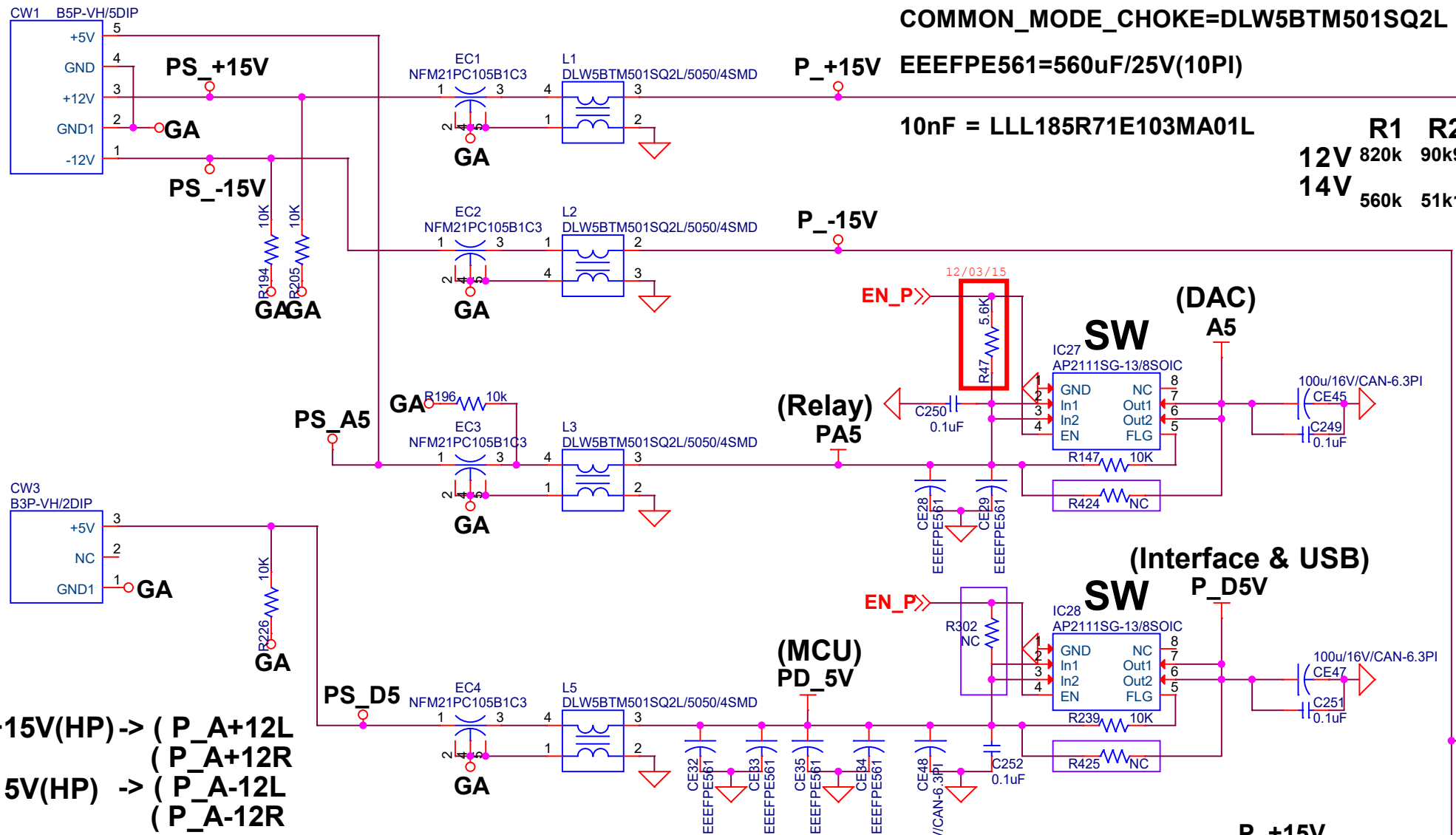


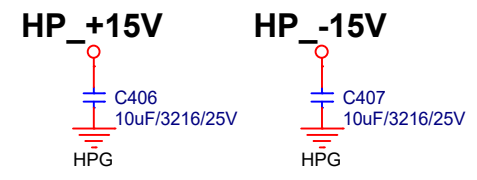
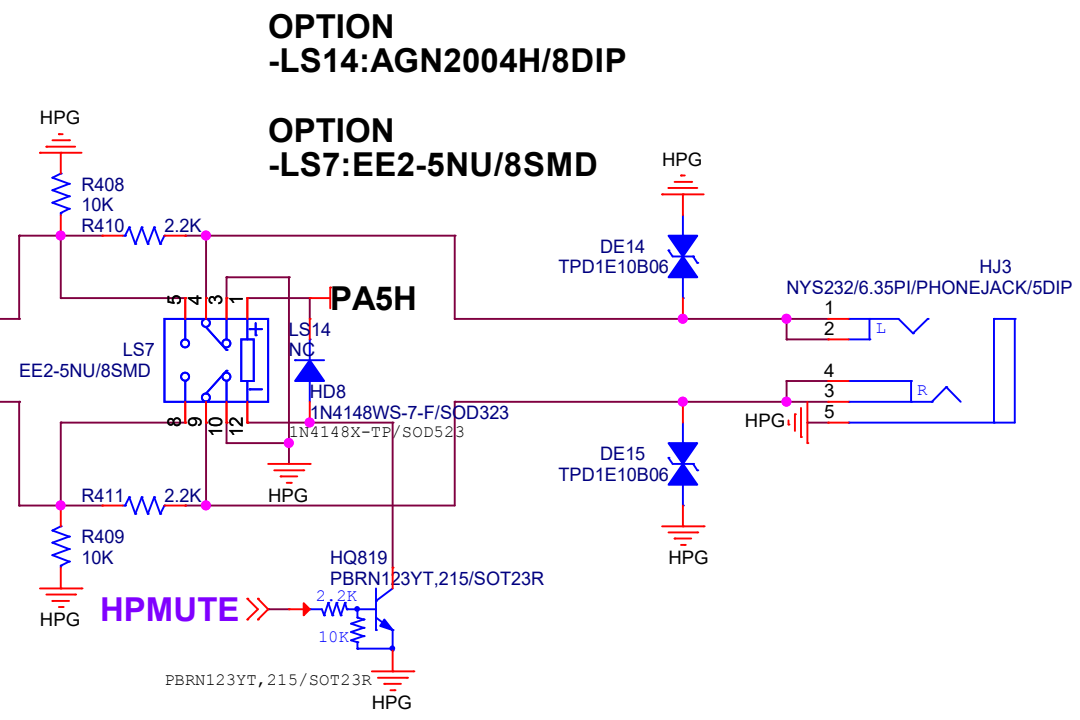
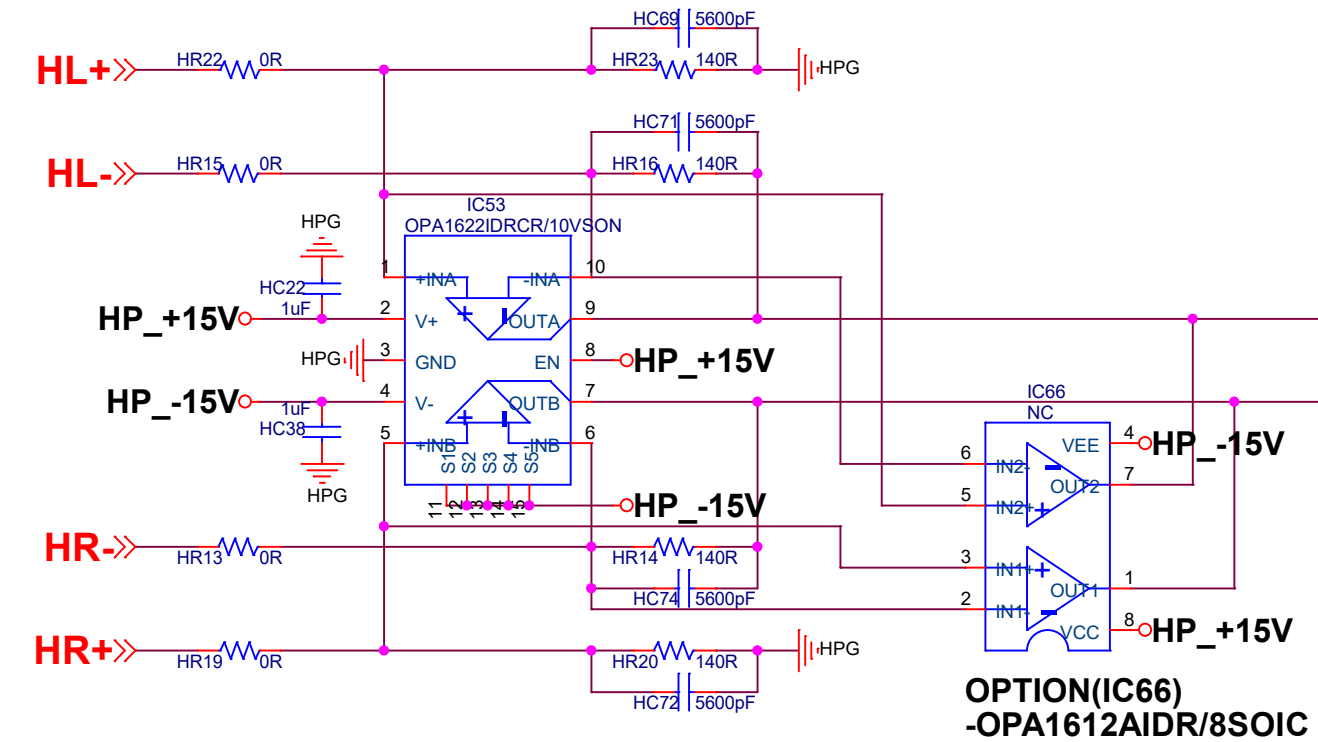
MainPower

Vac

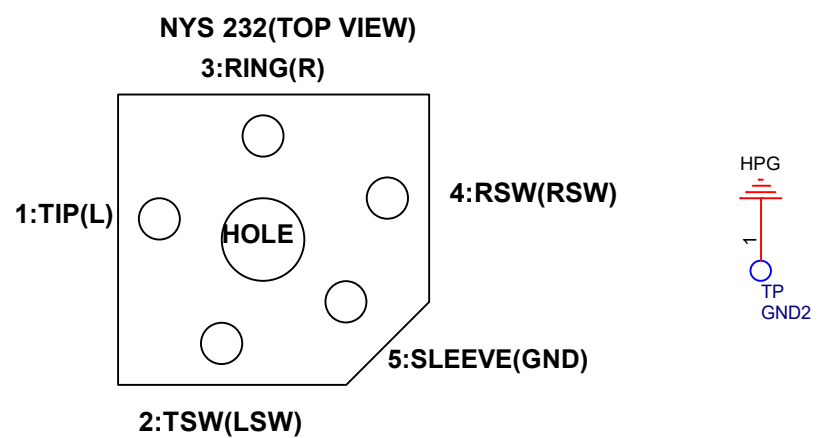
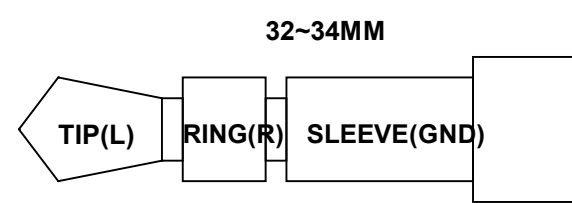
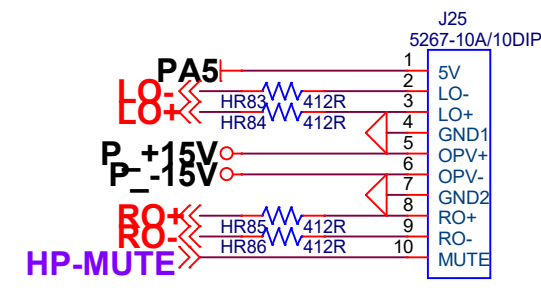
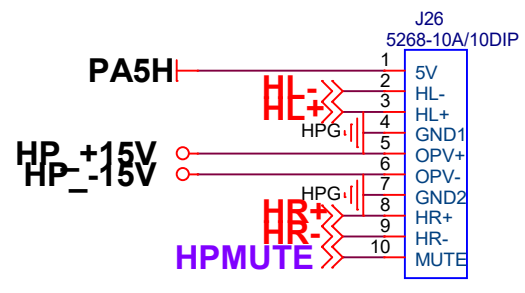
PowerEMI

PowerModule

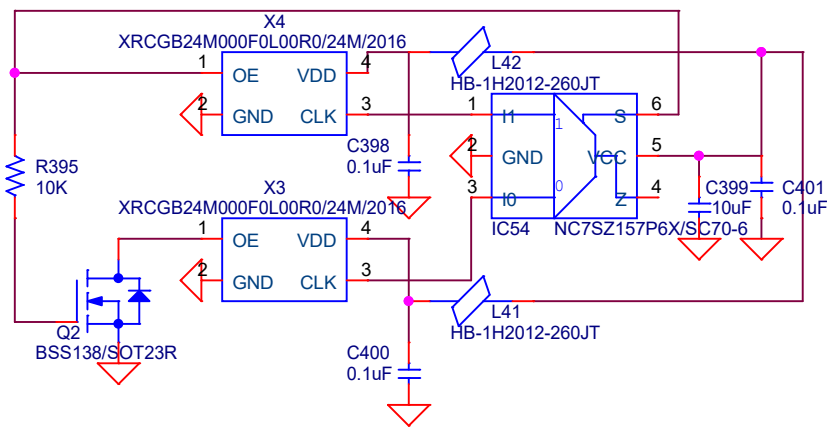




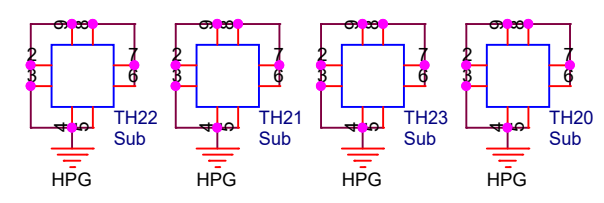
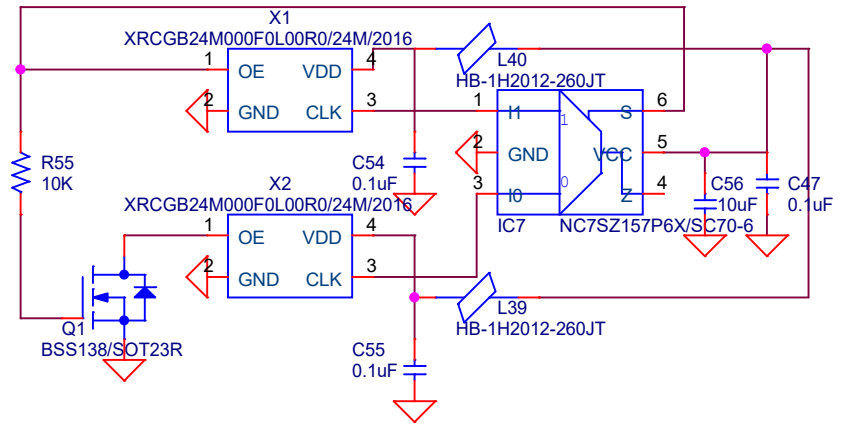
U24(MCU)_17PIN_PB2(HP_MUTE)
POWER_ON-OFF_POP/HP-USE
-L(MUTE)
-H(UNMUTE)



DAC_OSC(DUMMY1)



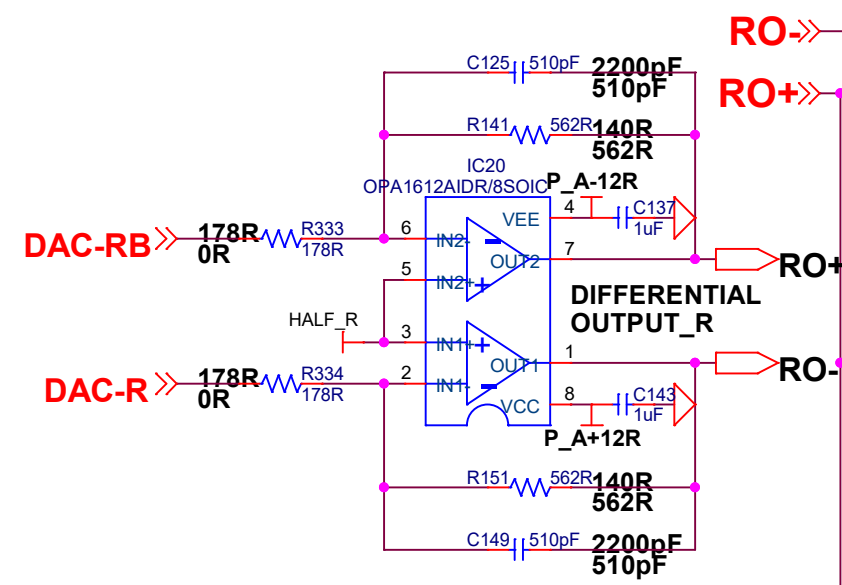
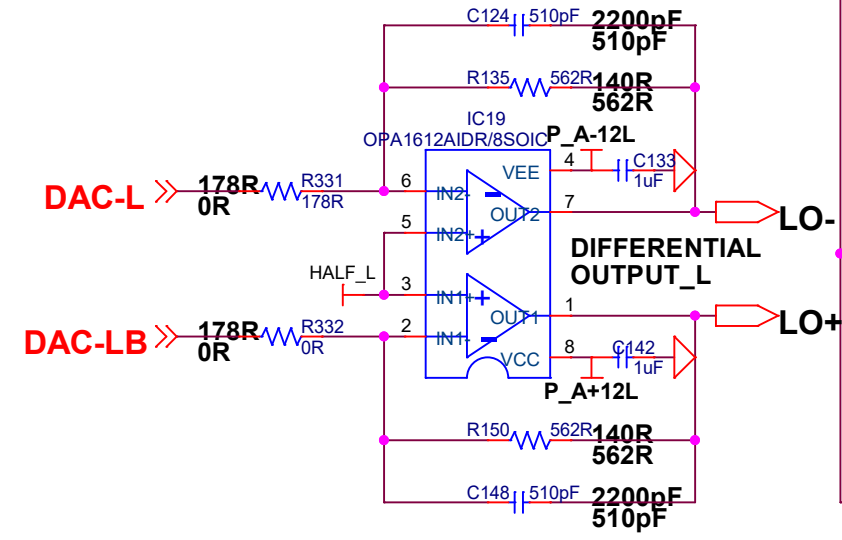
DAC_OSC(DUMMY2)



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DAC Out

DAC_R=25.25ohm(202ohm//8ea,+14%)
0.924xAVCC(2.5V)=1.155V

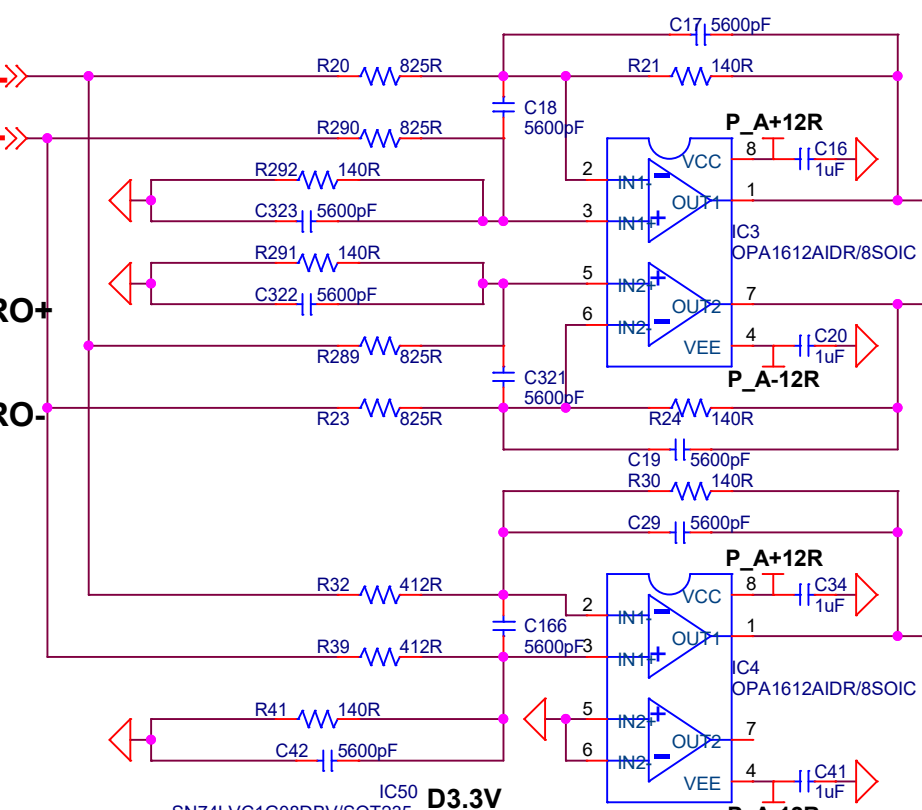
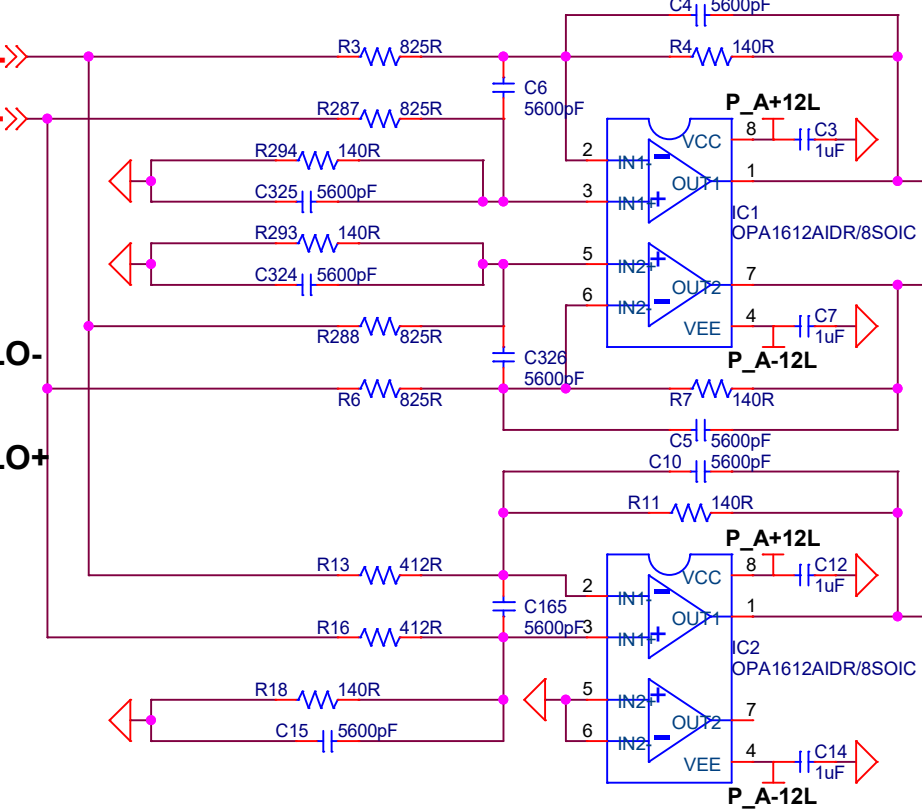


SA9127(IC36)_2PIN(GPIO1(UAUDIO_EN))
-H(USB_AUDIO_OUT-ON)
-L(USB_AUDIO_OUT-OFF)

U24(MCU)_17PIN_PB2(I2S_Sel)
-H(USB-SA9127)
-L(SPDIF-AK4118)

USB_AUDIO-ON
-H(USB_AUDIO_ON_When_USB_mode)
-L(USB_AUDIO_OFF_When_USB_mode)

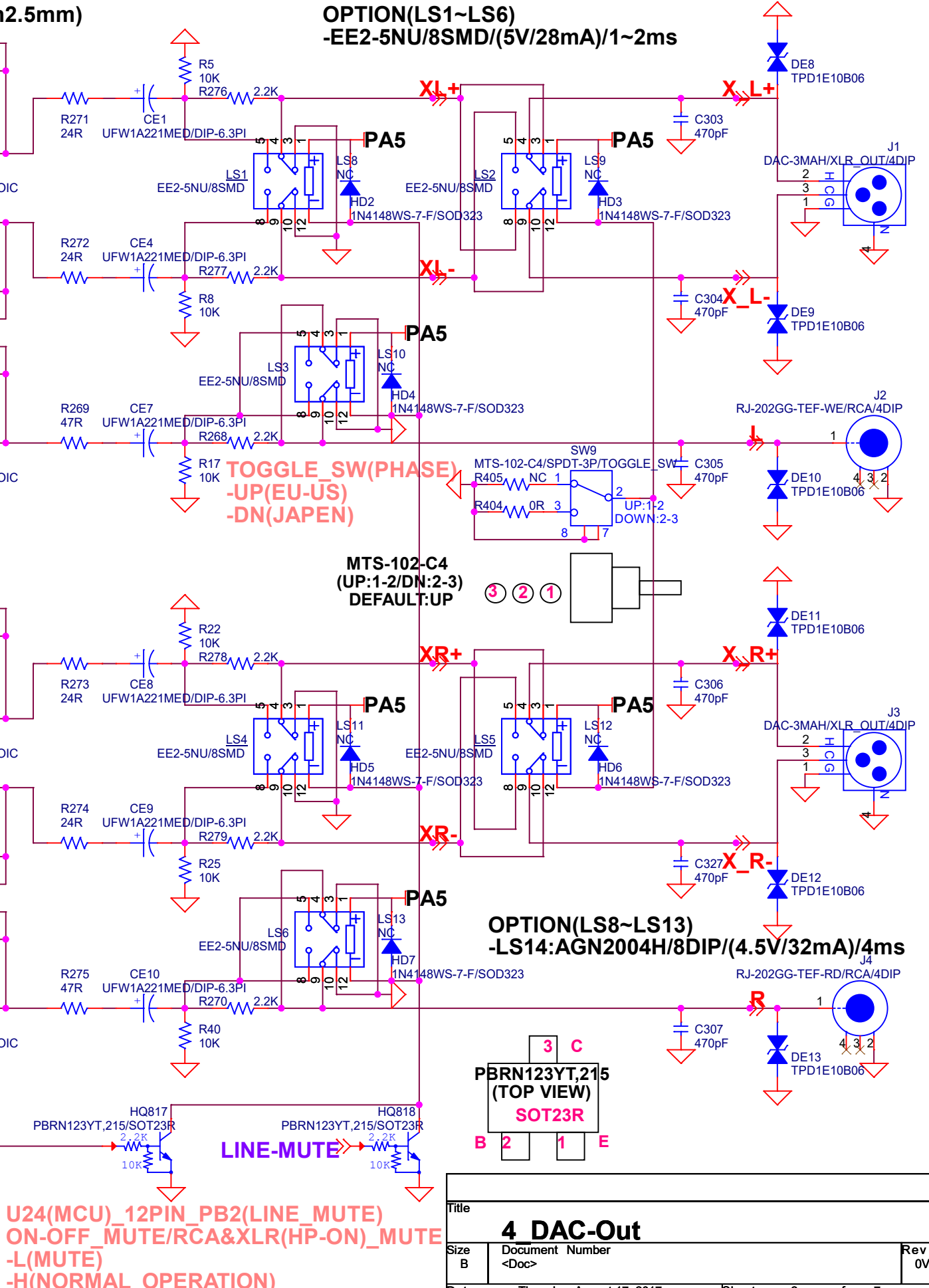
UFW1A221MED=220uF/10V(6.3*11mm-pitch2.5mm)



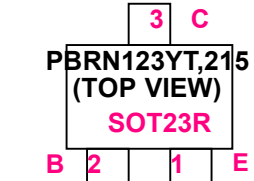
UAUDIO_EN
I2S_Sel

AND-GATE
SN74LVC1G08DBV/SOT235

USB_AUDIO-ON

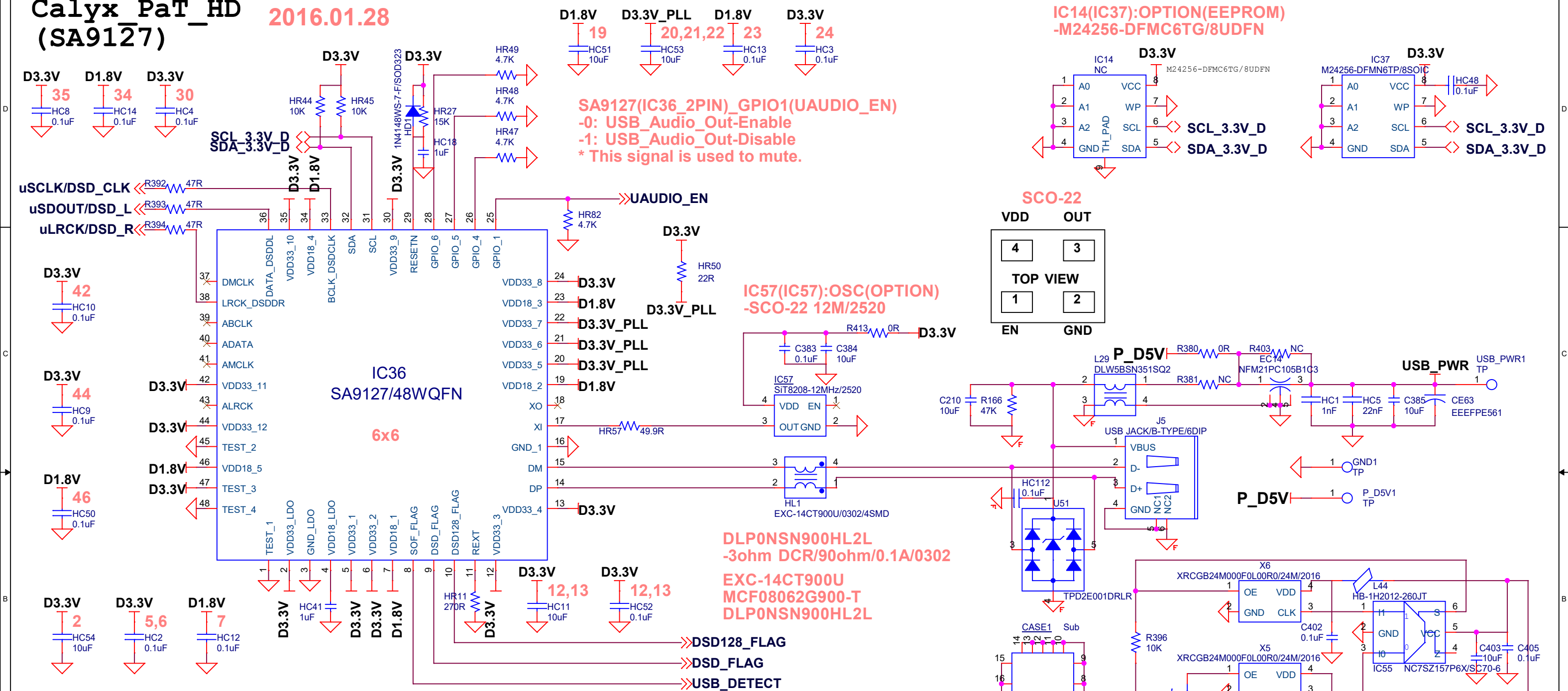


U24(MCU)_12PIN_PB2(LINE MUTE)
ON-OFF_MUTE/RCA&XLR(HP-ON)_MUTE
-L(MUTE)
-H(NORMAL OPERATION)



Title		
4 DAC-Out		
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Calyx PaT HD
(SA9127) 2016.01.28



DSD_FLAG:User can check this pin to understand DSD mode is detected or not

- 0: PCM mode
- 1: DSD mode

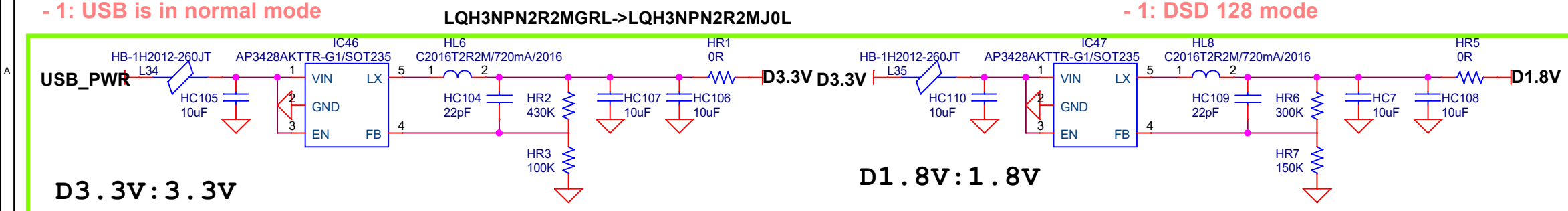
SOF(Start_Of_Frame)_FLAG:User can check this pin to understand USB is in suspend or not

- 0: USB is in suspend
- 1: USB is in normal mode

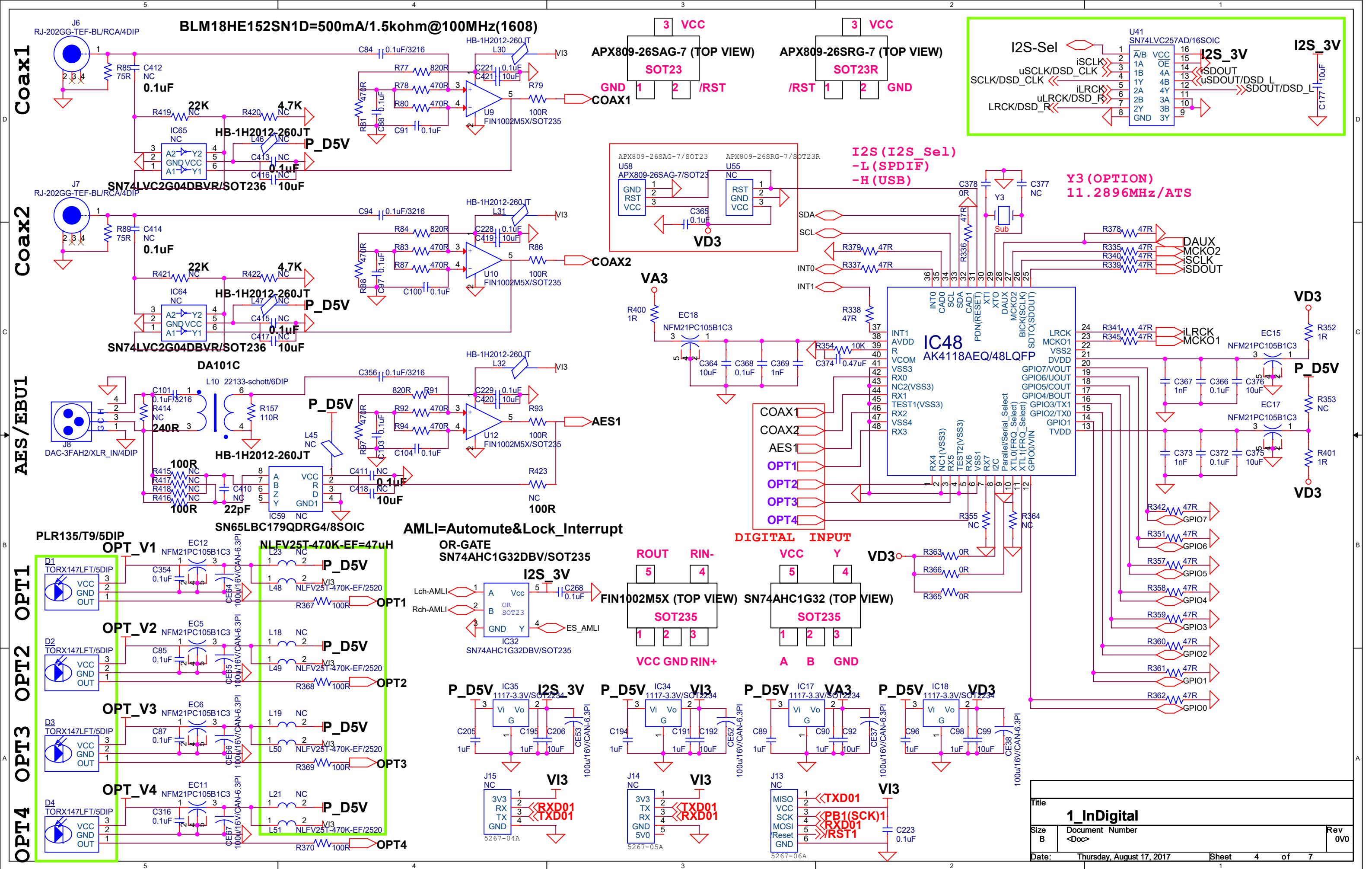
Q3NPN2R2MGR1 -> Q3NPN2R2M101

DSD128_FLAG:User can check this pin to understand which DSD mode is played now

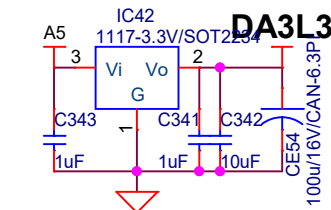
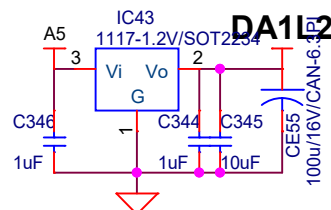
- 0: DSD 64 mode
- 1: DSD 128 mode



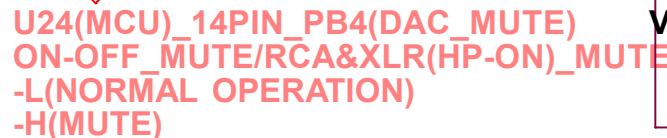
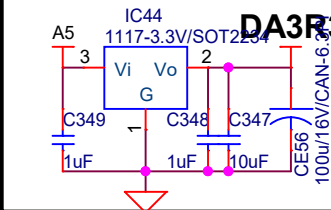
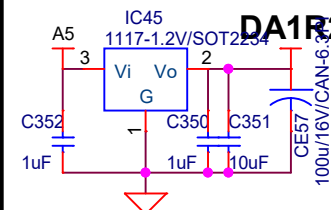
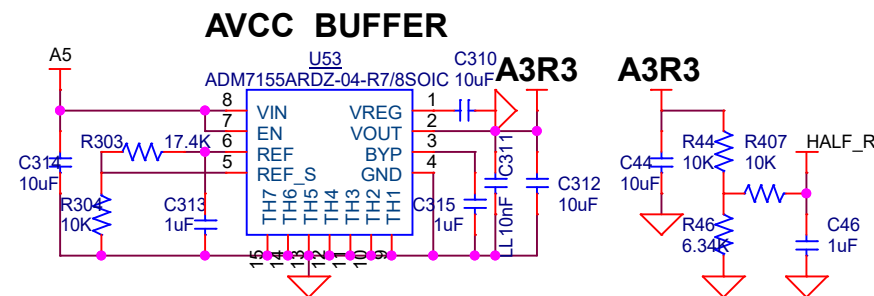
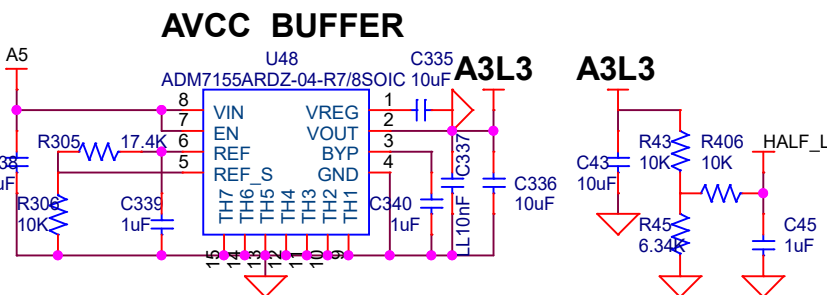
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2 USB			
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1_InDigital		
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```
R(ref)=R(Between_PIN6_and_PIN5)
R(ref s)=R(Between_PIN5_and_GND)
```



BLM18HE152SN1D=500mA/1.5kohm@100MHz(1608)
EEEFPE561=560uF/25V(10PI)

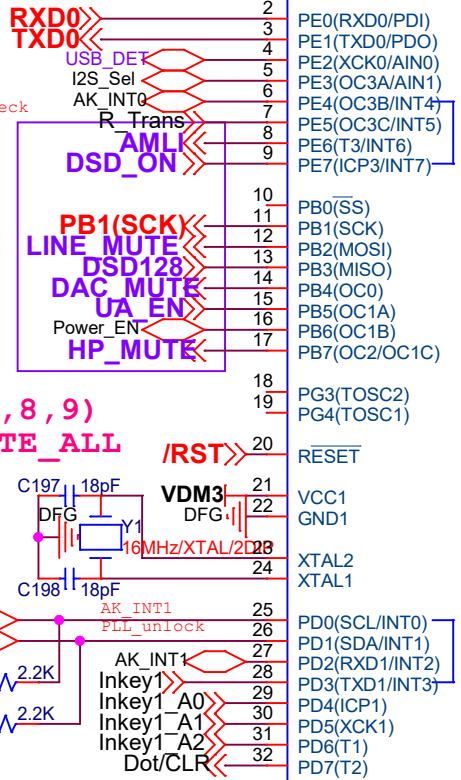
```
ES9038 GPIO3&GPIO4_SETTING=MUTE_ALL
-ES9038#REG9(4'D10)
INPUT:H->MUTE
INUPT:L->NORMAL OPERATION
```

Title			
3 DAC			
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MCU

VDM3 ATMEGA128A-AU/16MHz/64TQFP

U24



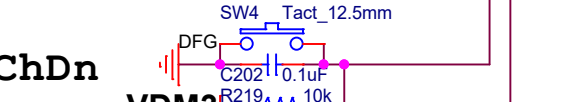
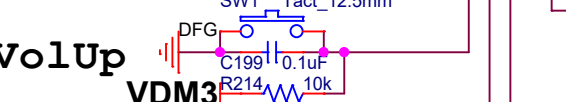
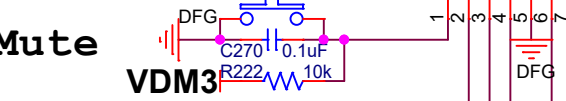
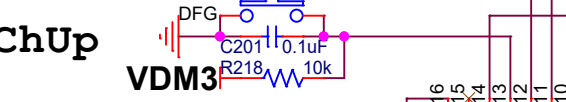
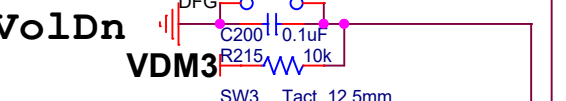
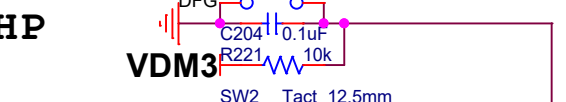
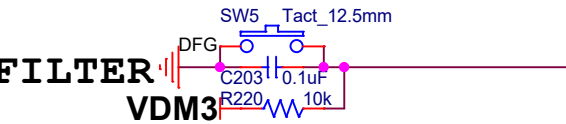
I2S (I2S_Sel)
-L (SPDIF-AK4118)
-H (USB-SA9127)

AMLI
=Automute Lock Interrupt
-ES9038#REG9 (4'd4)

LINE&DAC MUTE (ES9038#REG7, 8, 9)
ES9038 GPIO3-4 SETTING=MUTE_ALL
-ES9038#REG9 (4'd10)

DSD_FLAG (DSD_ON)
-ES9038#REG1
-H (USB_OUTPUT=DSD)
-L (USB_OUTPUT=I2S)

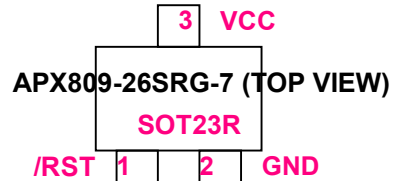
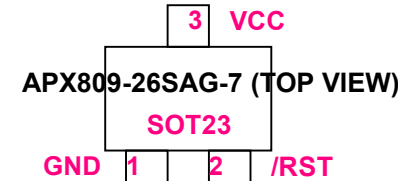
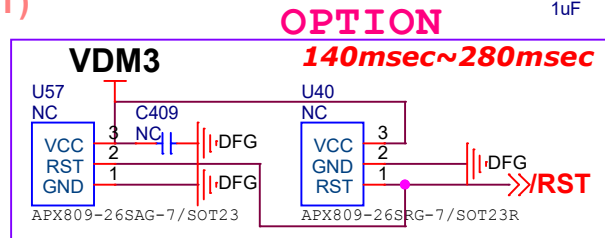
Power_EN (EN P)
: Interface, USB, DAC



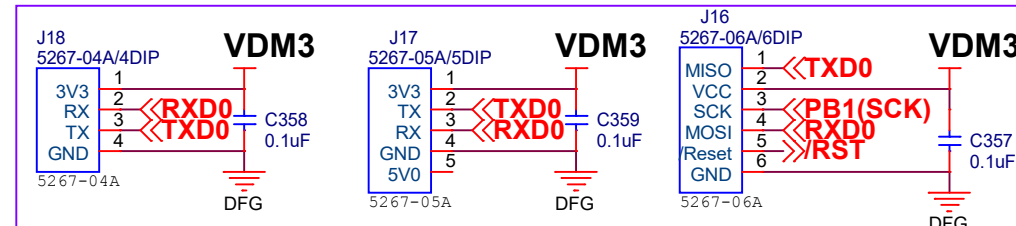
CAT24C16WI-E/EEPROM 16KBIT 400KHZ 8SOIC

SA9127 (IC36_2PIN)_GPIO1 (UAUDIO_EN)
-H (USB_AUDIO_OUT-ON)
-L (USB_AUDIO_OUT-OFF)
* This signal is used to mute.

SA9127 (IC36_8PIN)_SOF_FLAG (USB_DETECT)
-H (USB_DETECT)
-L (USB_UNDETECT)

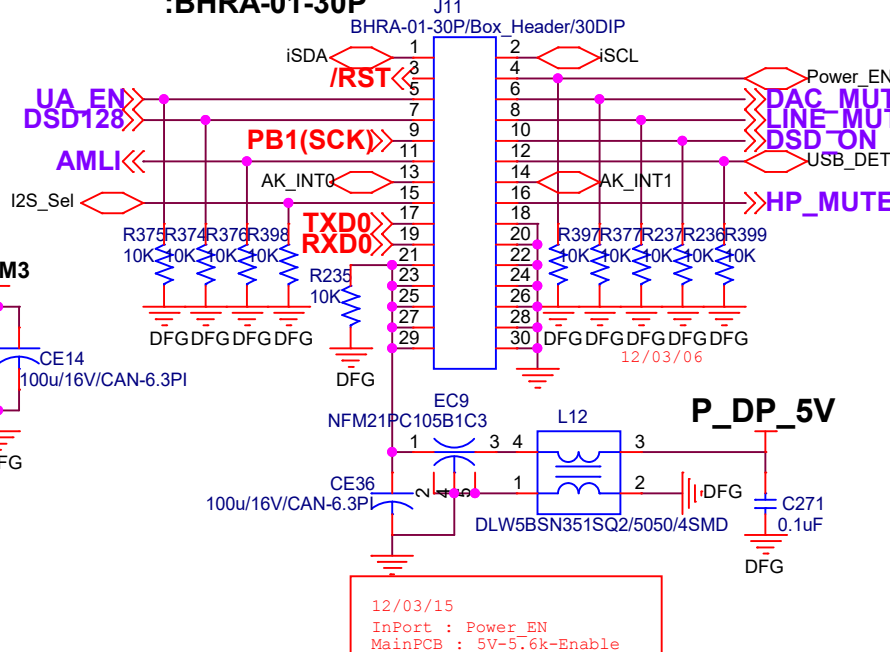


AT24C16BN-SH-T/EEPROM 16KBIT 400KHZ 8SOIC

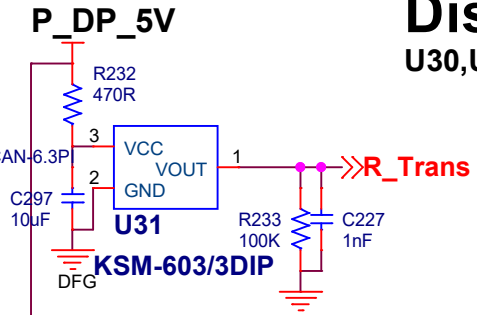
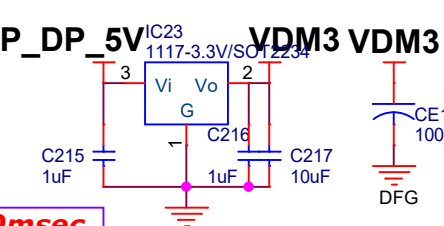


AMLI=Automute&Lock Interrupt
UA_EN(UOUT-EN)=USB_AUDIO_OUT_ENABLE

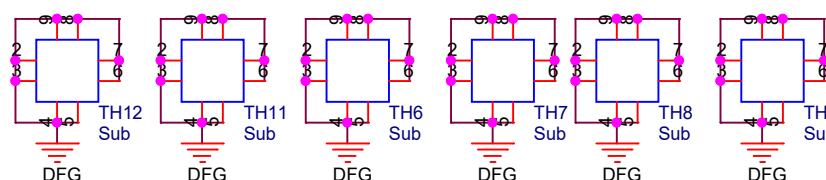
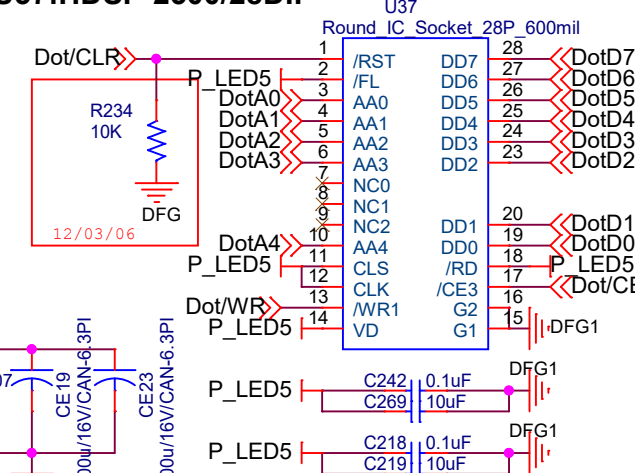
Front
Box Header 2.54MM_30P_Right_Angle
:BHRA-01-30P



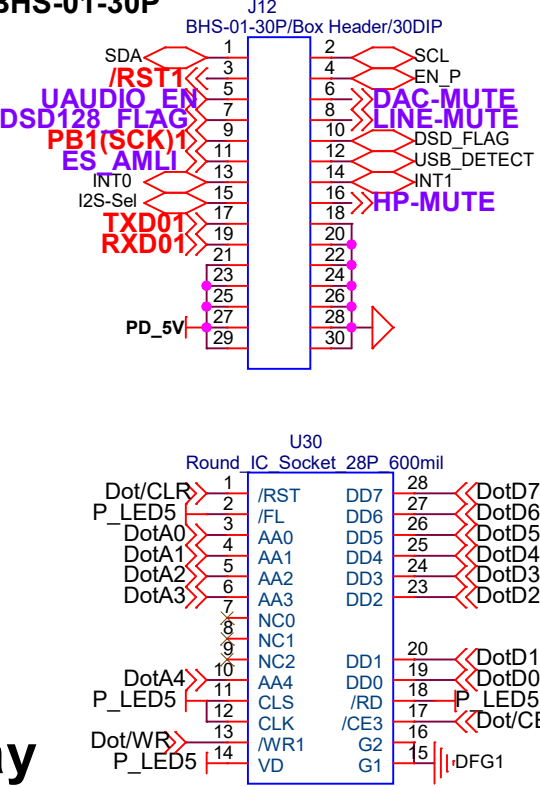
COMMON_MODE_CHOKE=DLW5BTM501SQ2L



Display
U30,U37:HDSP-2500/28DIP

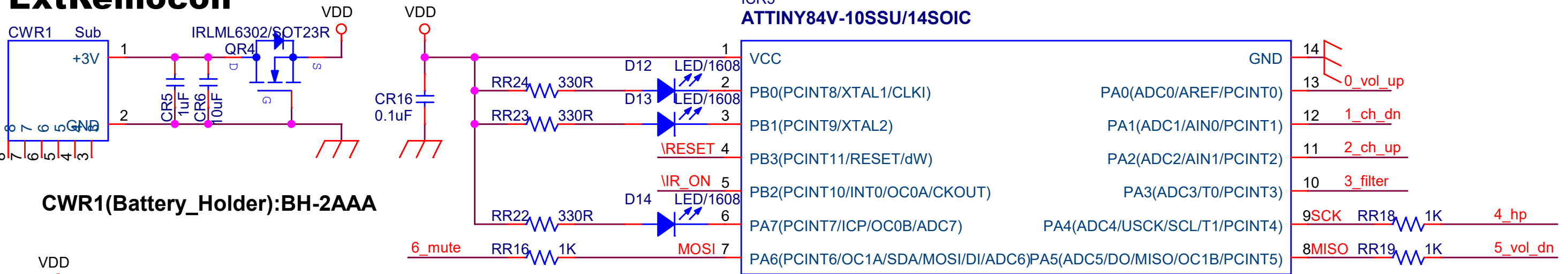


Main
Box Header 2.54MM_30P_Straight
:BHS-01-30P

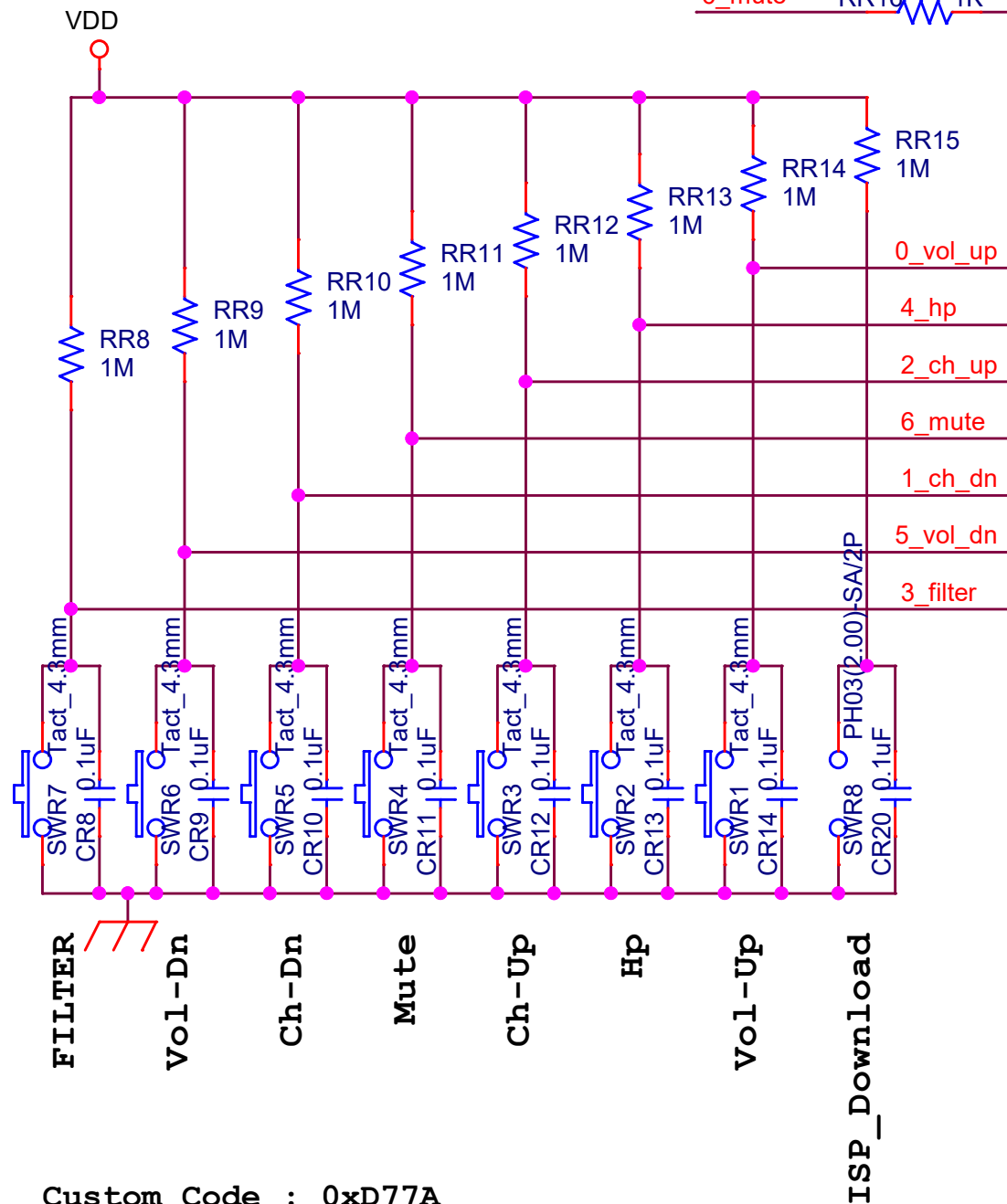


Title		
5 MCU Key_Display		
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ExtRemocon



CWR1(Battery_Holder):BH-2AAA

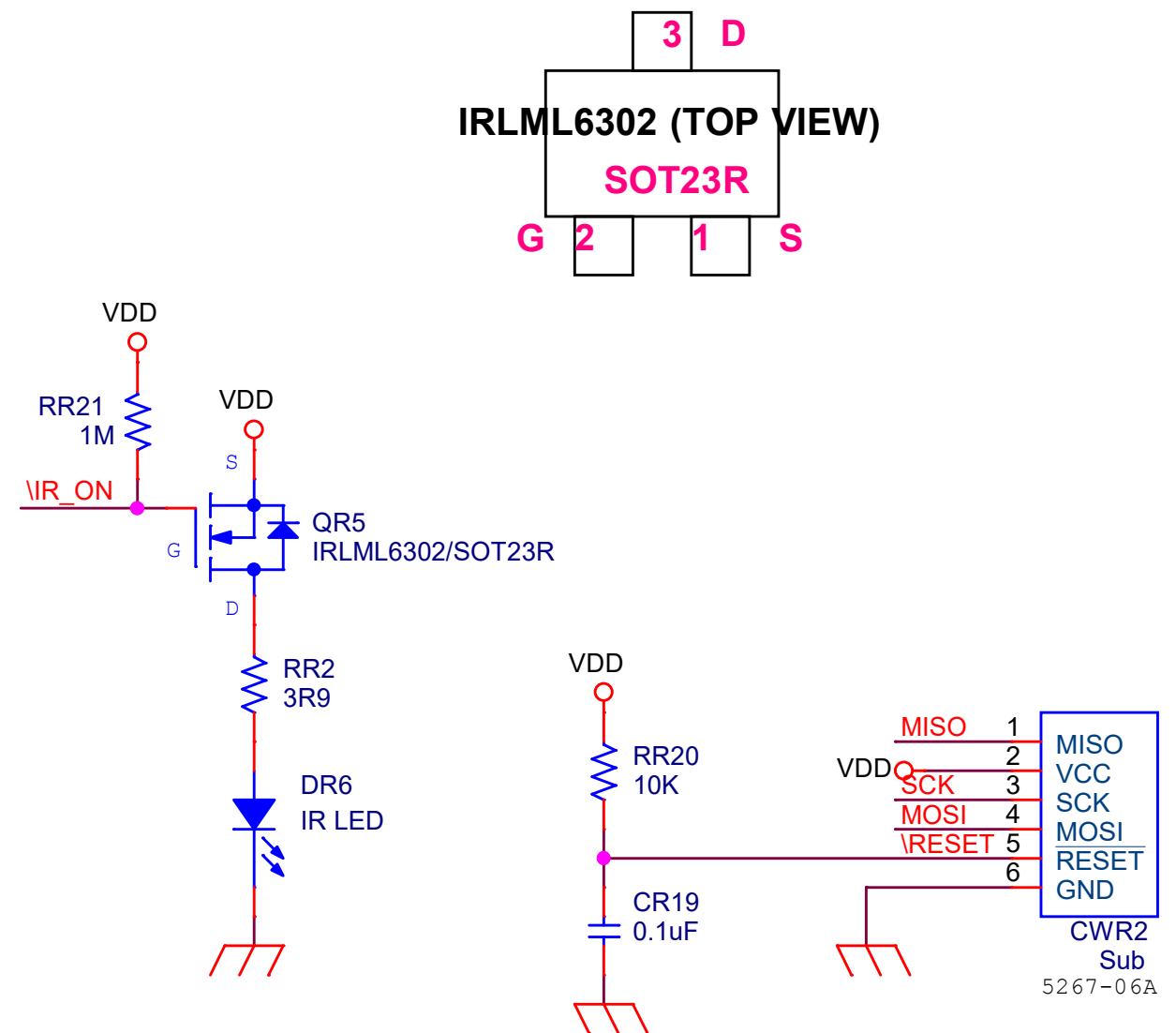


Custom Code : 0xD77A

Data Code :

```
//MUTE           : 0xB0;
//VOL-UP        : 0x80;
//VOL-DOWN      : 0xA8;
//CH-UP         : 0x90;
//CH-DOWN       : 0x88;
//HP            : 0xA0;
//FILTER        : 0x98;
```

```
0 = vol-up,
1 = ch-dn,
2 = ch-up,
3 = filter,
4 = hp,
5 = vol-dn,
6 = mute
```

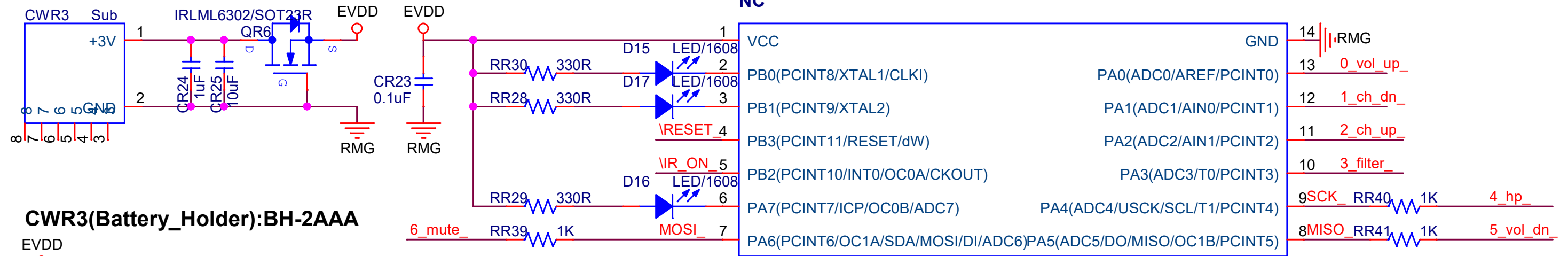


IRLML6302 (TOP VIEW)

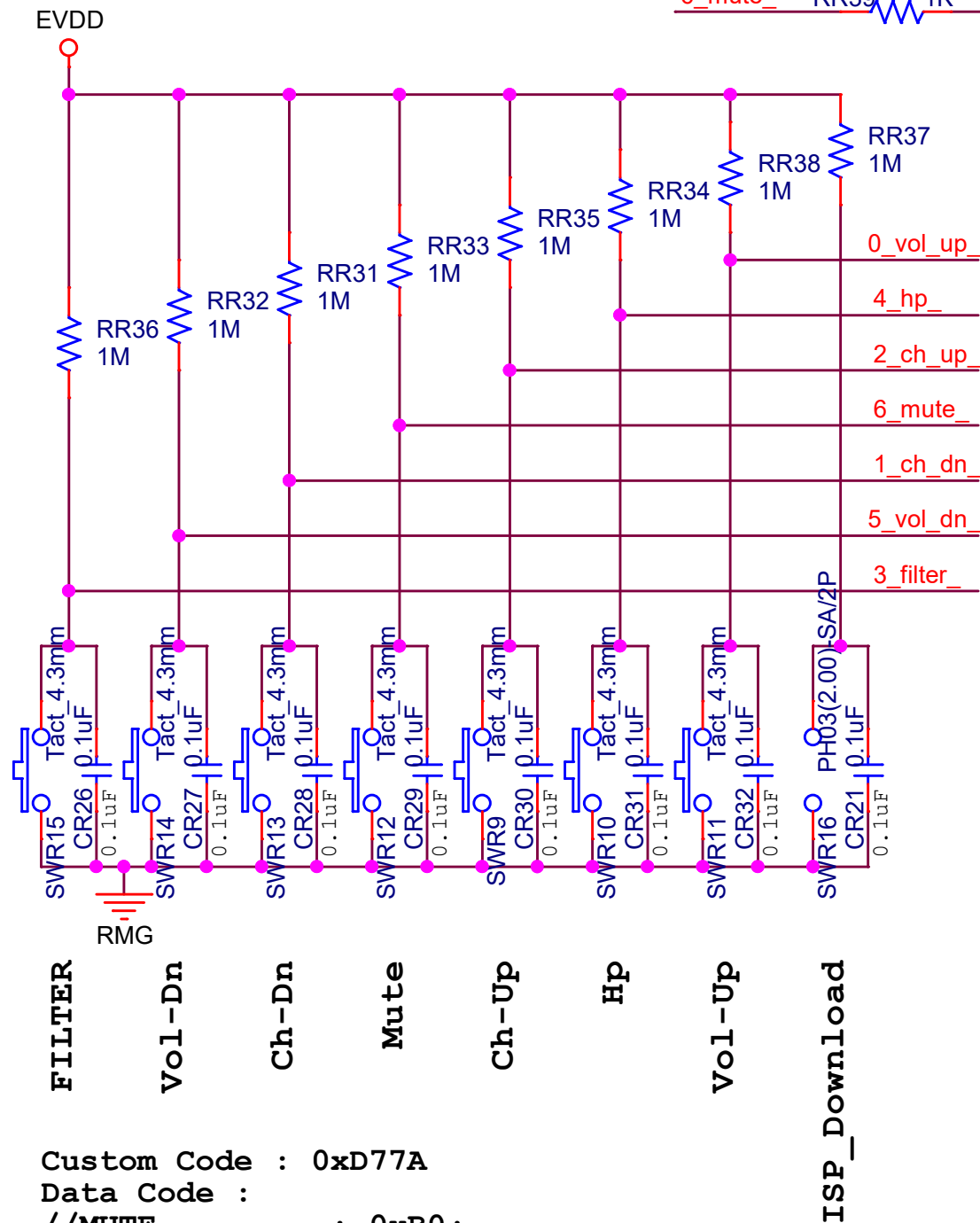
SOT23R

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Remocon			
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ExtRemocon-EXTRA

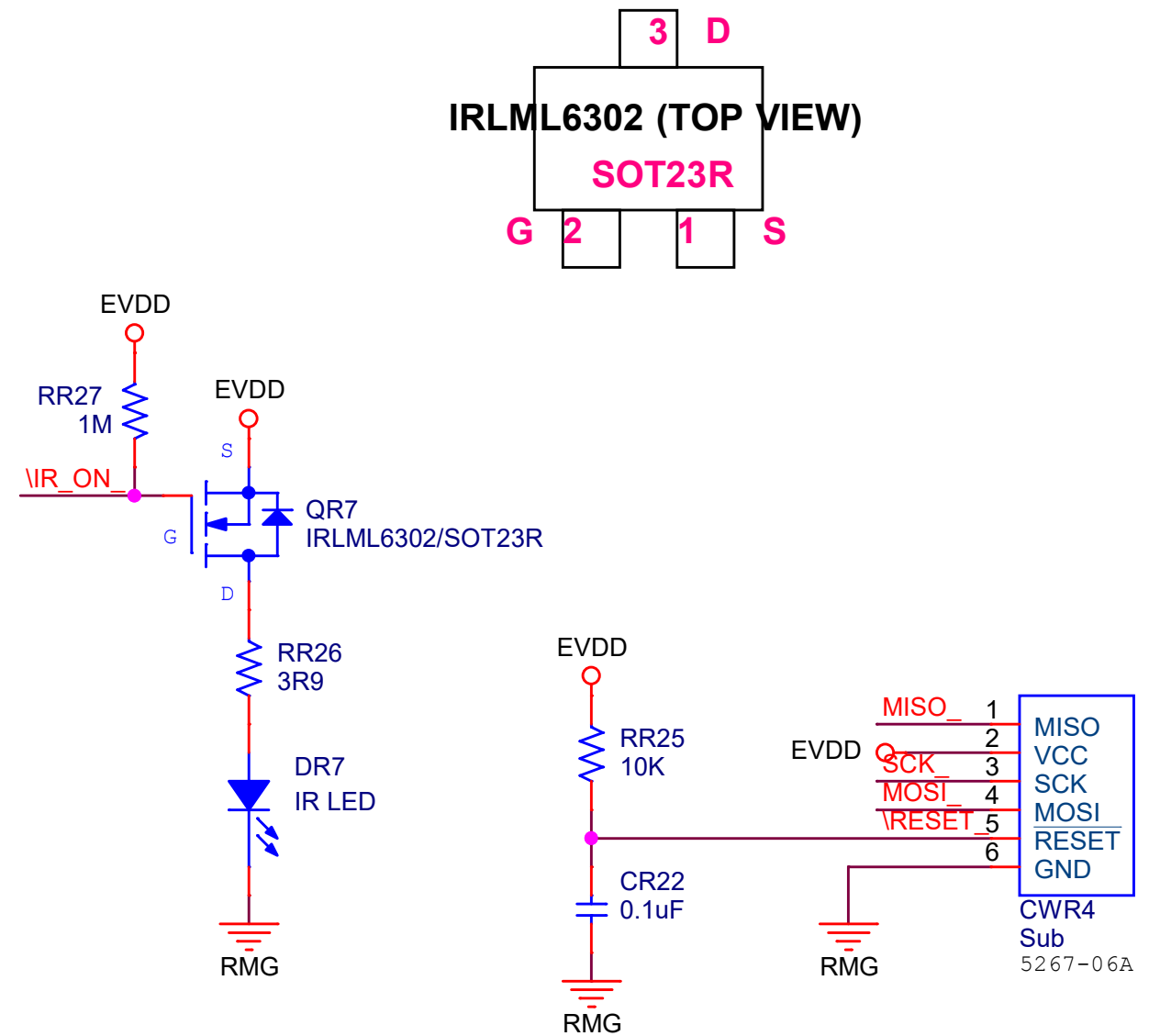


CWR3(Battery_Holder):BH-2AAA



```
Custom Code : 0xD77A
Data Code :
//MUTE : 0xB0;
//VOL-UP : 0x80;
//VOL-DOWN : 0xA8;
//CH-UP : 0x90;
//CH-DOWN : 0x88;
//HP : 0xA0;
//FILTER : 0X98;
```

```
0 = vol-up,
1 = ch-dn,
2 = ch-up,
3 = filter,
4 = hp,
5 = vol-dn,
6 = mute
```



IRLML6302 (TOP VIEW)

SOT23R

Remocon

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Rev
0.1

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