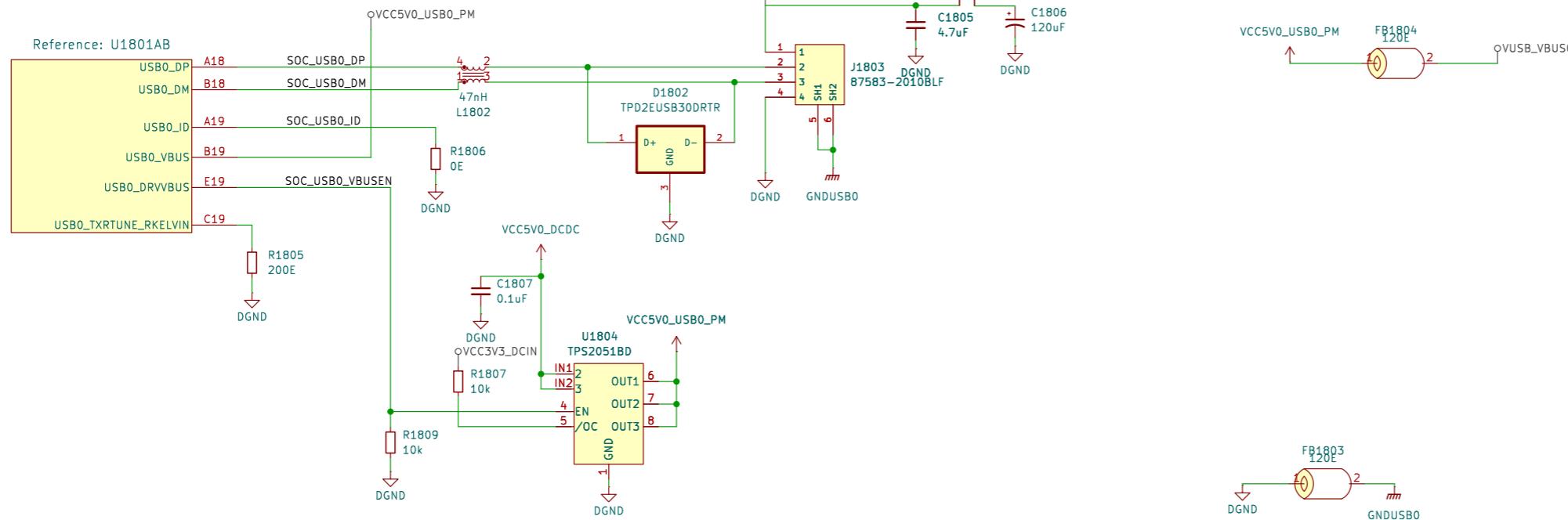
# PCI EXPRESS x1 CONNECTOR



## USB1 DUAL ROLE



## USBO HOST



NDH

Sheet: /USB DUAL ROLE & HOST/  
File: USB\_DUAL\_ROLE\_and\_HOST.kicad\_sch

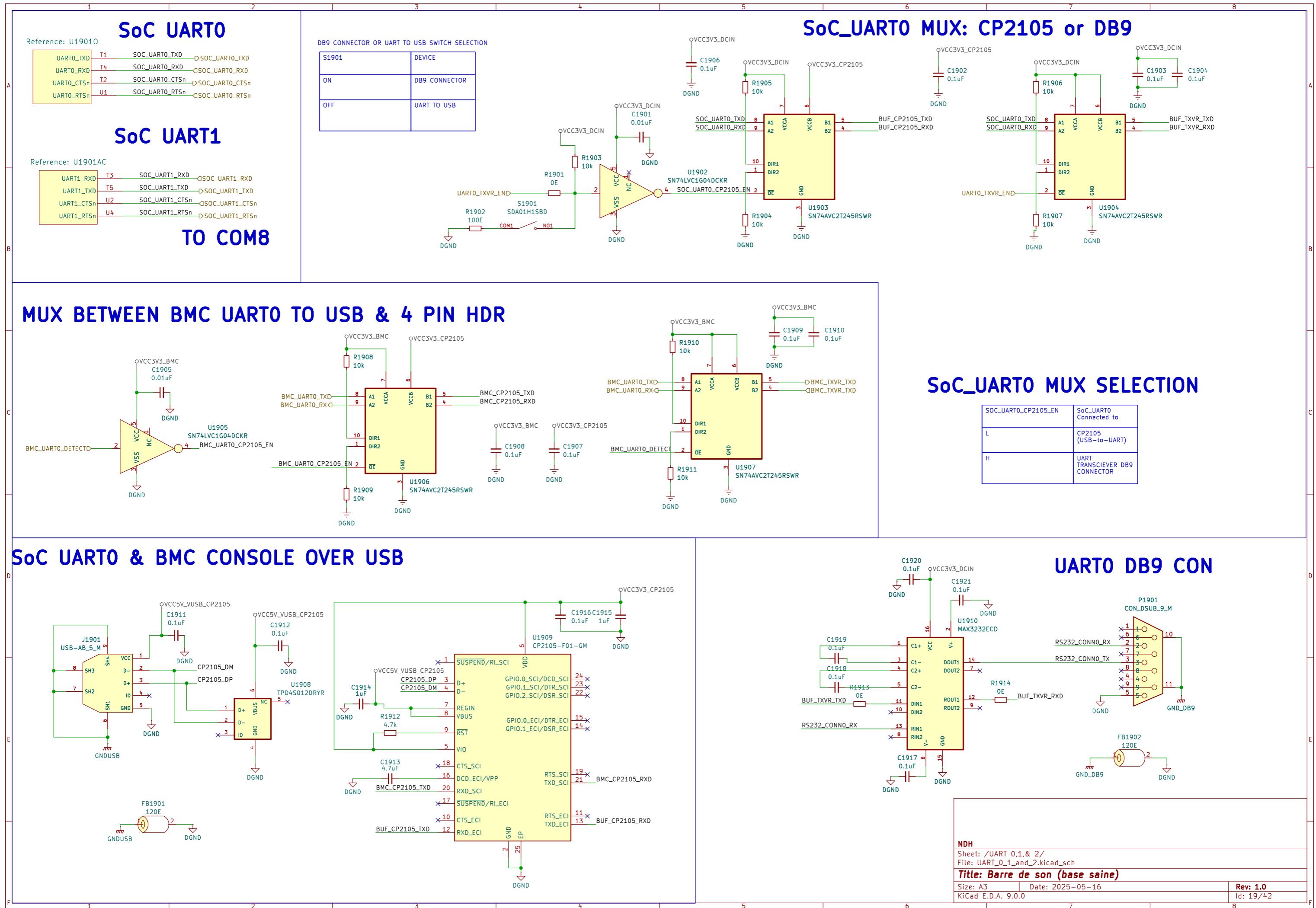
Title: Barre de son (base saine)

Size: A3 Date: 2025-05-16

KiCad E.D.A. 9.0.0

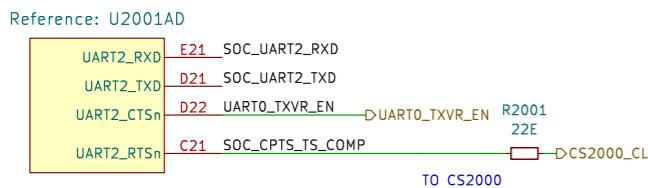
Rev: 1.0

Id: 18/42

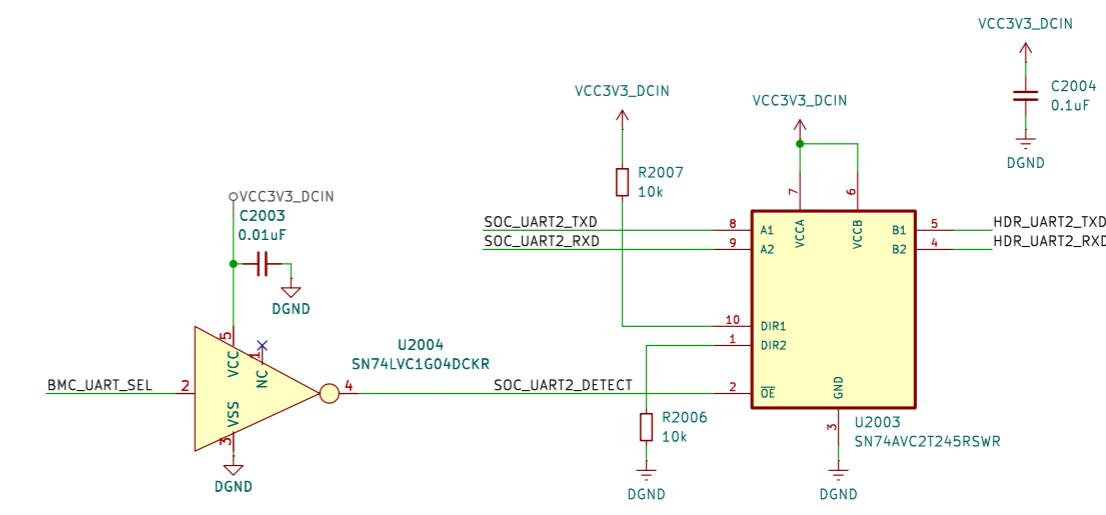
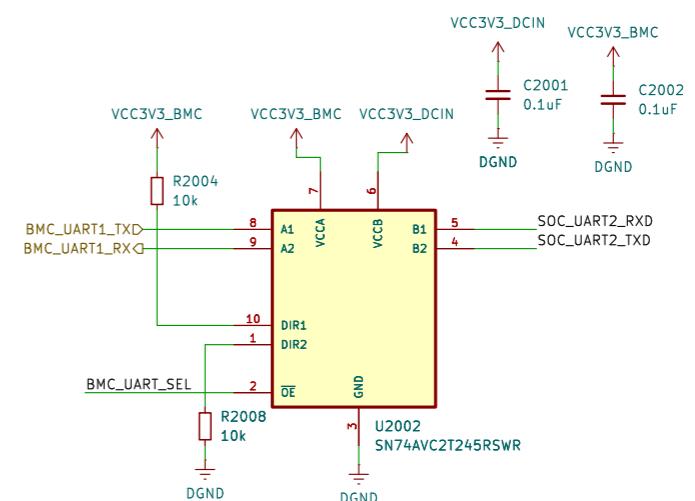
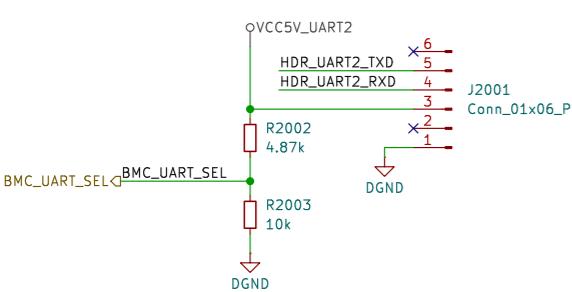


# SoC UART2 MUX – BMC or UART2 Header

## SoC UART2



## UART2 HEADER



SoC\_UART2\_MUX\_SELECTION

BMC_UART_SEL	SoC_UART2 Connected to
L	BMC
H	UART2 HEADER (J49)

NDH

Sheet: /UART2/  
File: UART2.kicad\_sch

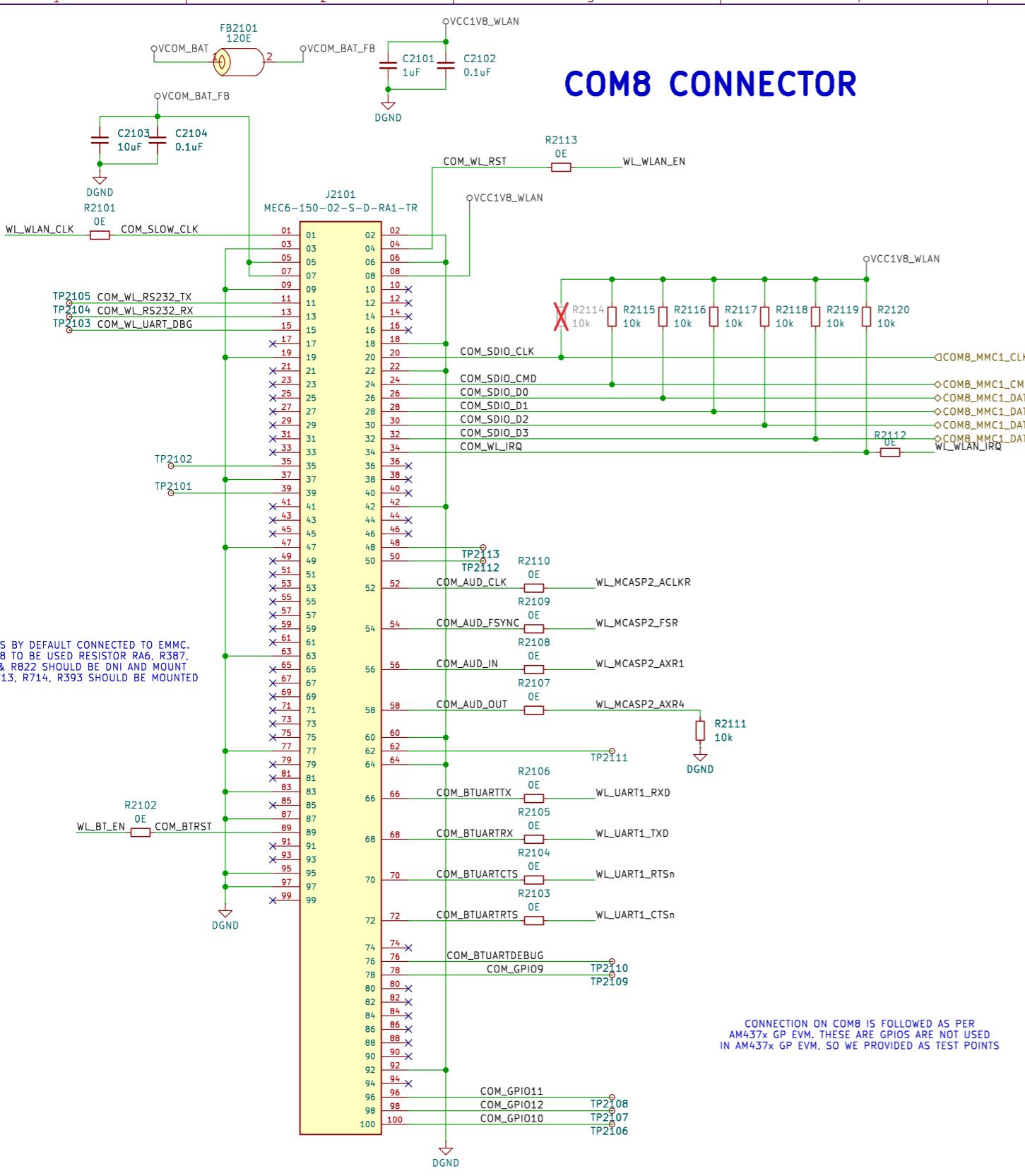
Title: Barre de son (base saine)

Size: A3 Date: 2025-05-16

KiCad E.D.A. 9.0.0

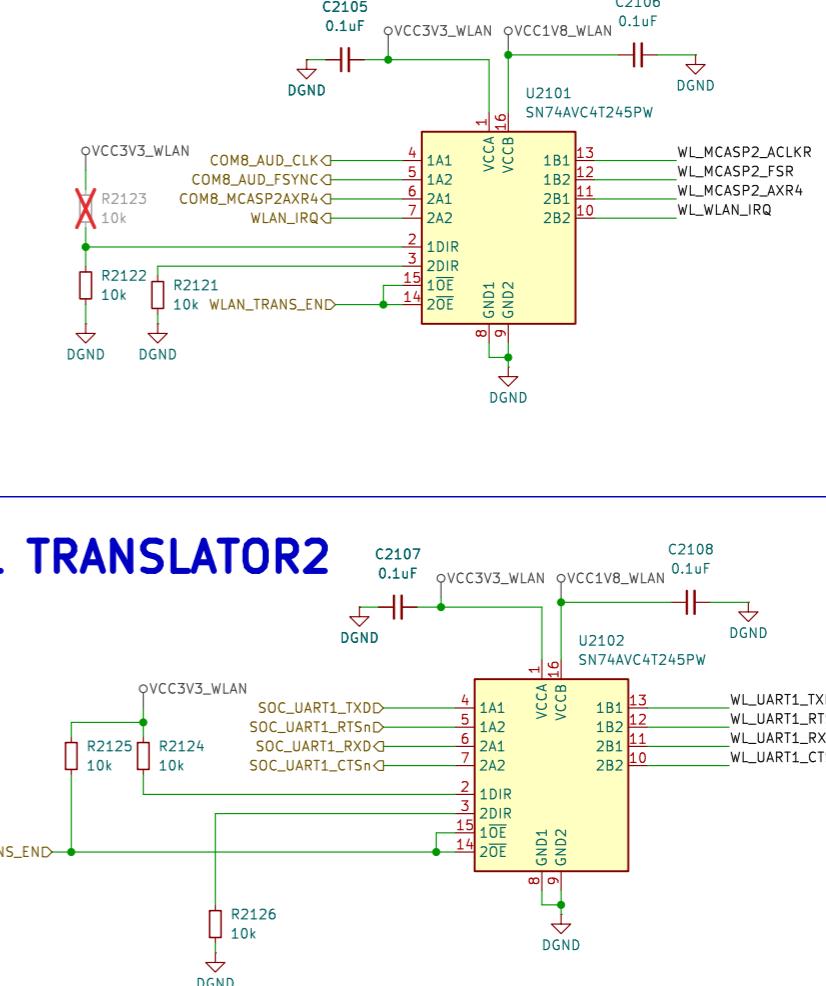
Rev: 1.0

Id: 20/42

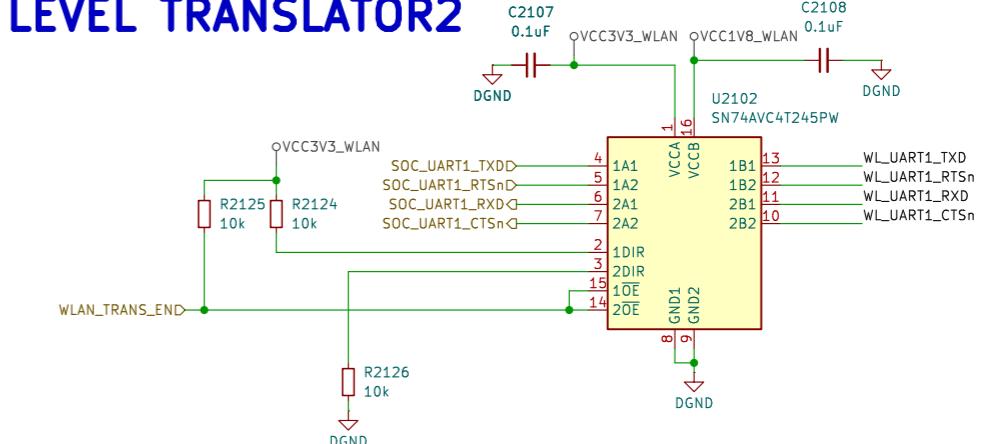


## COM8 CONNECTOR

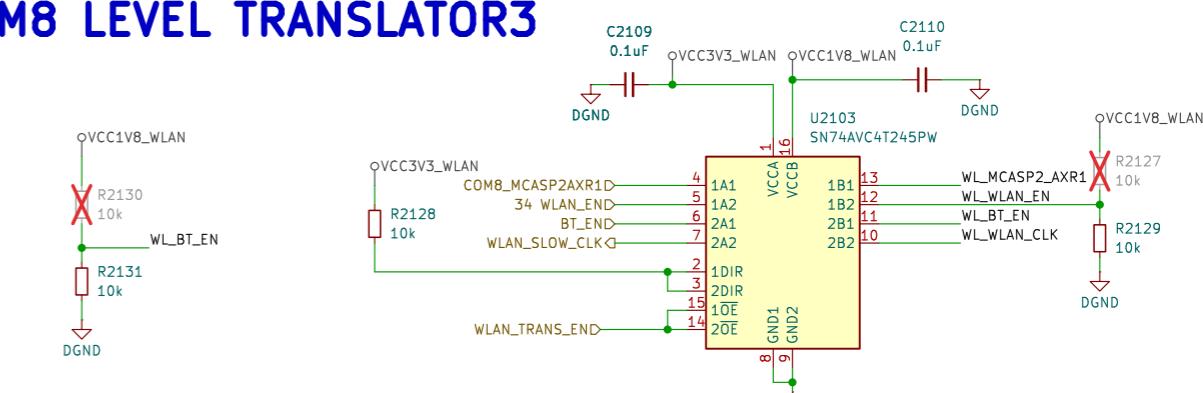
## COM8 LEVEL TRANSLATOR1



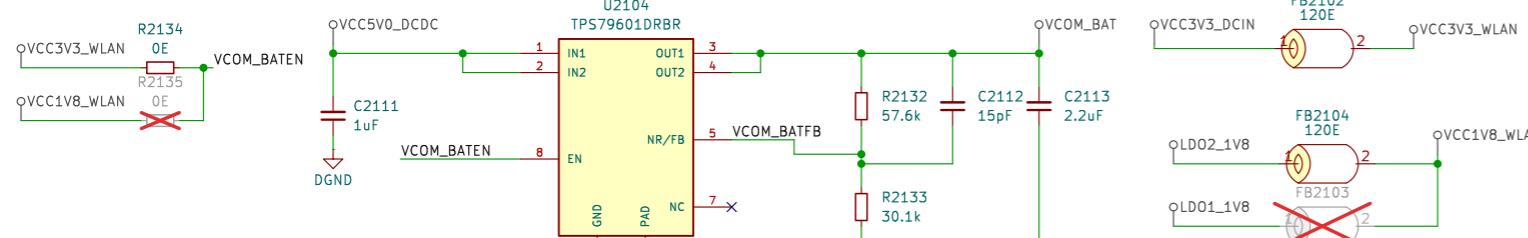
## COM8 LEVEL TRANSLATOR2



## COM8 LEVEL TRANSLATOR3



## COM8 VBAT GENERATION



NDH

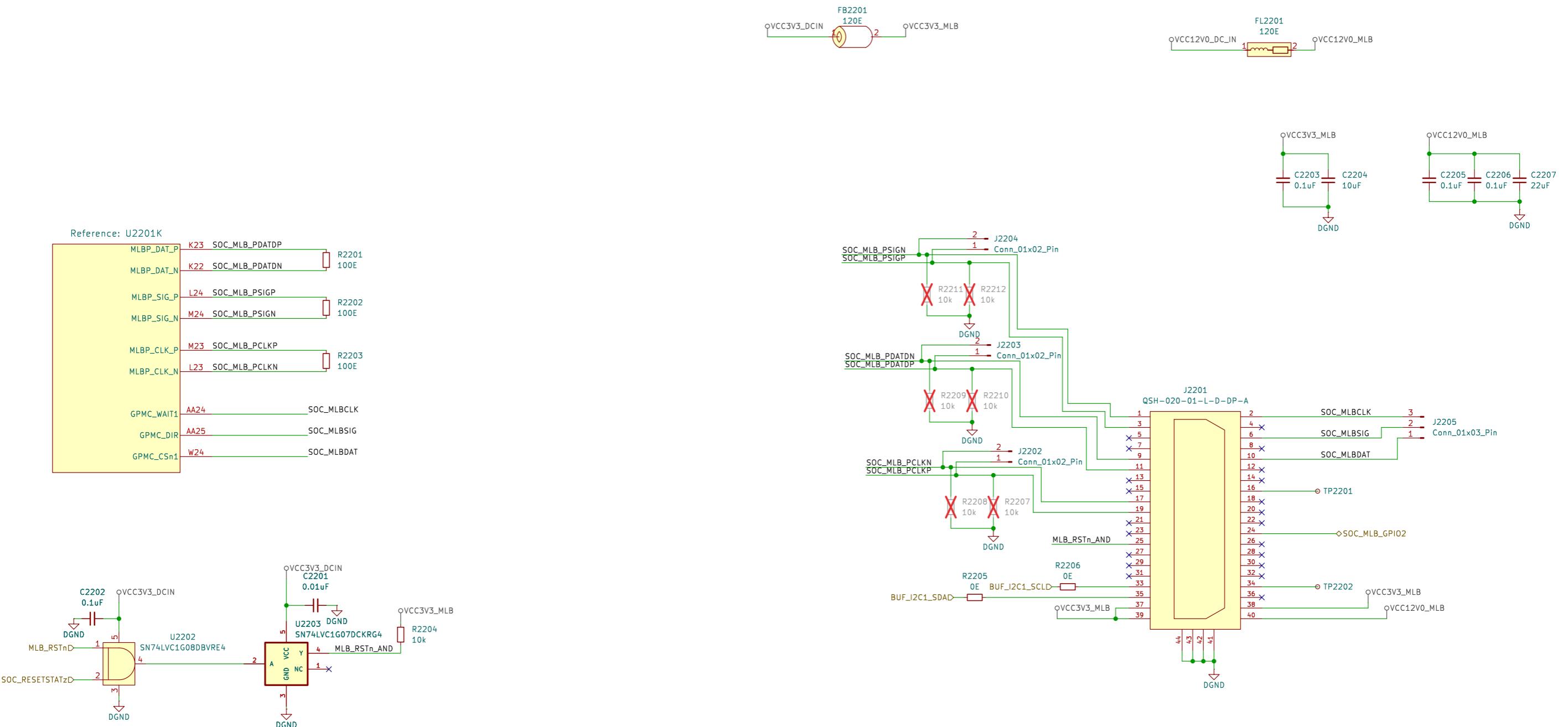
Sheet: /COM8\_CONNECTOR/  
File: COM8\_CONNECTOR.kicad\_sch

Title: Barre de son (base saine)

Size: A3 Date: 2025-05-16  
KiCad E.D.A. 9.0.0

Rev: 1.0  
Id: 21/42

## MLB CONNECTOR



NDH

Sheet: /MLB\_CONNECTOR/  
File: MLB\_CONNECTOR.kicad\_sch

Title: Barre de son (base saine)

Size: A3 Date: 2025-05-16  
KiCad EDA 9.0.0

KICad E.D.A. 9.0.0

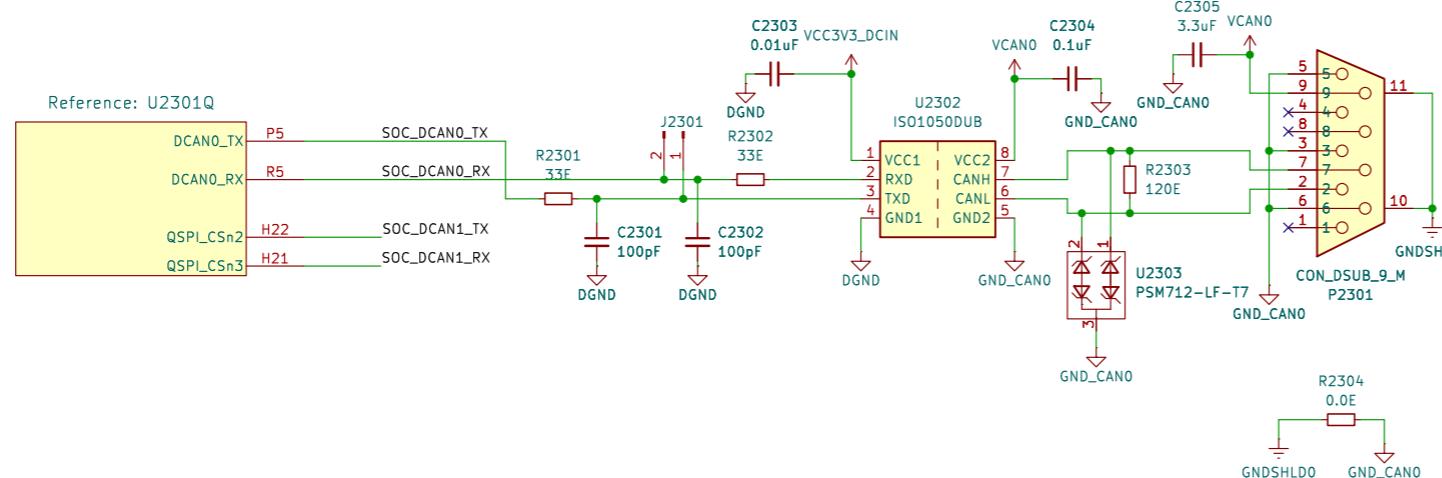
KICad E.D.A. 9.0.0

Rev: 1.0  
Id: 22/42

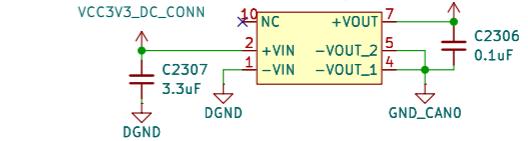
8

1 2 3 4 5 6 7 8

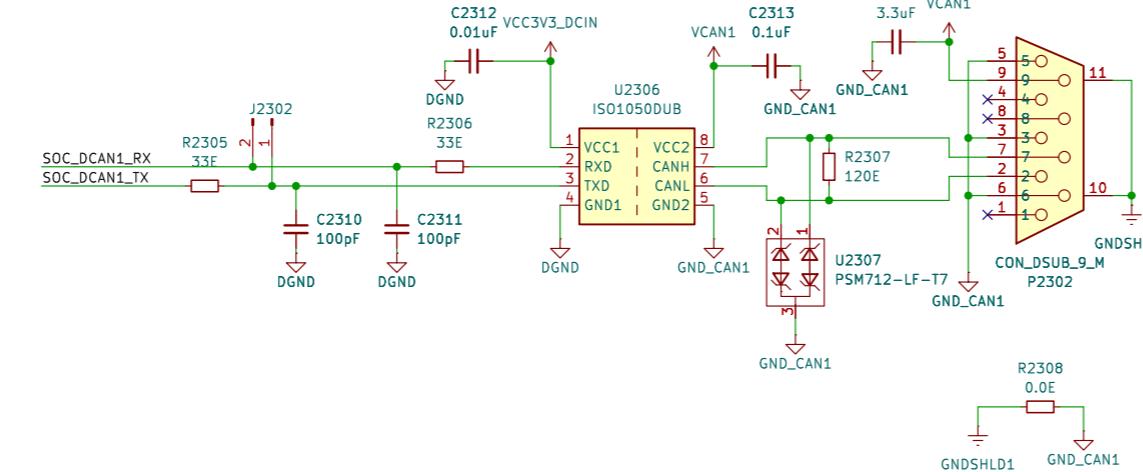
## DCANO



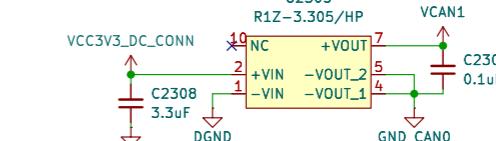
## DCANO POWER



## DCAN1



## DCAN1 POWER



NDH

Sheet: /DCAN\_CONNECTOR/  
File: DCAN\_CONNECTOR.kicad\_sch

Title: Barre de son (base saine)

Size: A3 Date: 2025-05-16

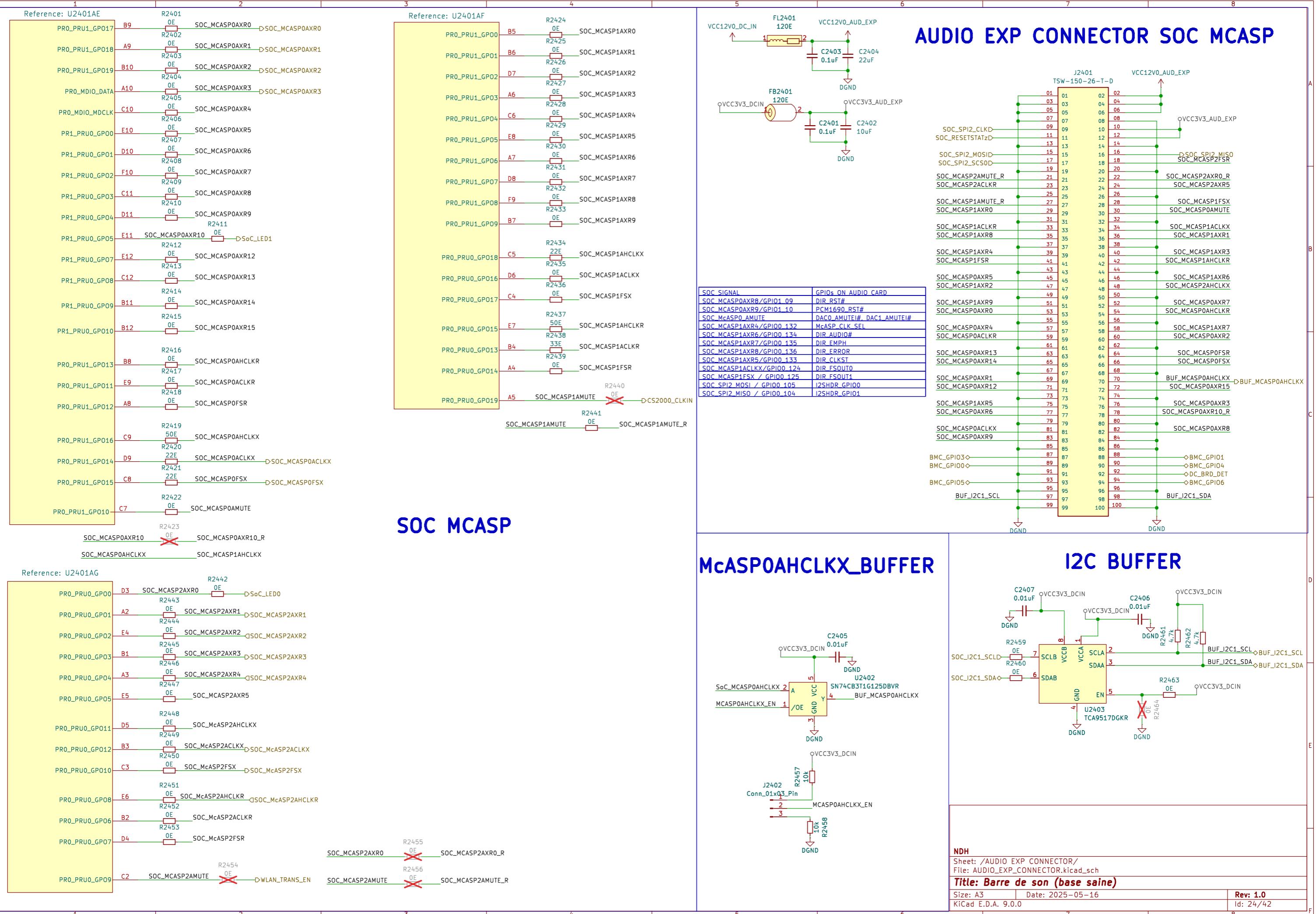
KiCad E.D.A. 9.0.0

Rev: 1.0

Id: 23/42

1 2 3 4 5 6 7 8

# AUDIO EXP CONNECTOR SOC MCASP



## SoC McBSP

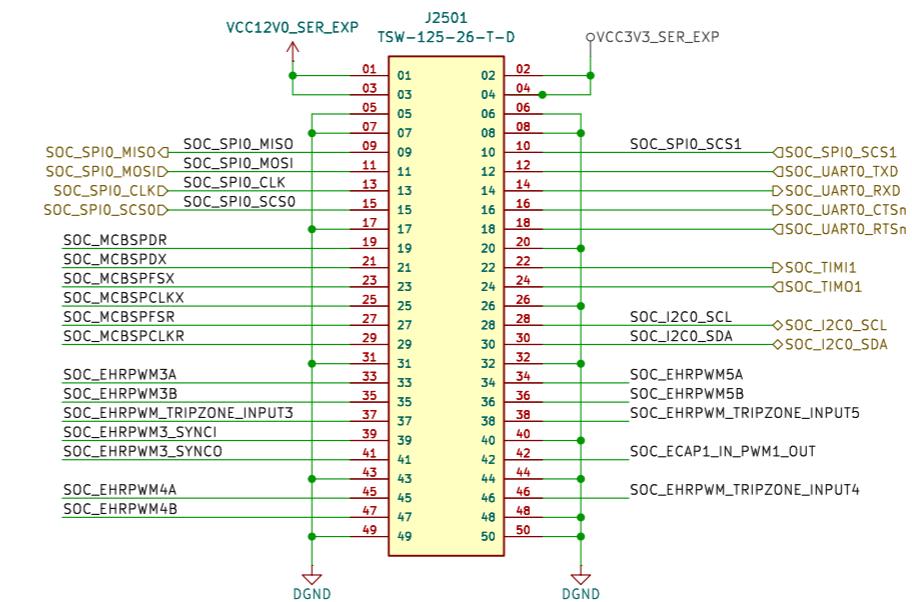
Reference: U2501AH	
PR1_PRU1_GP09	D15 SOC_MCBSPDR
PR1_PRU1_GP010	A16 SOC_MCBSPDX
PR1_PRU1_GP011	E15 SOC_MCBSPFSX
PR1_PRU1_GP012	B16 SOC_MCBSPCLKX
PR1_PRU1_GP013	C16 SOC_MCBSPFSR
PR1_PRU1_GP014	D17 SOC_MCBSPCLKR
GPMC_CSn2	W23 DSOC_TIMI1
GPMC_CSn3	Y25 DSOC_TIMO1

## SERIAL EXPANSION CONNECTOR



## SoC PWM

Reference: U2501R	
eHRPWM3_A	A23 SOC_EHRPWM3A
eHRPWM3_B	B22 SOC_EHRPWM3B
MII_TXER	H24 SOC_EHRPWM_TRIPZONE_INPUT3
eHRPWM3_SYNC0	D23 SOC_EHRPWM3_SYNC0
eHRPWM3_SYNC1	C22 SOC_EHRPWM3_SYNC1
PR1_PRU0_GPO18	D12 SOC_EHRPWM4A
PR1_PRU0_GPO19	D13 SOC_EHRPWM4B
PR1_PRU0_GPO17	E13 SOC_EHRPWM_TRIPZONE_INPUT4
PR1_PRU1_GPO18	E17 SOC_EHRPWM5A
PR1_PRU1_GPO19	E16 SOC_EHRPWM5B
PR1_PRU1_GPO17	F16 SOC_EHRPWM_TRIPZONE_INPUT5
PR1_MDIO_MDCLK	D18 SOC_ECAP1_IN_PWM1_OUT



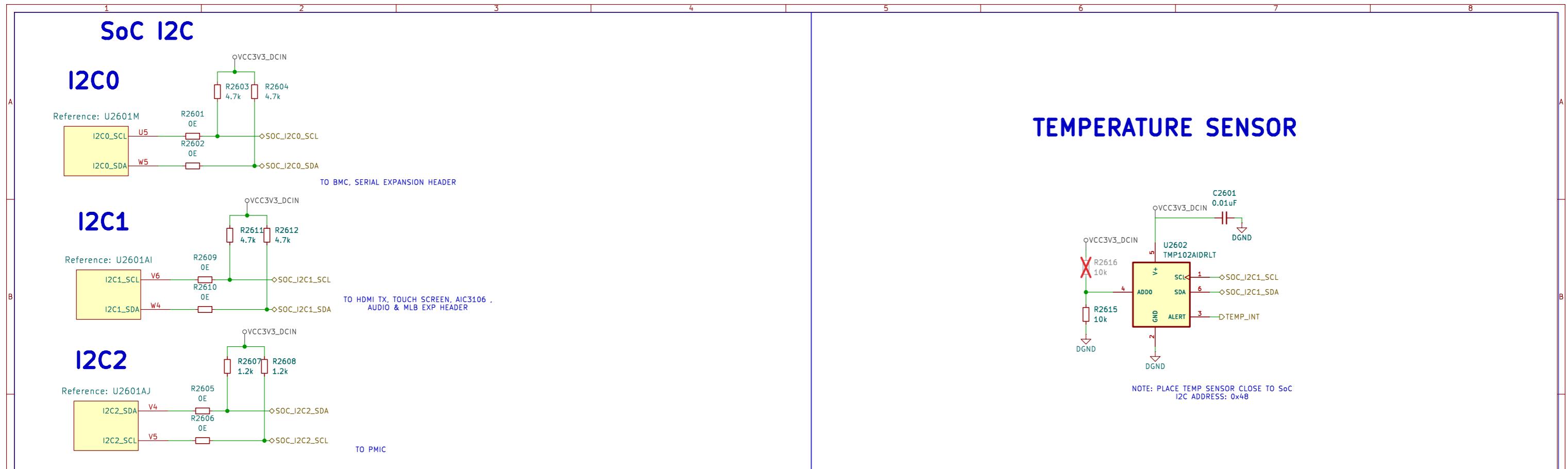
## NDH

Sheet: /SERIAL & EHRPWM EXP CONNECTOR/  
File: SERIAL\_and\_EHRPWM\_EXP\_CONNECTOR.kicad\_sch

Title: Barre de son (base saine)

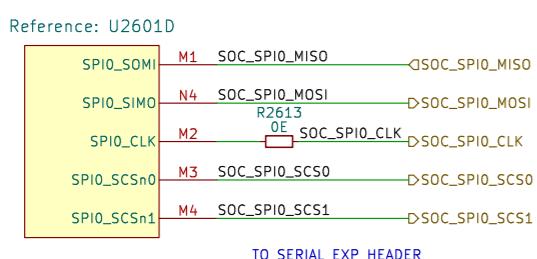
Size: A3 Date: 2025-05-16  
KiCad E.D.A. 9.0.0

Rev: 1.0  
Id: 25/42

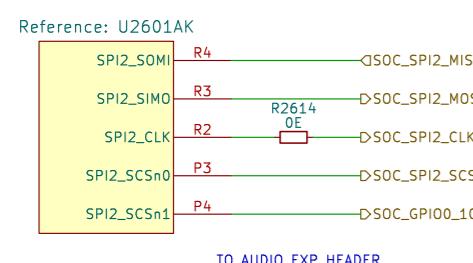


SoC SPI

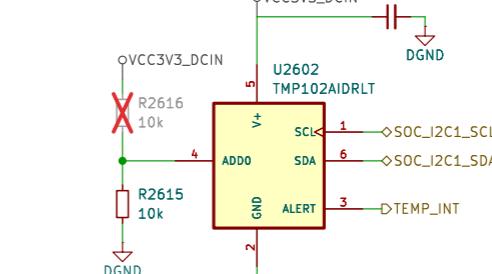
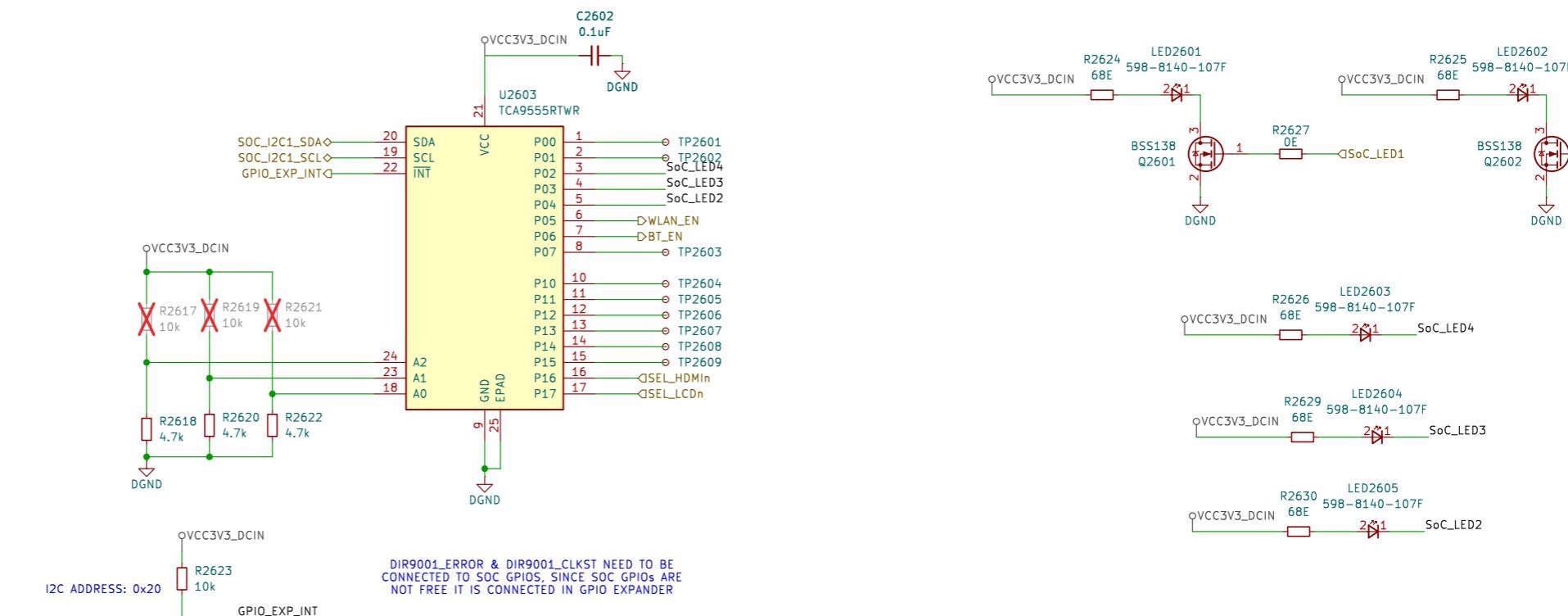
SPI0



SPI2



## GPIO EXPANDER & LEDs



NOTE: PLACE TEMP SENSOR CLOSE TO SoC  
I2C ADDRESS: 0x48

NDH

et: /SERIAL CONTROL INTERFACE/  
: SERIAL\_CONTROL\_INTERFACE.kicad\_sch

**le: Barre de son (base saine)**

: A3 Date: 2025-05-16

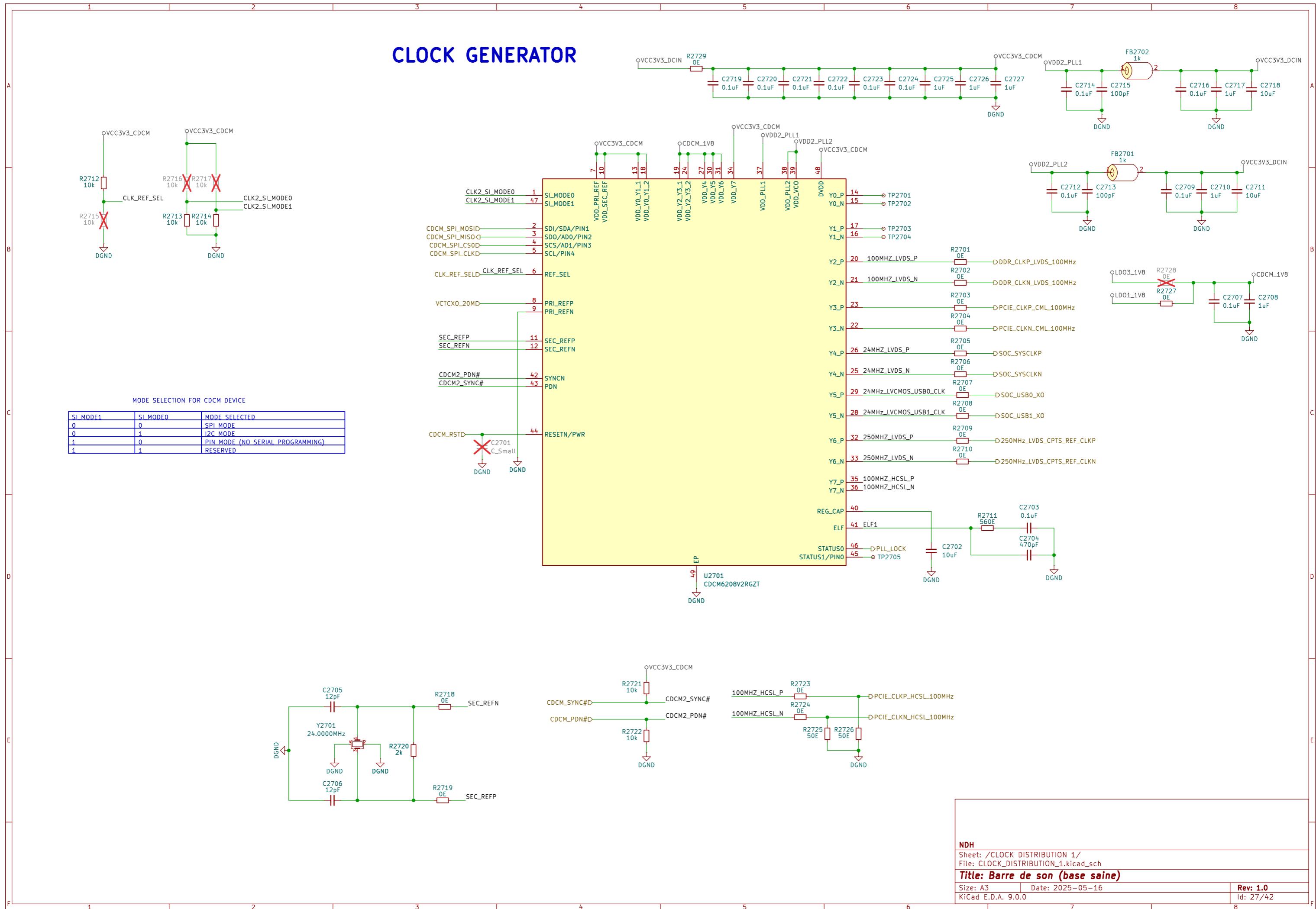
ad E.D.A. 9.0.0

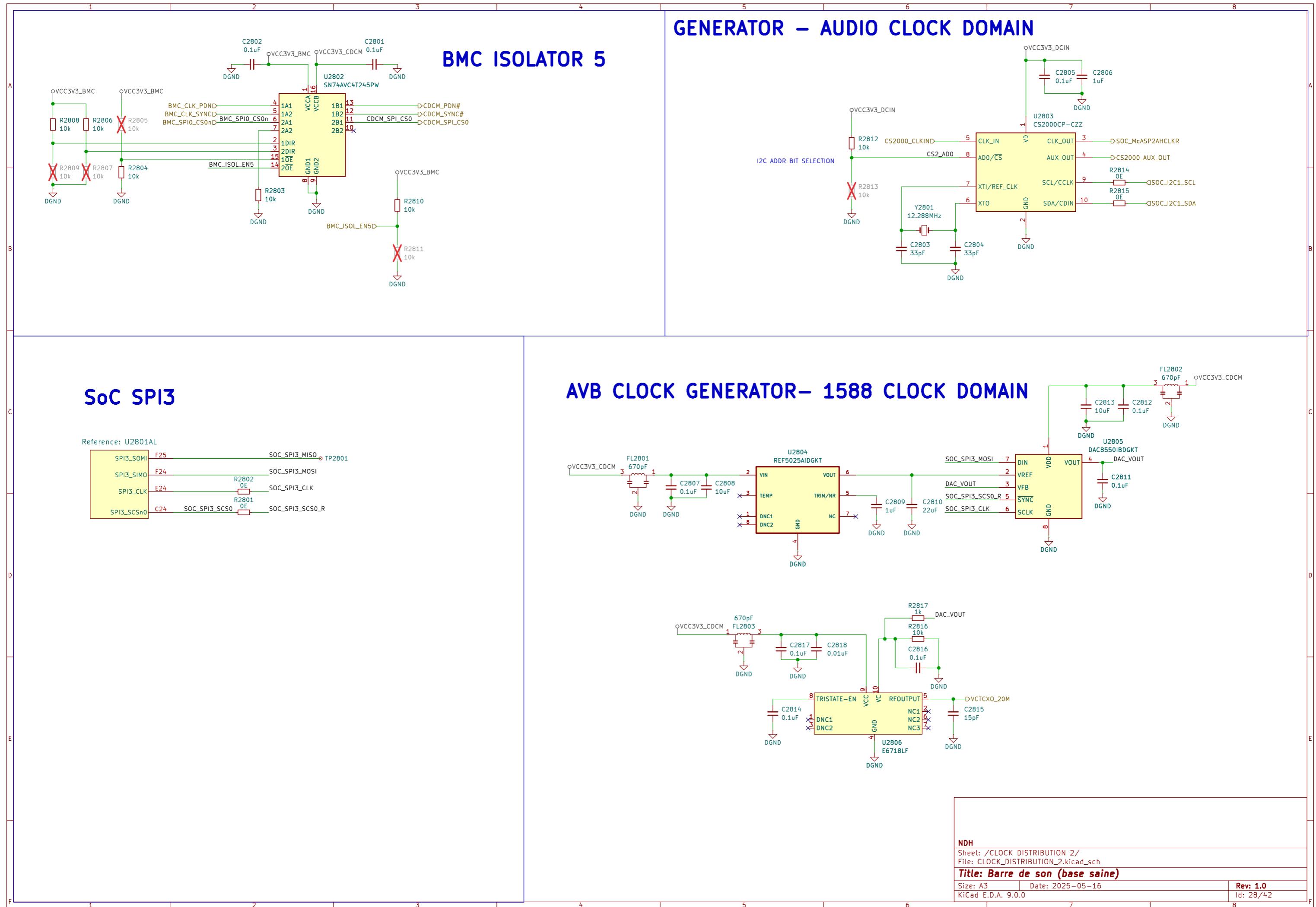
7

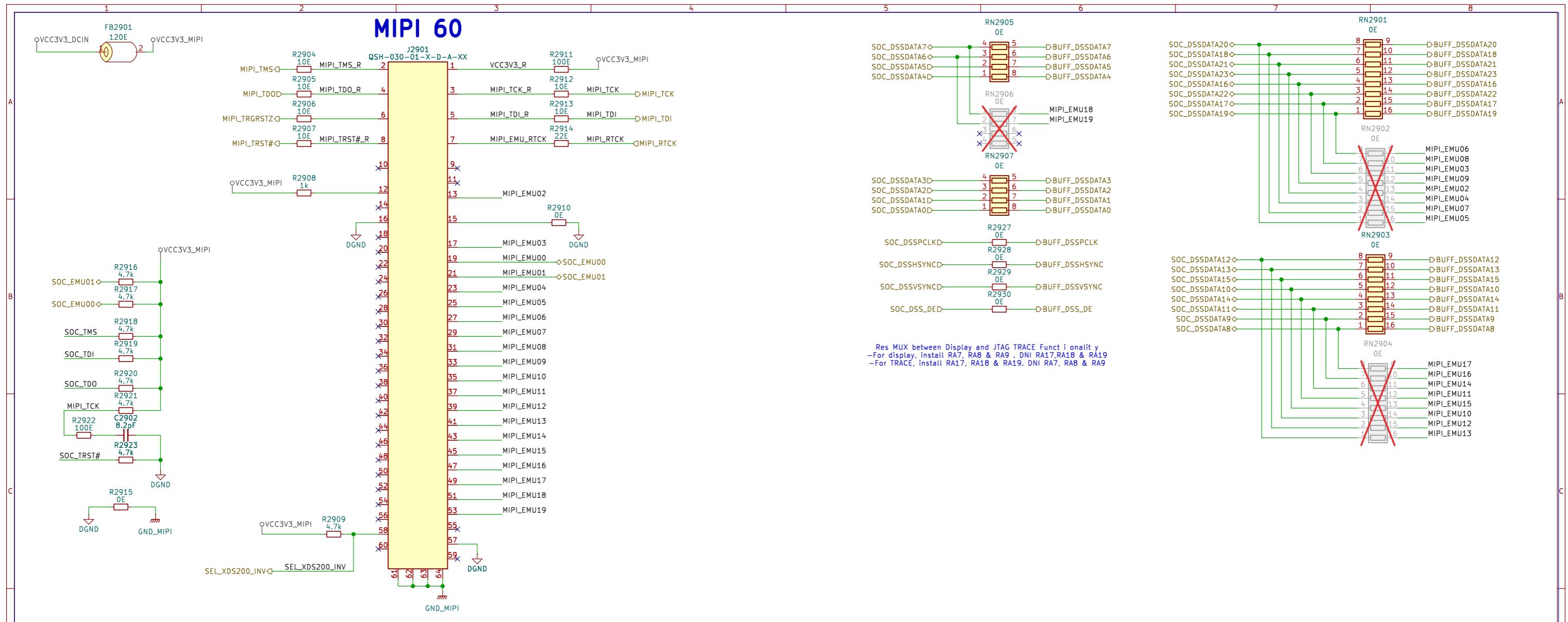
Id: 26/42

8

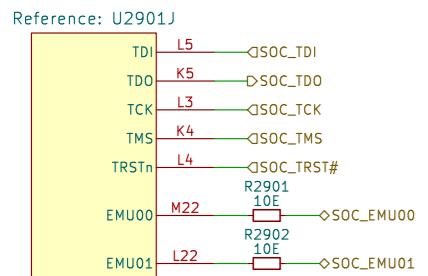
## CLOCK GENERATOR



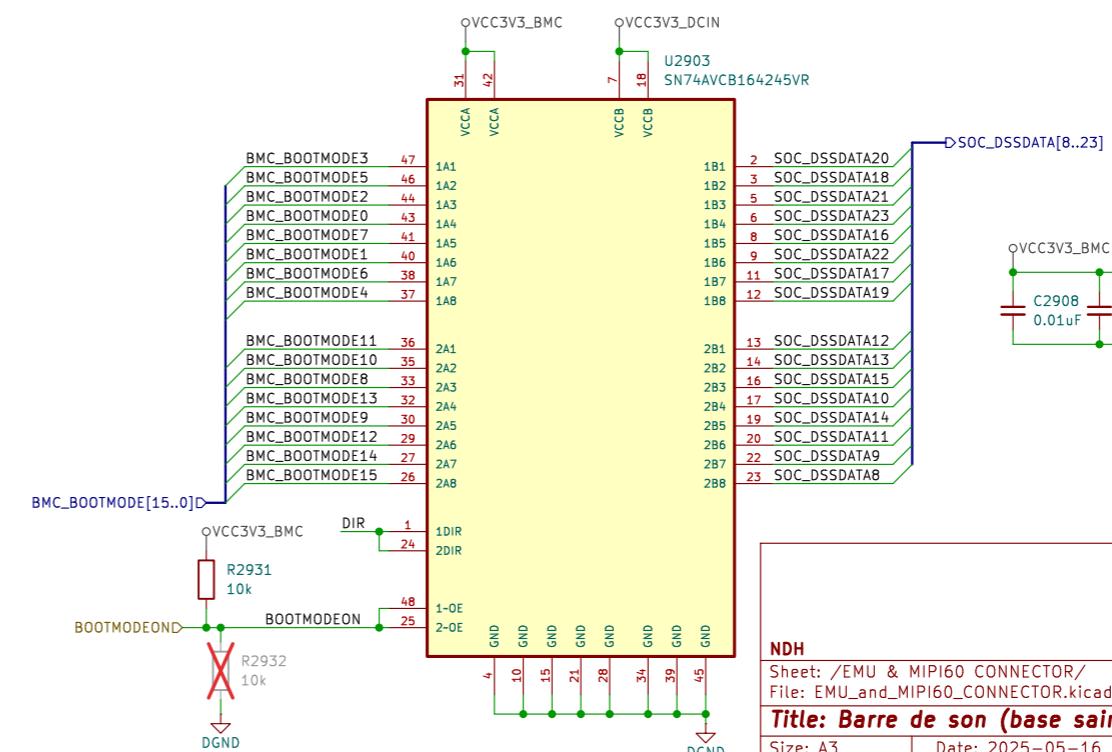
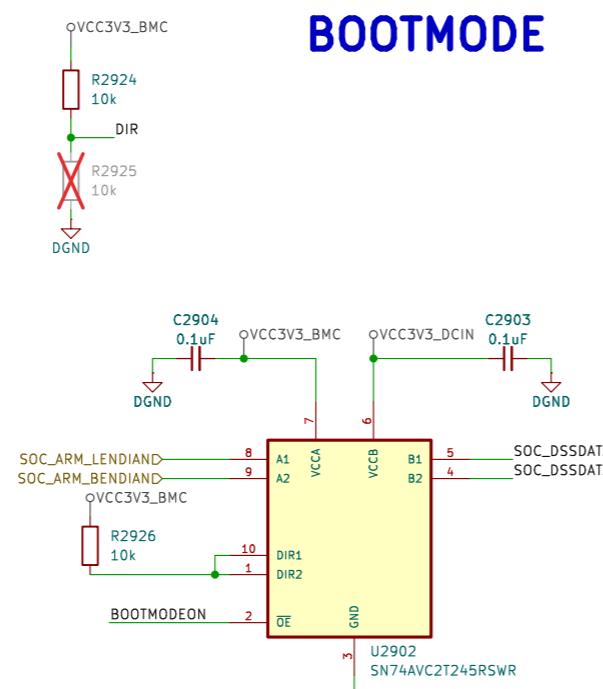




SoC JTAG

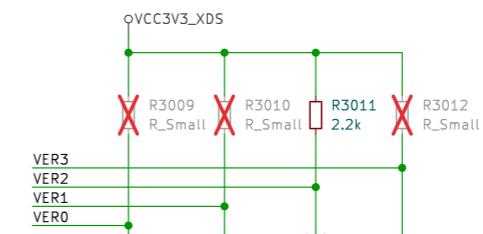
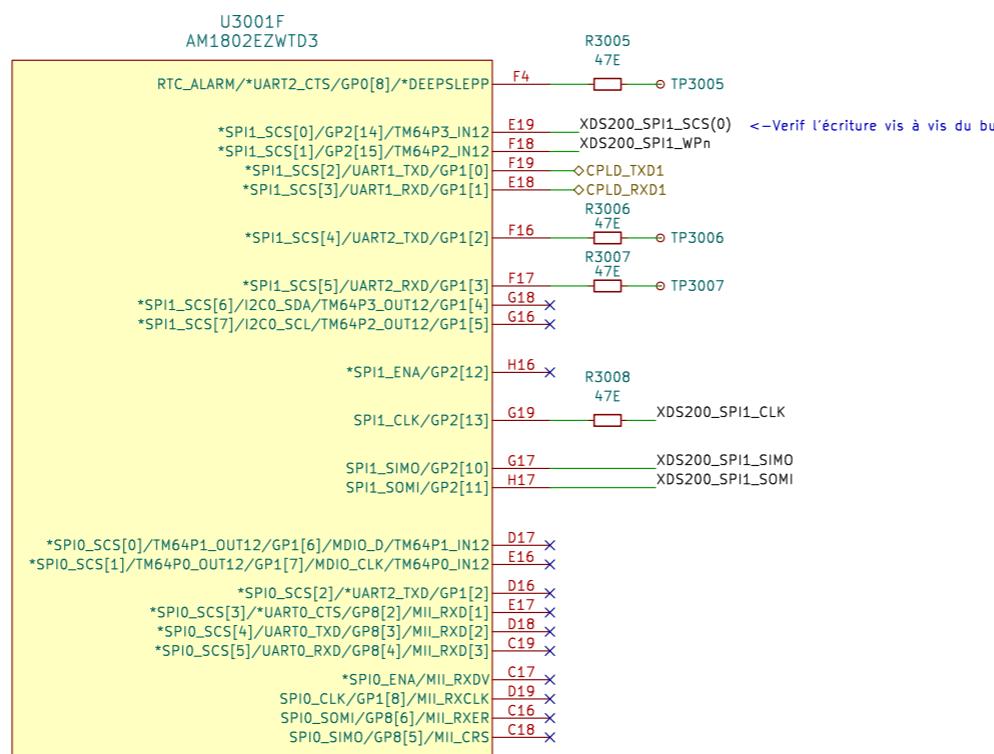
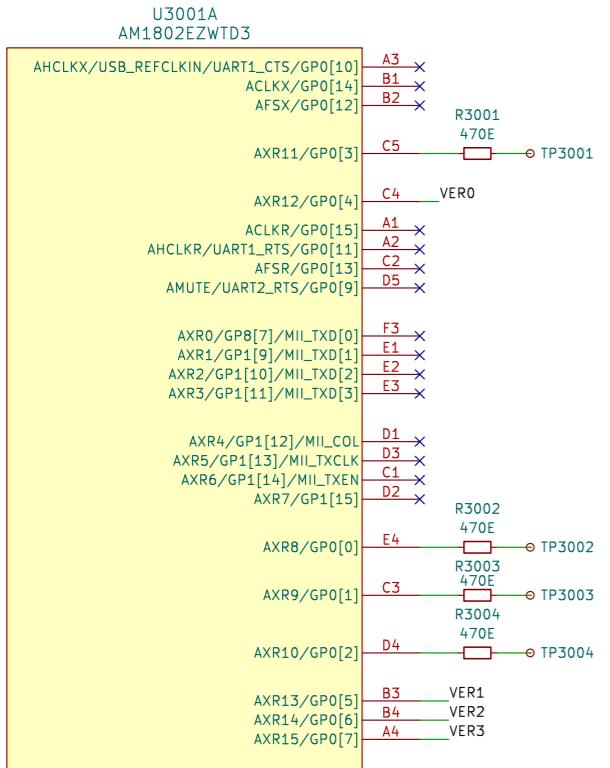


# BOOTMODE



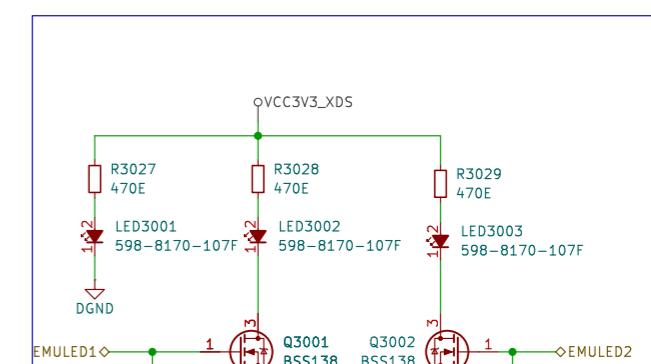
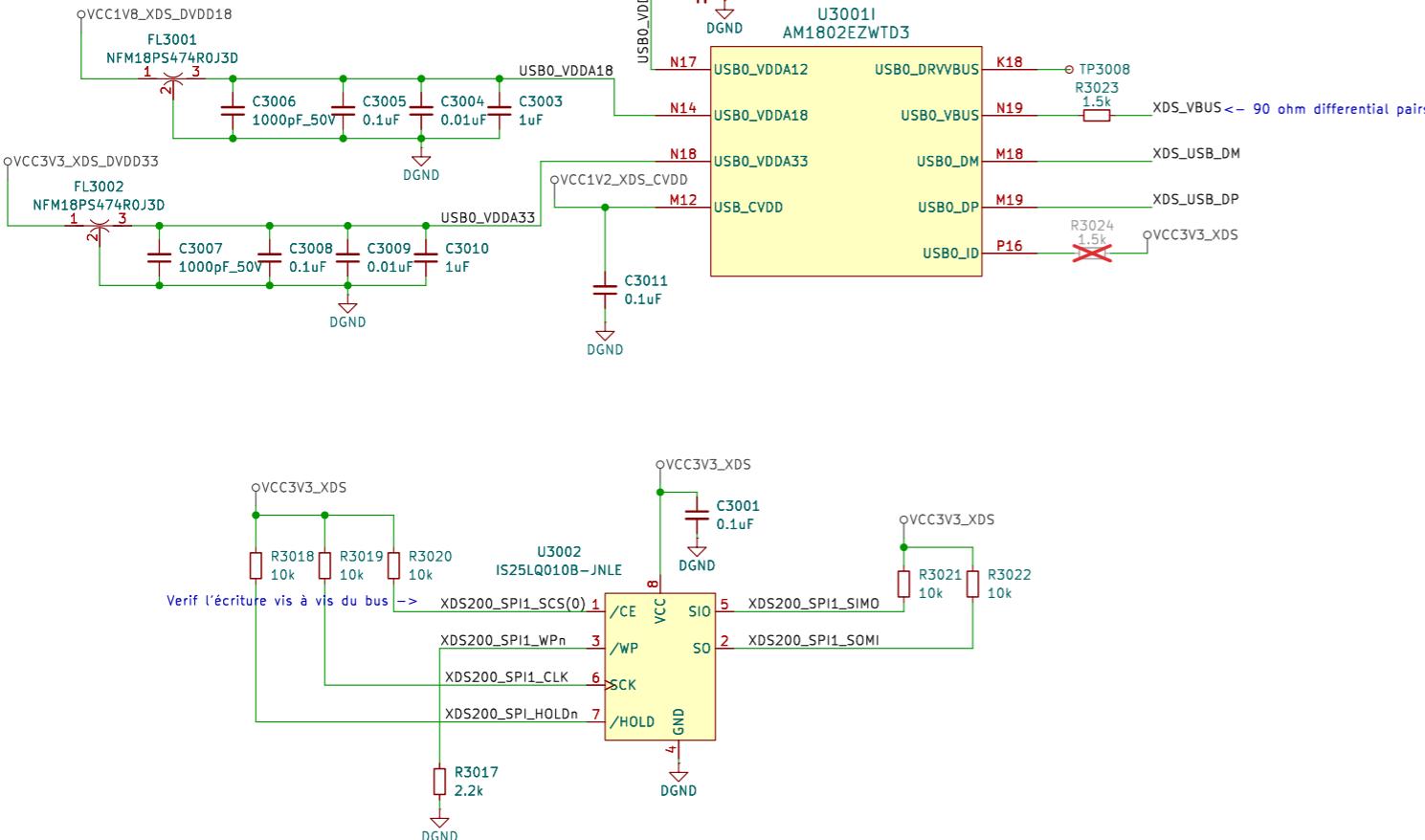
**NDH**  
Sheet: /EMU & MIPI60 CONNECTOR/  
File: EMU\_and\_MIPI60\_CONNECTOR.kicad\_sch

**Title: Barre de son (base saine)**

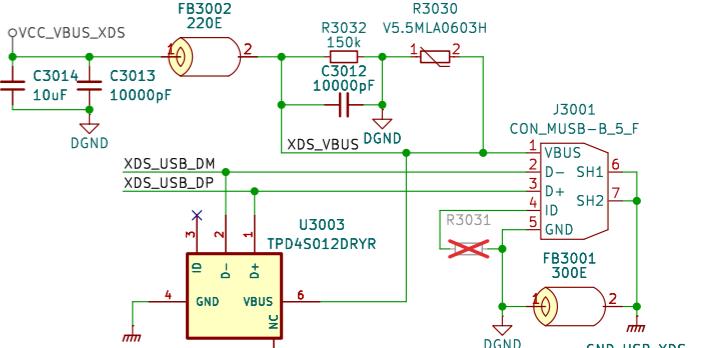


Note: Version Code default value is changed to 0100 as per TI recommendation

XDS200



**MINI USB CONN**



NDH

Sheet: /XDS200/  
File: XDS200.kicad\_sch

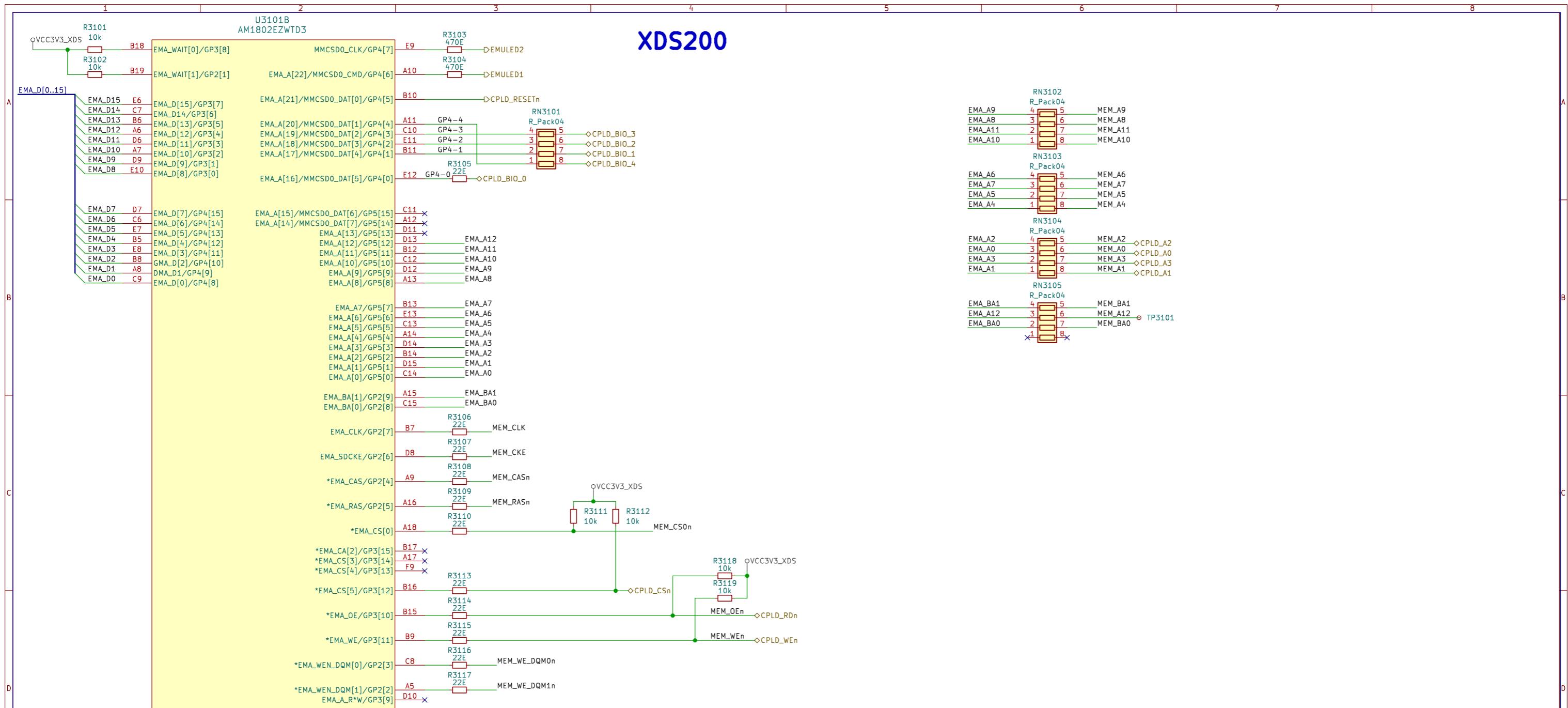
## Title: Barre de son (base saine)

Size: A3 Date: 2025-05-16  
KiCad E.D.A. 9.0.0

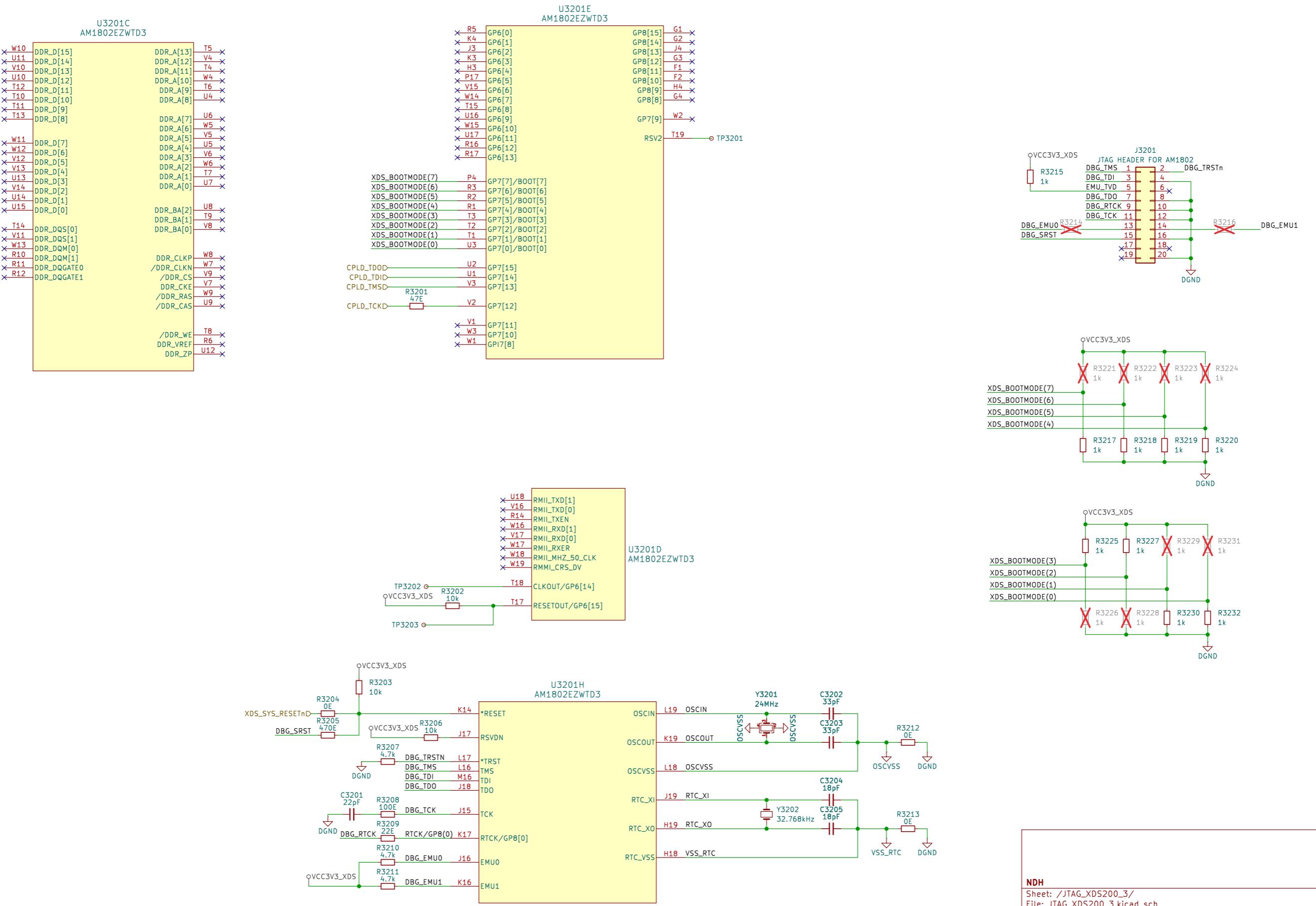
7

Rev: 1.0  
Id: 30/42

# XDS200



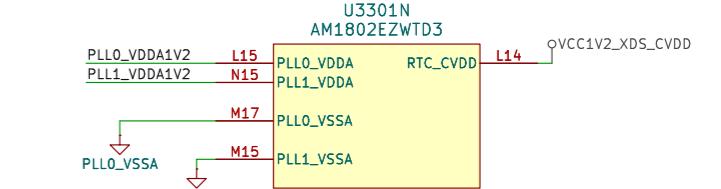
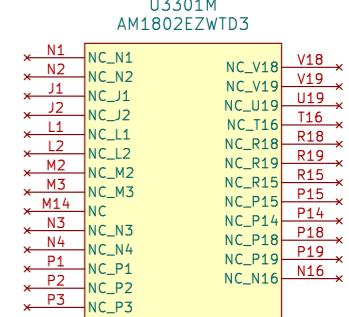
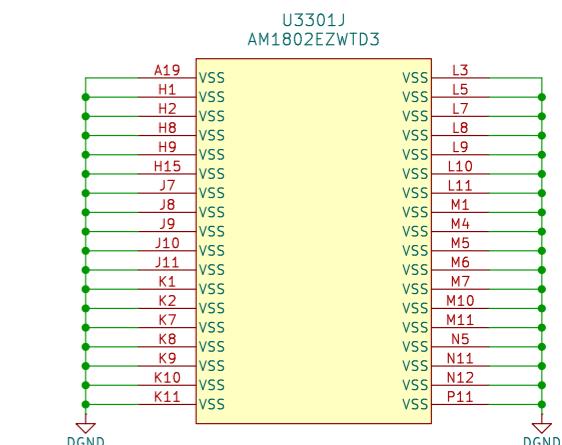
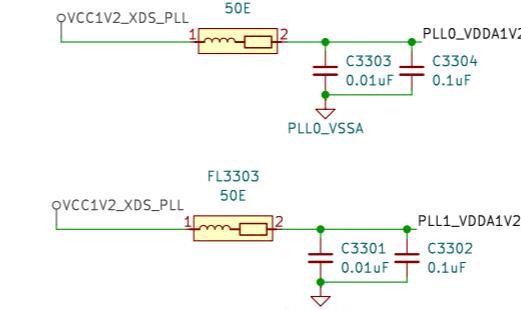
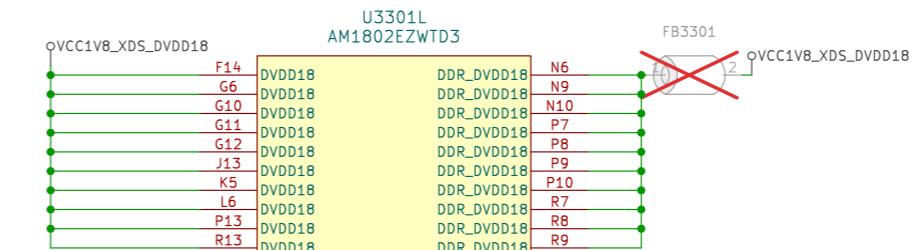
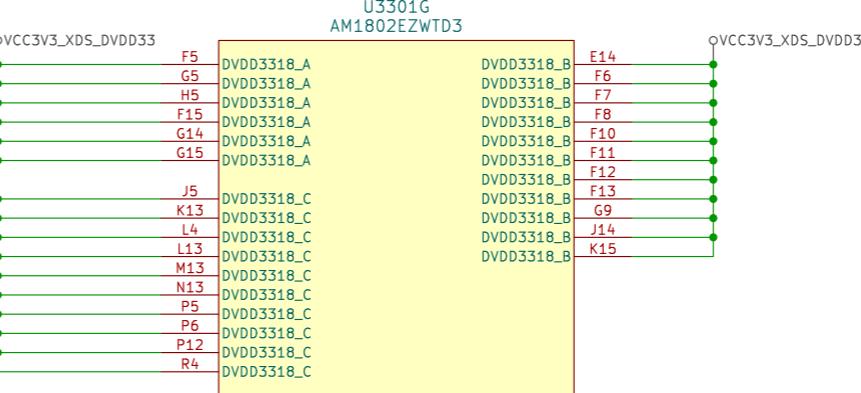
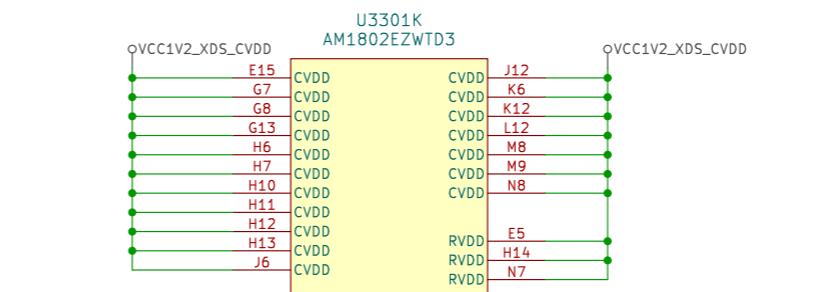
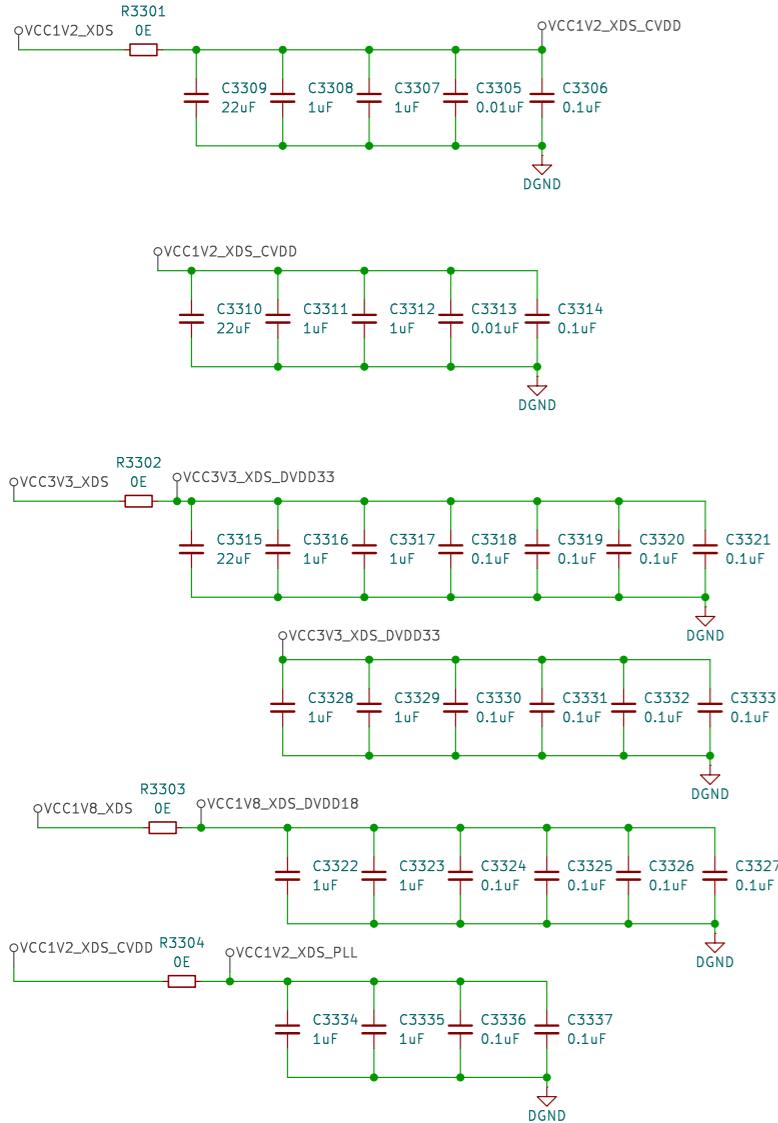
XDS200



**NDH**  
Sheet: /JTAG\_XDS200\_3/  
File: JTAG\_XDS200\_3.kicad\_sch  
**Title: Barre de son (base saine)**

# XDS200

## XDS200 DECAPS



NDH

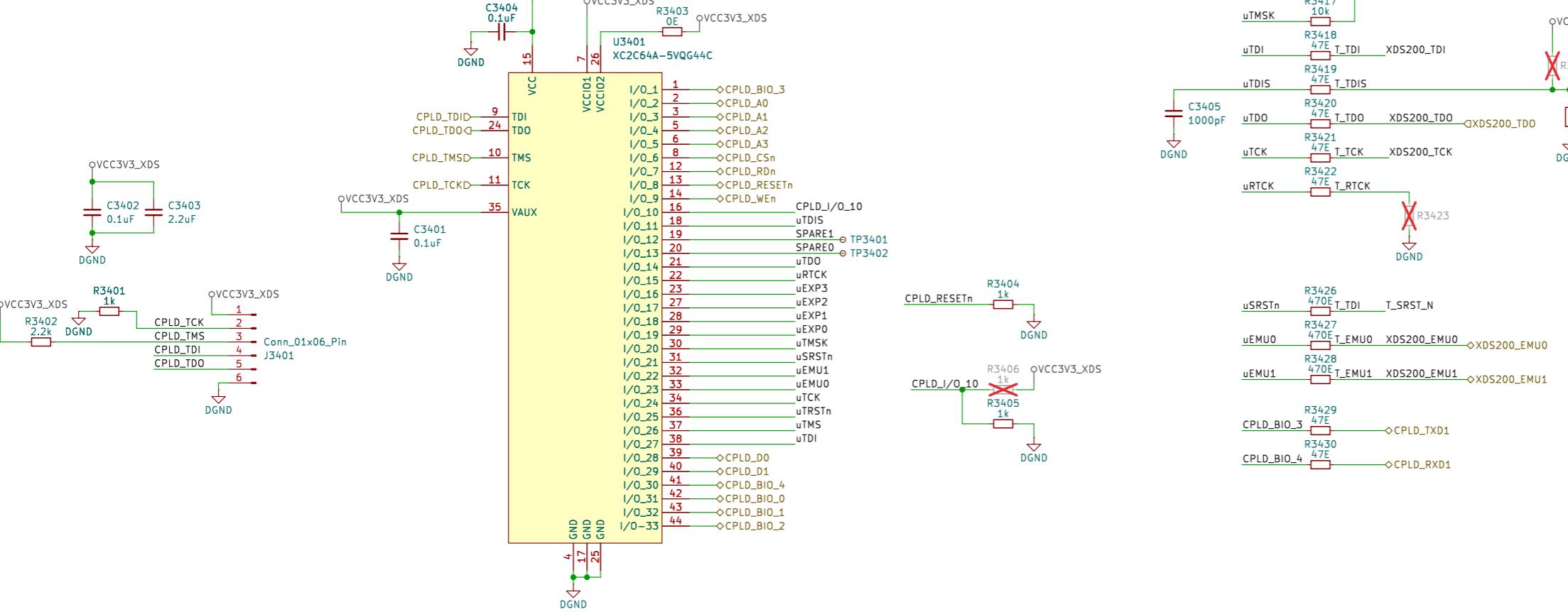
Sheet: /JTAG\_XDS200\_4/  
File: JTAG\_XDS200\_4.kicad\_sch

Title: Barre de son (base saine)

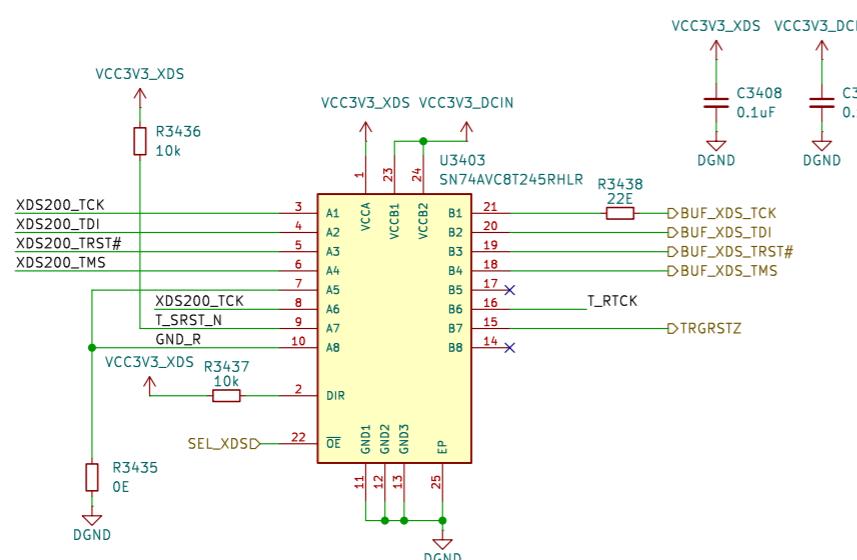
Size: A3 Date: 2025-05-16  
KiCad E.D.A. 9.0.0

Rev: 1.0  
Id: 33/42

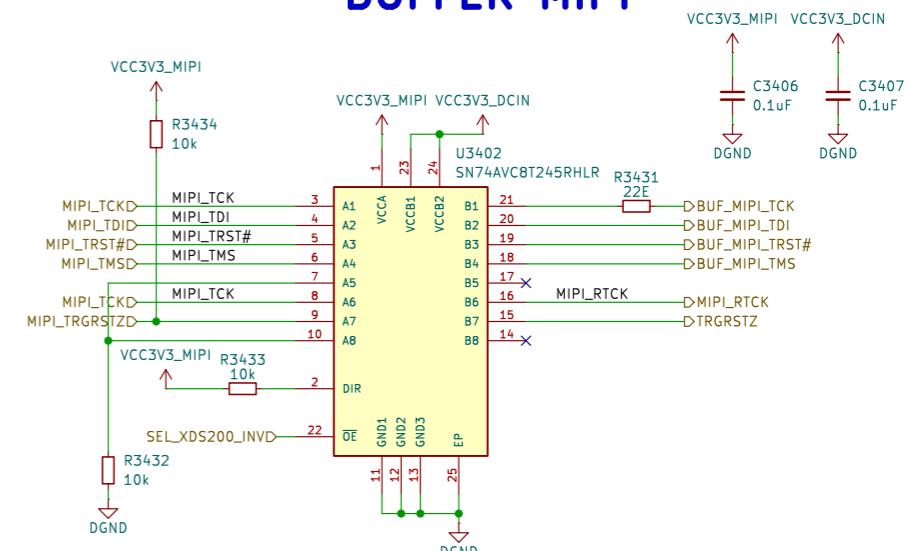
# XDS200 CPLD



# BUFFER XDS200



# BUFFER MIPI



NDH

Sheet: /JTAG\_XDS200\_CPLD/  
File: JTAG\_XDS200\_CPLD.kicad\_sch

Title: Barre de son (base saine)

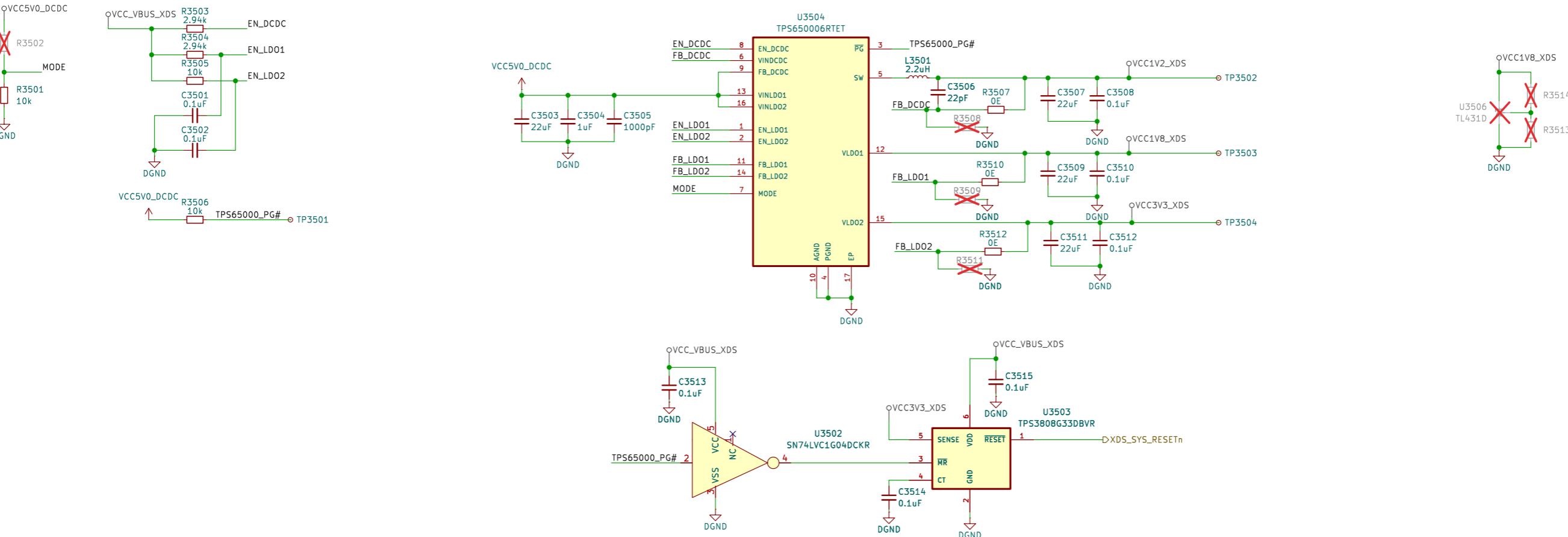
Size: A3 Date: 2025-05-16

KiCad E.D.A. 9.0.0

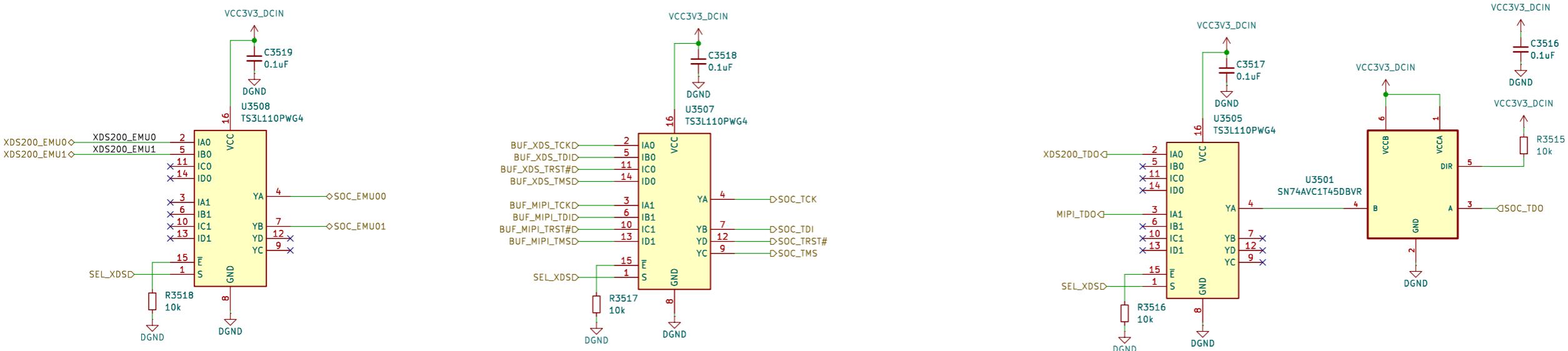
Rev: 1.0

Id: 34/42

## XDS200 POWER



## JTAG FET SWITCH



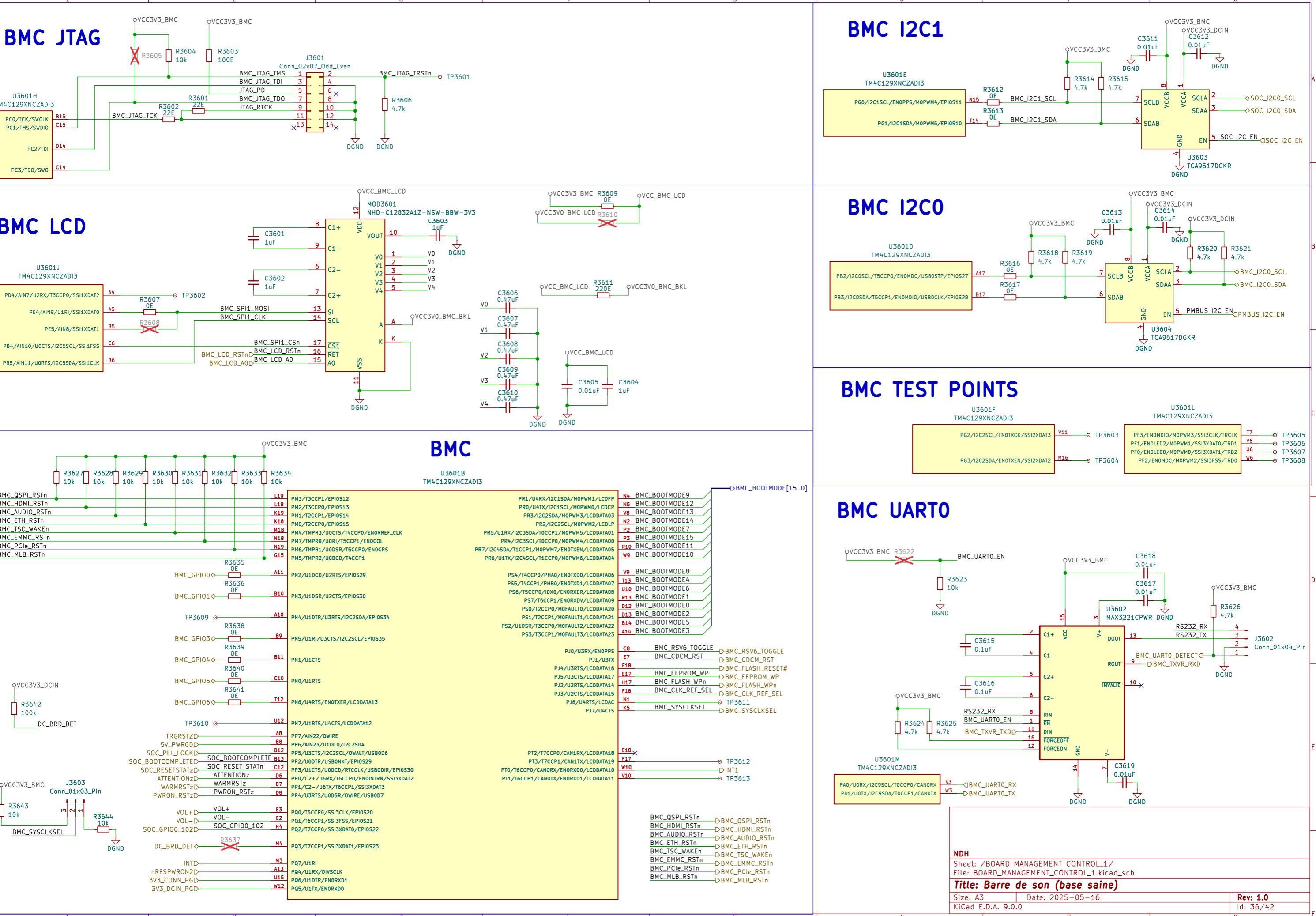
NDH

Sheet: /XDS200\_POWER/  
File: XDS200\_POWER.kicad\_sch

Title: Barre de son (base saine)

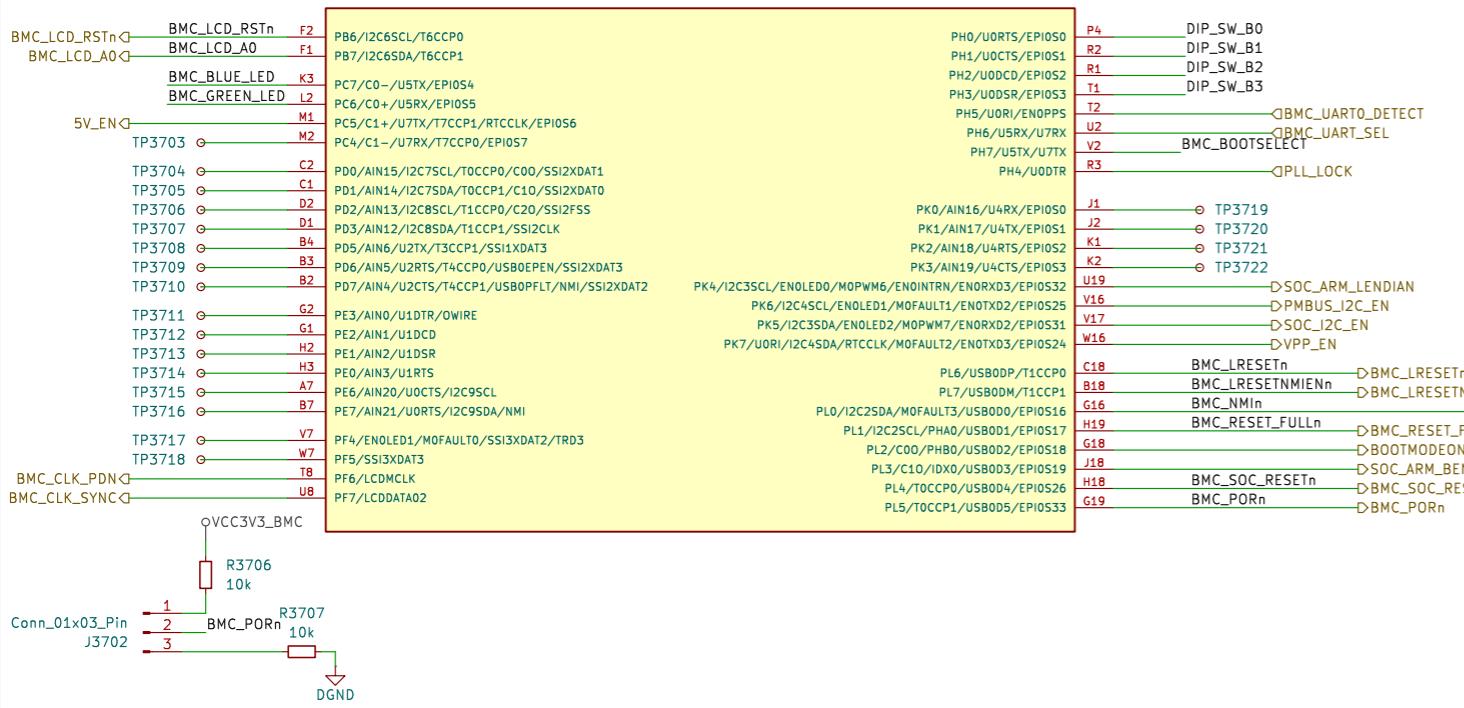
Size: A3 Date: 2025-05-16  
KiCad E.D.A. 9.0.0

Rev: 1.0  
Id: 35/42

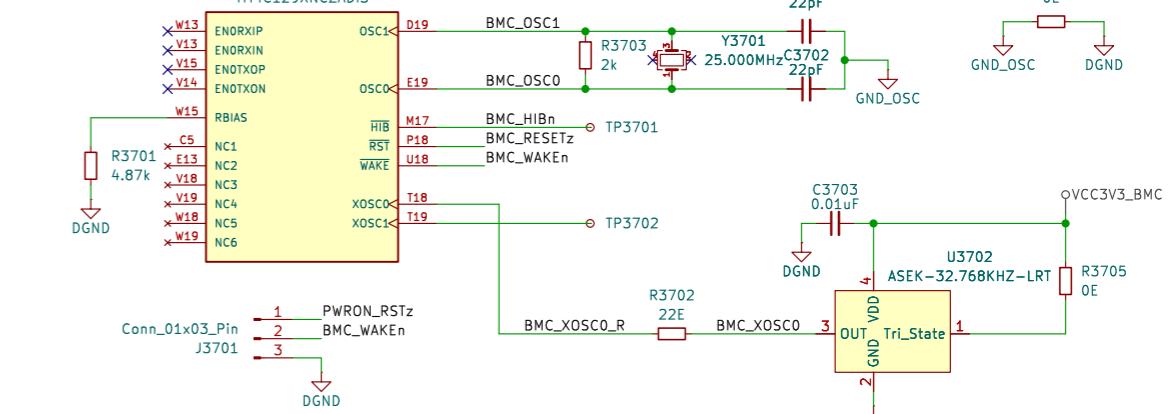


# BMC

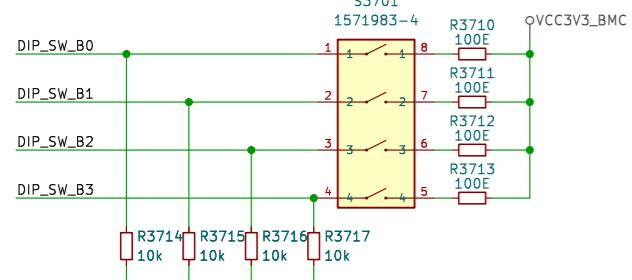
U3701A  
TM4C129NCZADI3



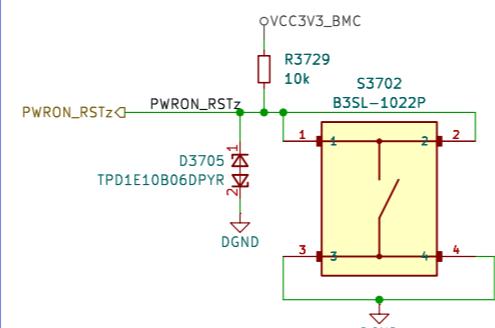
# BMC CLOCK



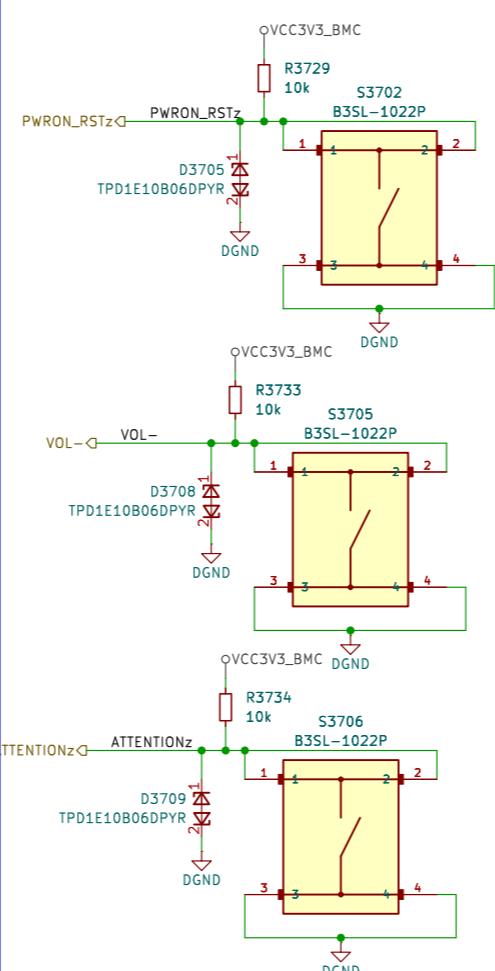
# DIP SWITCH



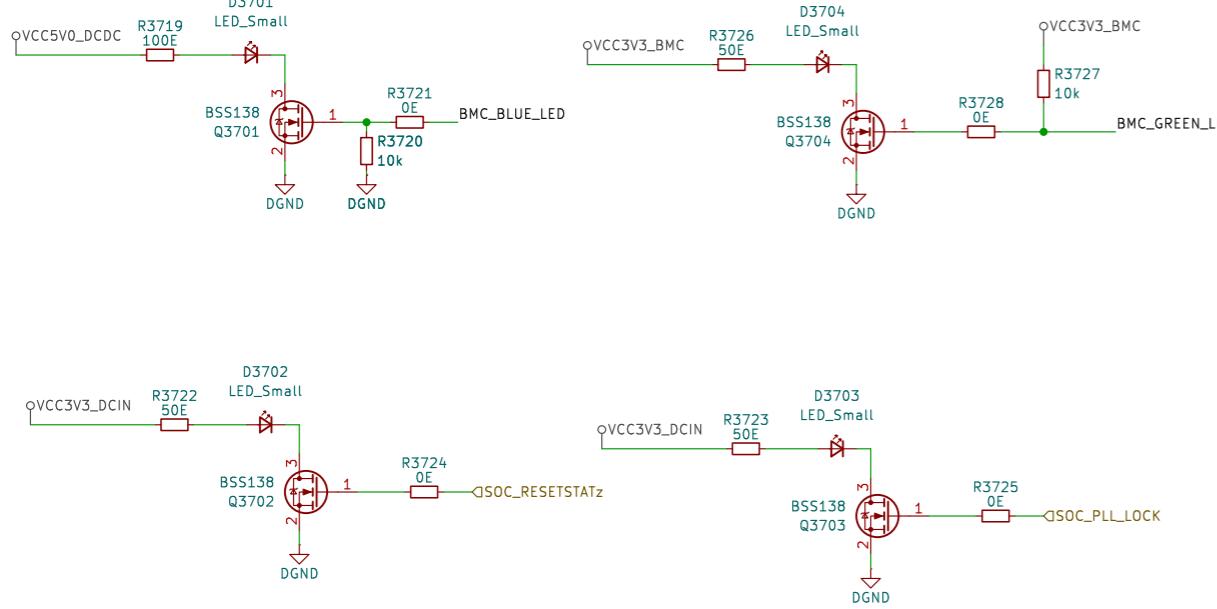
# BMC BOOT SELECT



# PUSH BUTTON SWITCHES



# LEDS



# NDH

Sheet: /BOARD MANAGEMENT CONTROL\_2/  
File: BOARD\_MANAGEMENT\_CONTROL\_2.kicad\_sch

Title: Barre de son (base saine)

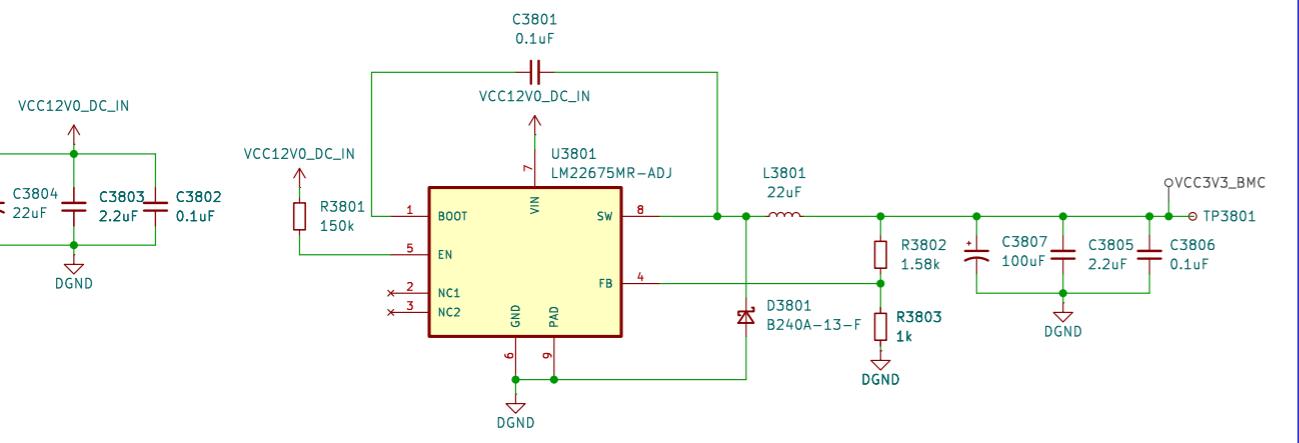
Size: A3 Date: 2025-05-16

KiCad E.D.A. 9.0.0

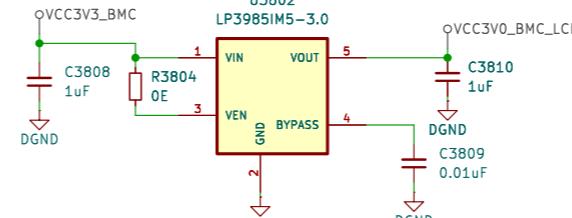
Rev: 1.0

Id: 37/42

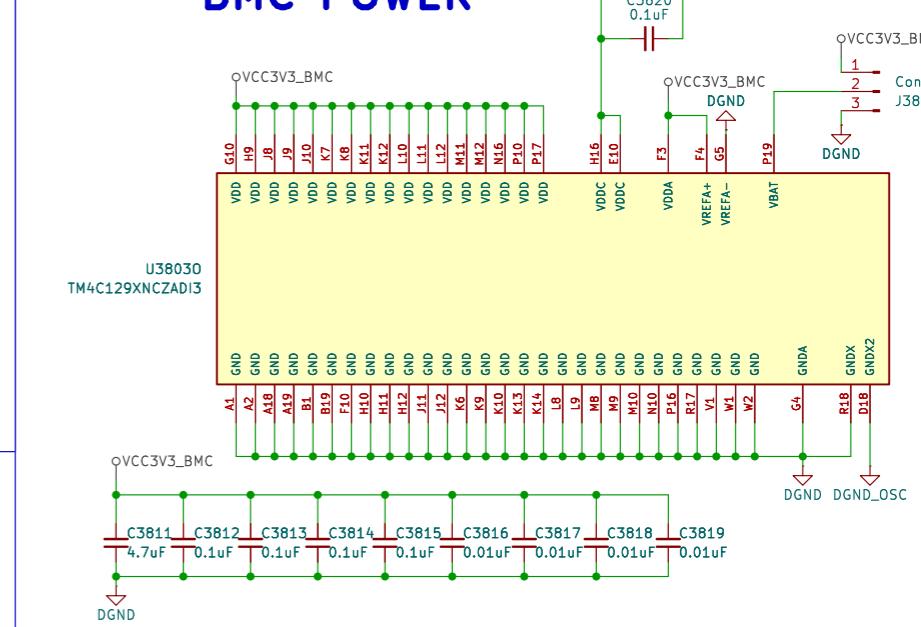
## BMC 3.3V GENERATOR



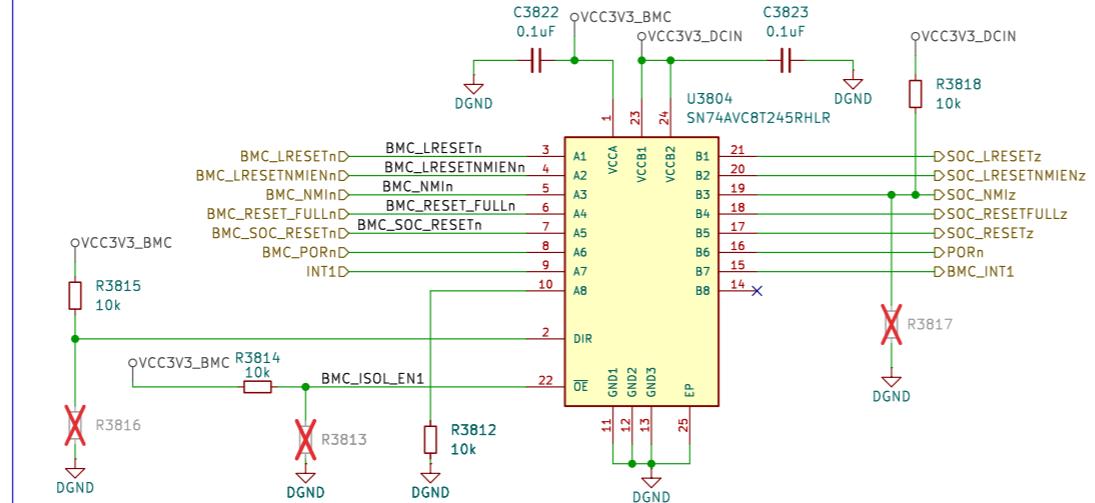
## BMC LCD 3V GENERATOR



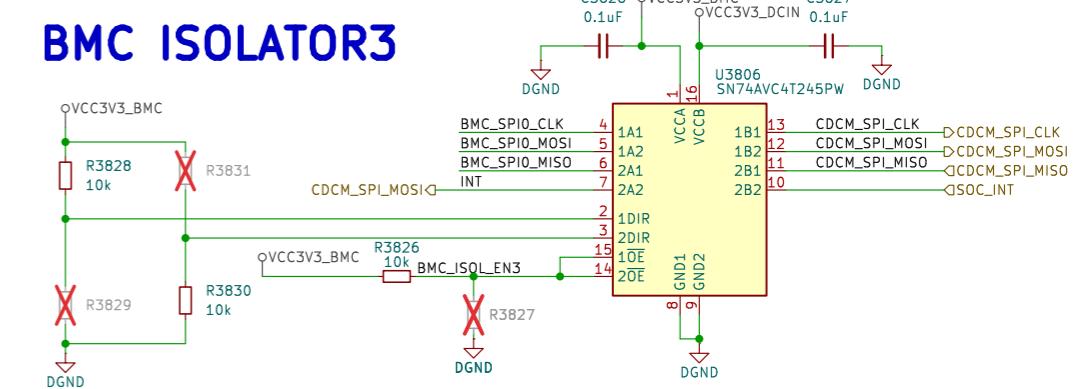
## BMC POWER



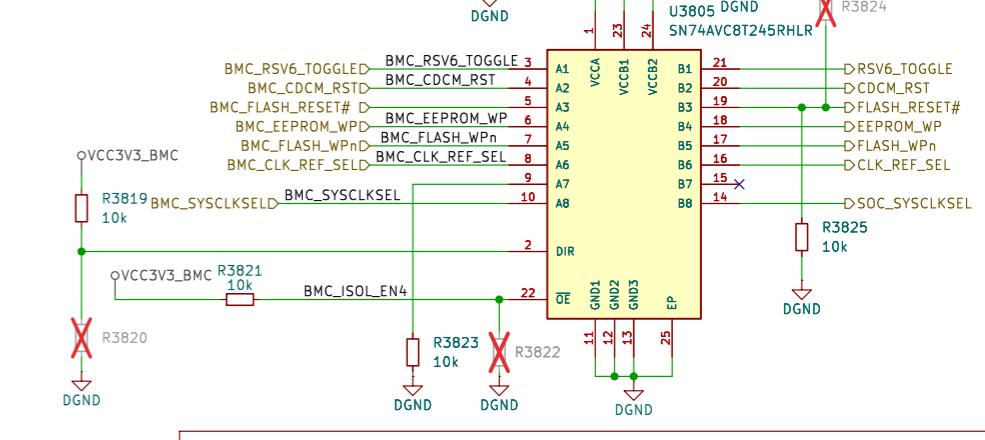
## BMC ISOLATOR1



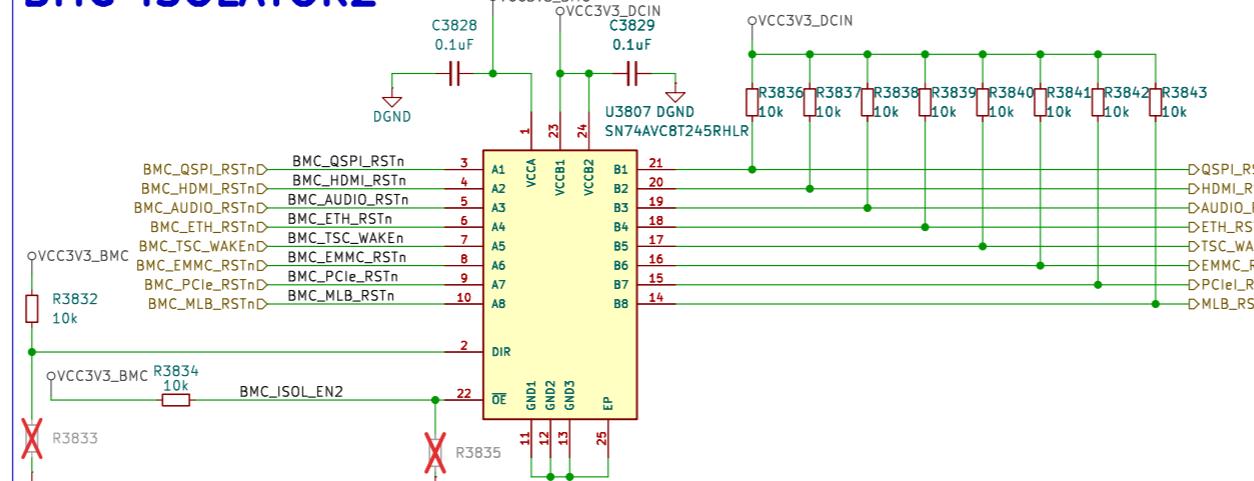
## BMC ISOLATOR3



## BMC ISOLATOR4



## BMC ISOLATOR2



NDH

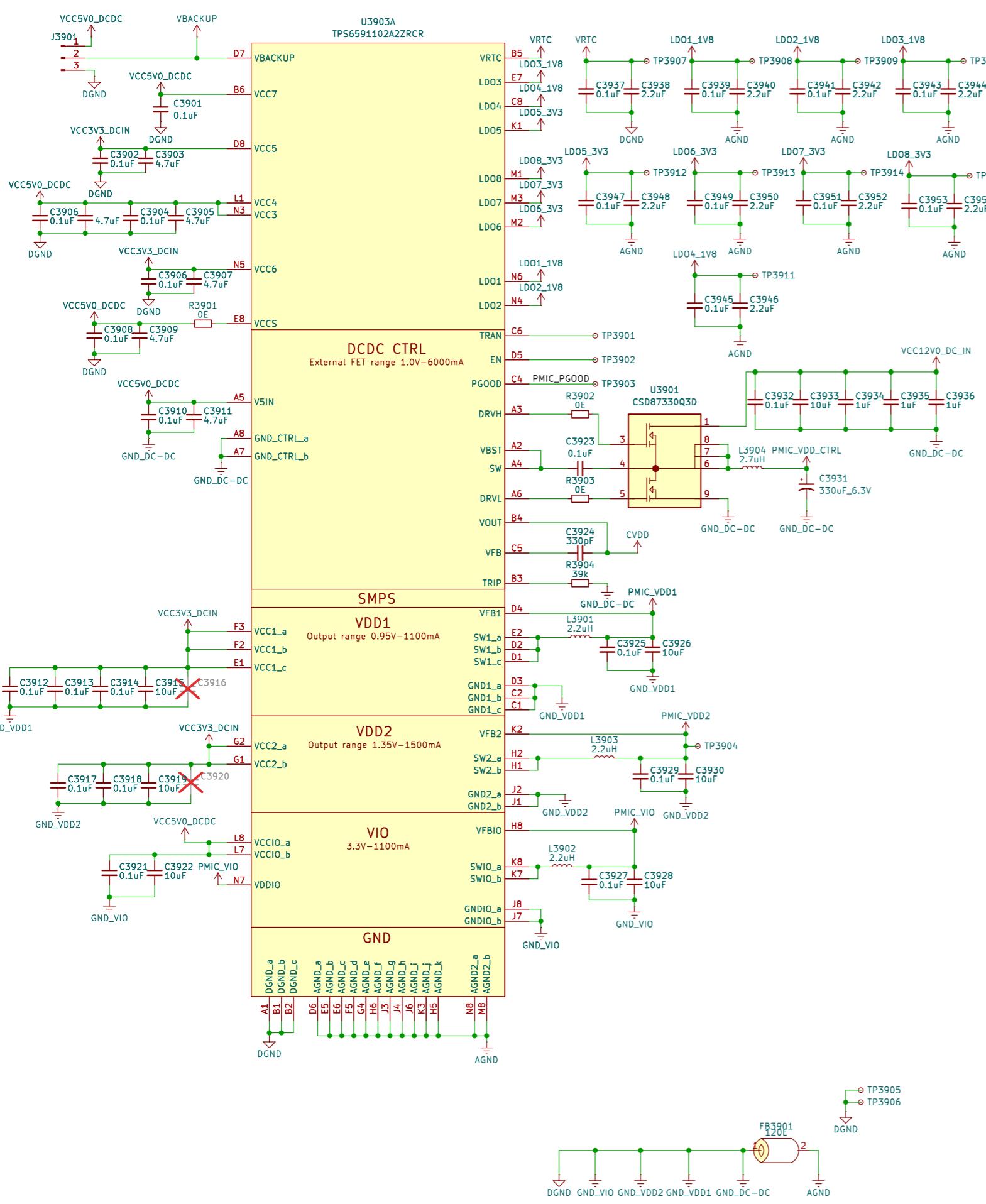
Sheet: /BOARD MANAGEMENT CONTROL\_3/  
File: BOARD\_MANAGEMENT\_CONTROL\_3.kicad\_sch

Title: Barre de son (base saine)

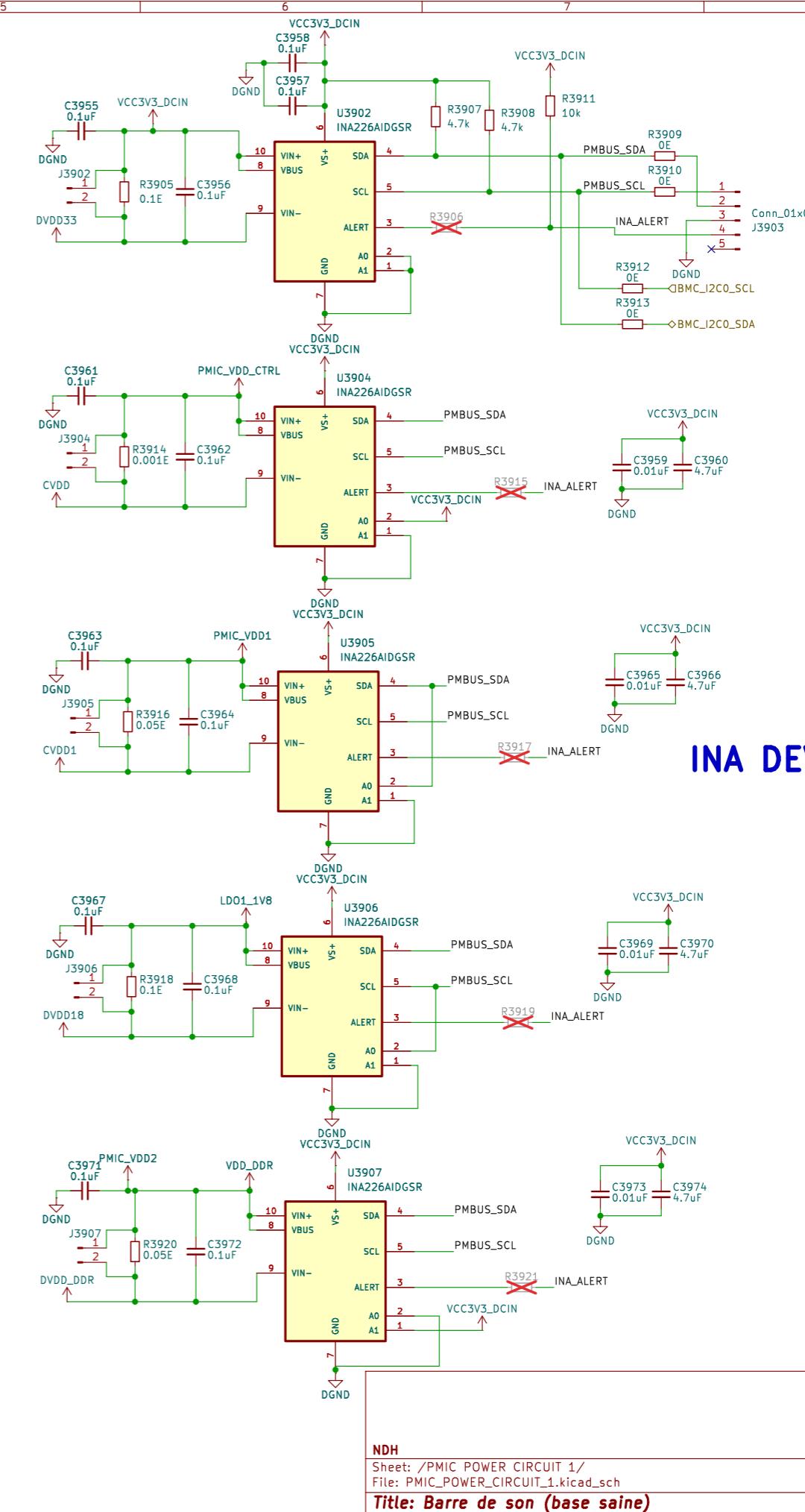
Size: A3 Date: 2025-05-16  
KiCad E.D.A. 9.0.0

Rev: 1.0  
Id: 38/42

# PMIC POWER SECTION 1



# INA DEVICES

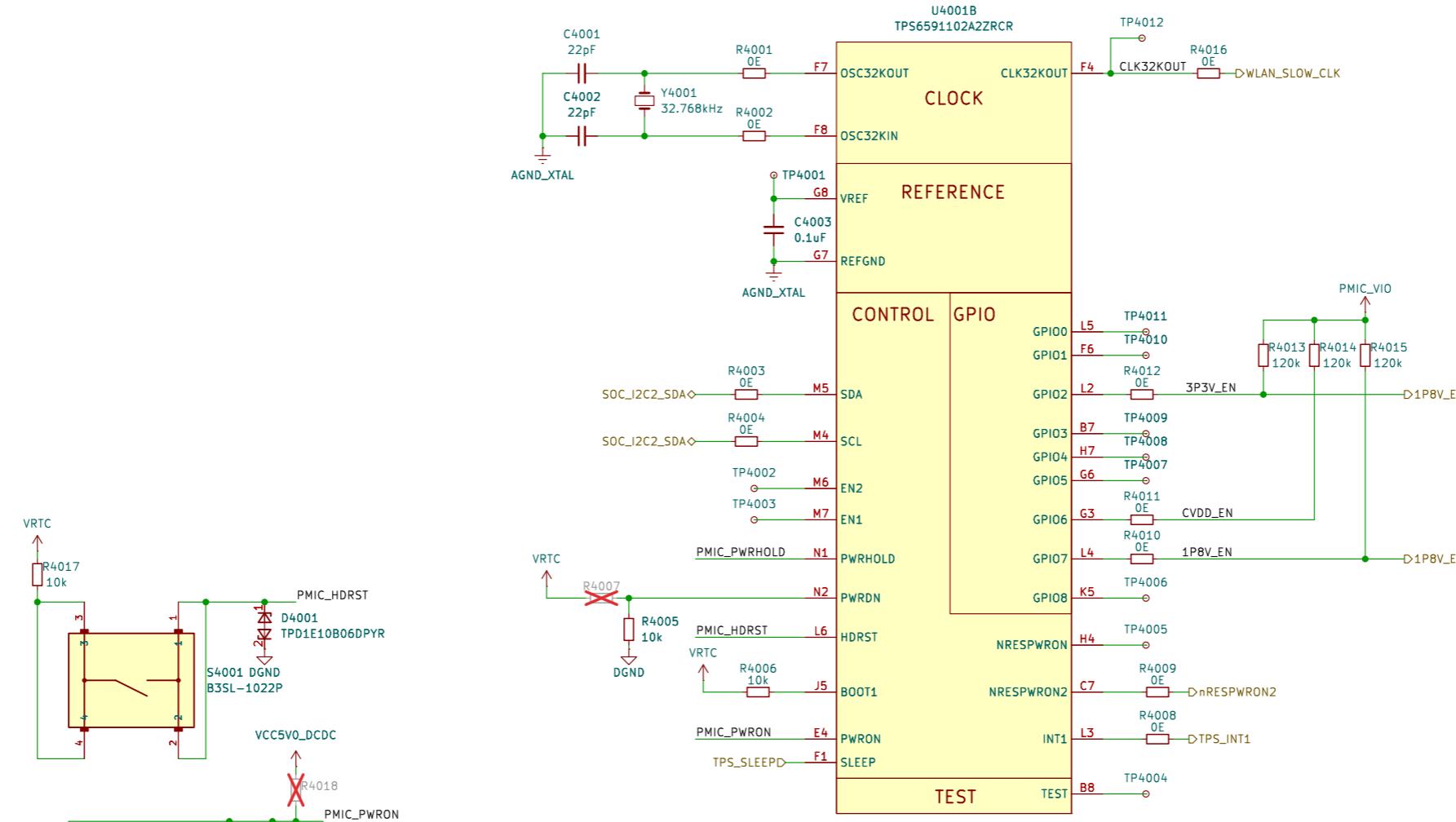


**NDH**  
Sheet: /PMIC POWER CIRCUIT 1/  
File: PMIC\_POWER\_CIRCUIT\_1.kicad\_sch  
**Title: Barre de son (base saine)**

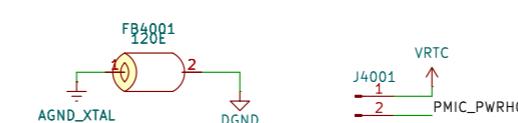
Size: A3 Date: 2025-05-16  
KiCad E.D.A. 9.0.0

Rev: 1.0  
Id: 39/42

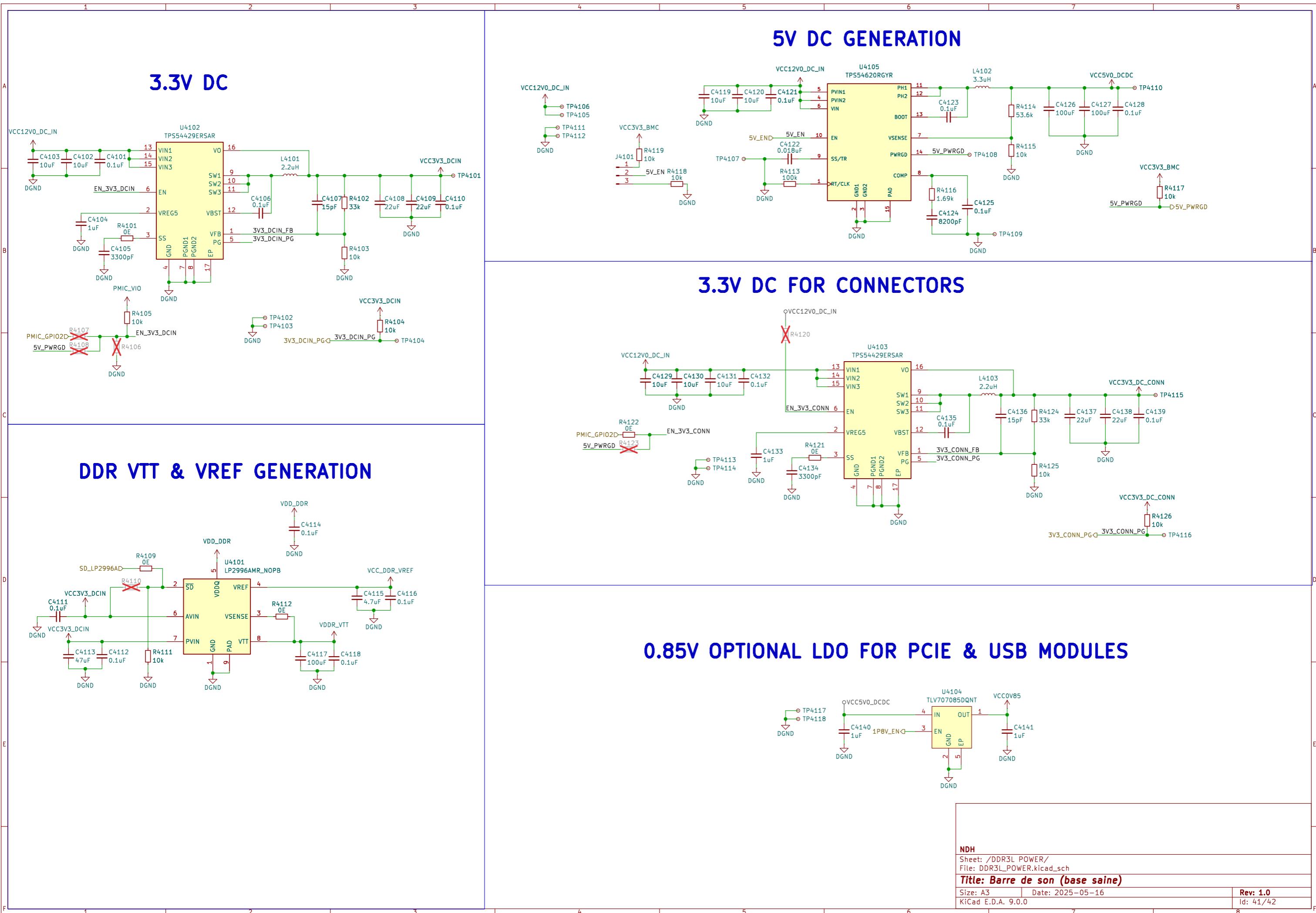
## PMIC POWER SECTION 2

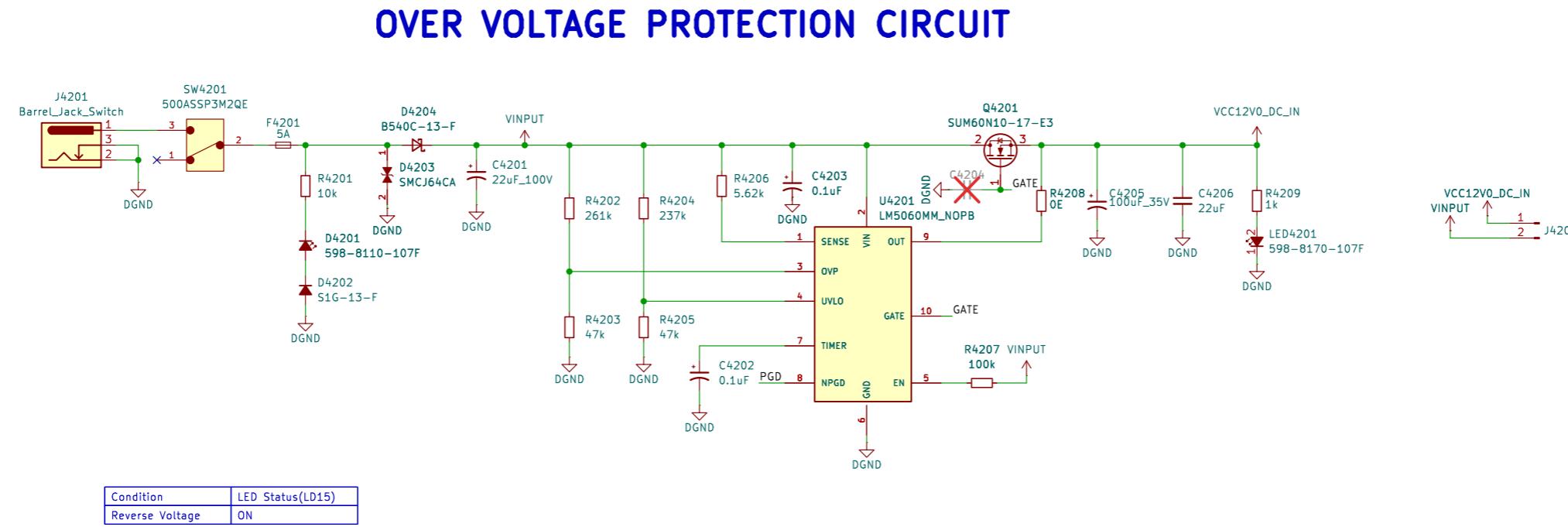


I2C ADDRESS: 0x2D (GENERAL PURPOSE) TBD  
0x12 (VOLTAGE SCALING) TBD

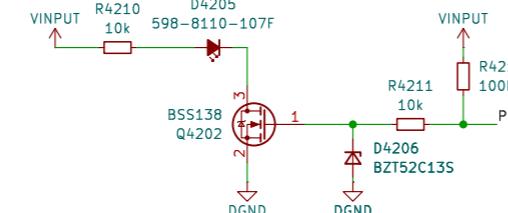


**NDH**  
Sheet: /PMIC POWER CIRCUIT 2/  
File: PMIC\_POWER\_CIRCUIT\_2.kicad\_sch  
**Title: Barre de son (base saine)**  
Size: A3 Date: 2025-05-16  
KiCad E.D.A. 9.0.0 Rev: 1.0  
Id: 40/42





## Fault Indication



Condition	LED Status(D4205)
between 11 to 13V & Current below 5A	OFF
T above 13V or below 11V & Current above 5A	ON

When fault is indicated ,set to proper voltage and power cycle the board.

**NDH**  
Sheet: /OVER VOLTAGE PROTECTION/  
File: OVER\_VOLTAGE\_PROTECTION.kicad\_sch  
**Title: Barre de son (base saine)**

Size: A3	Date: 2025-05-16	Rev: 1.0
KiCad E.D.A. 9.0.0		Id: 42/42