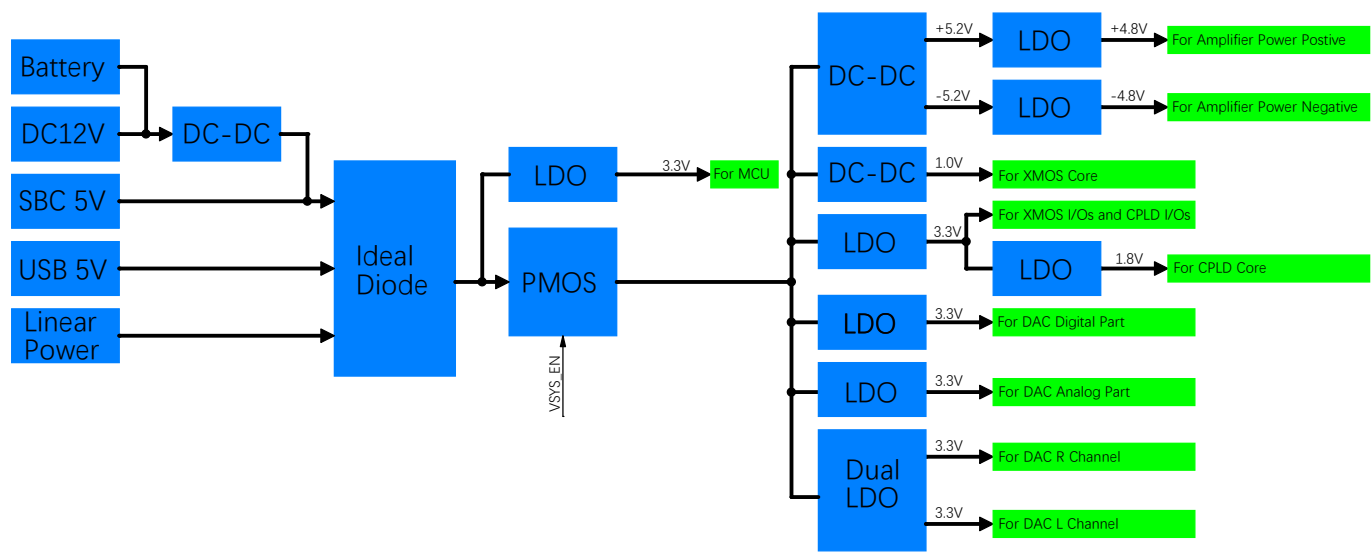
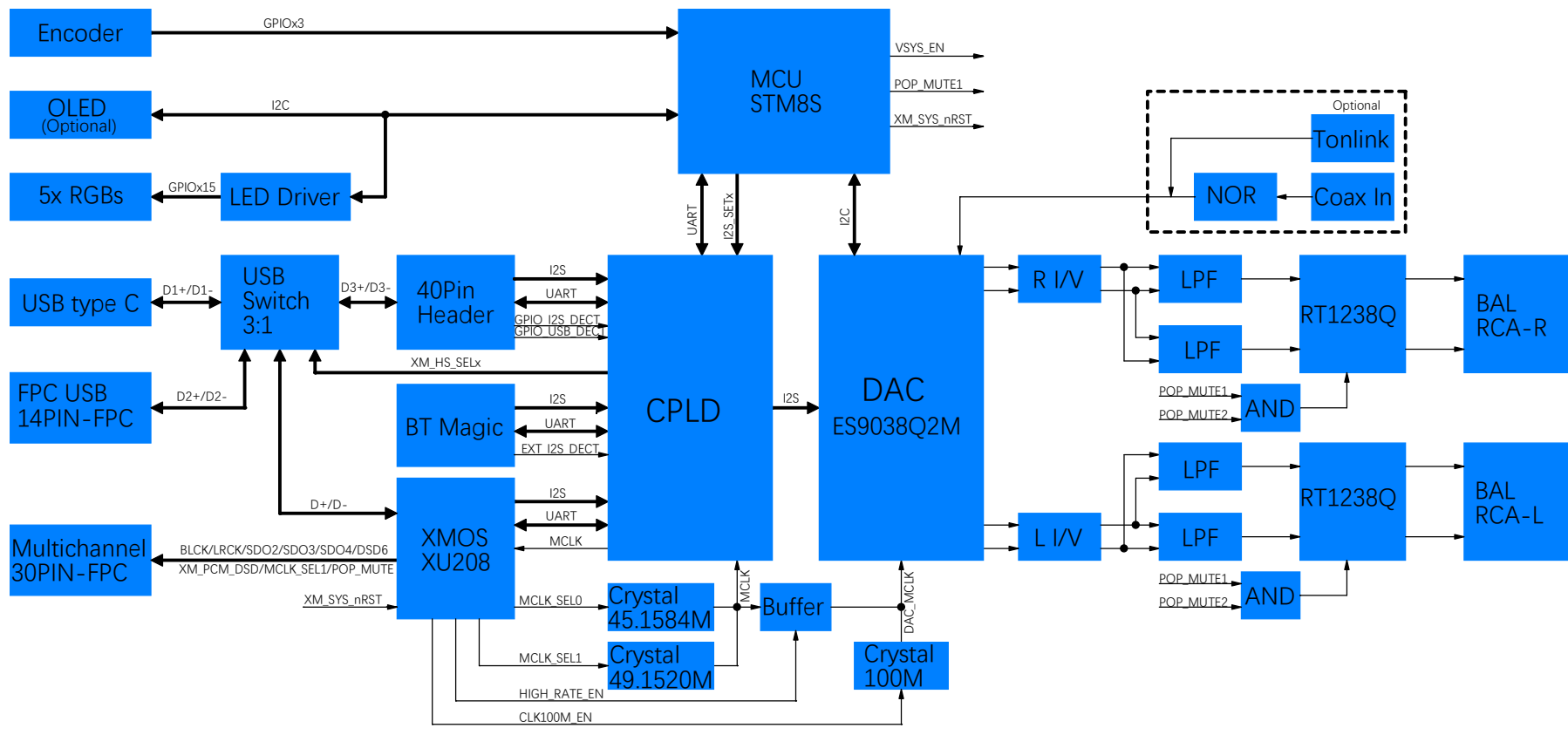




KHADASS

Something a little different.

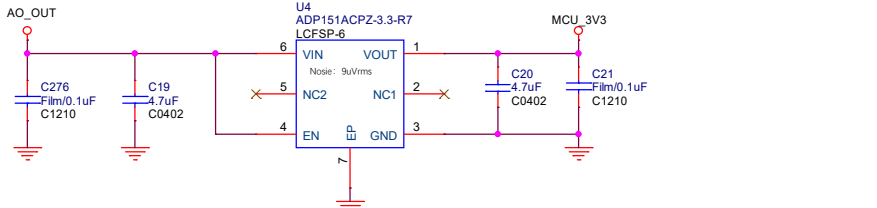
Shenzhen Wesion Technology Co., Ltd.			
<b>Project:</b>	Tone2		
<b>File:</b>	00_Khadass		
<b>Date:</b>	Tuesday, September 27, 2022	<b>Rev:</b>	V12
<b>Designed_by:</b>	Eric	<b>Sheet:</b>	1



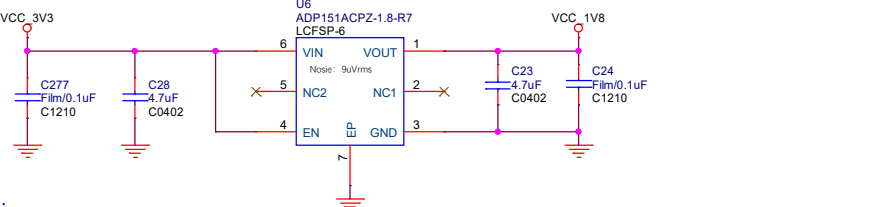
Shenzhen Wesion Technology Co., Ltd.			
Project:	Tone2		
File:	01_Block		
Date:	Tuesday, September 27, 2022	Rev:	V12
Designed by:	Eric	Sheet:	2



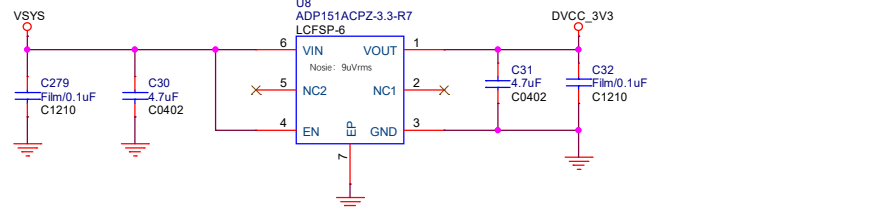
CPLD IO



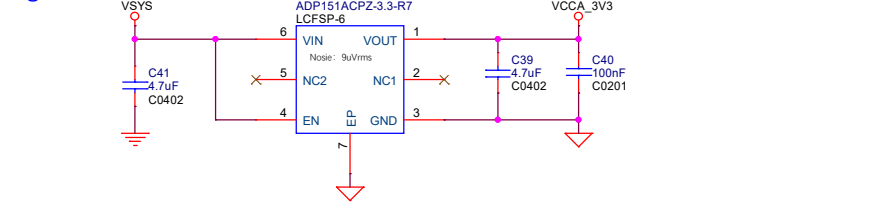
CPLD Core



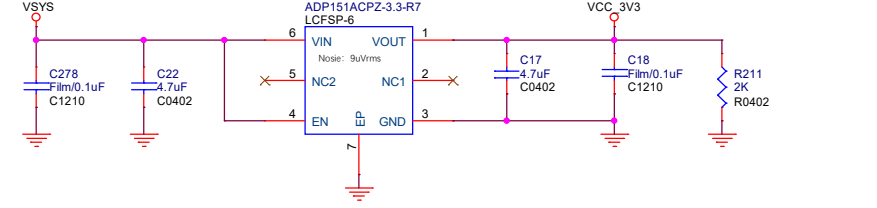
DAC Logic



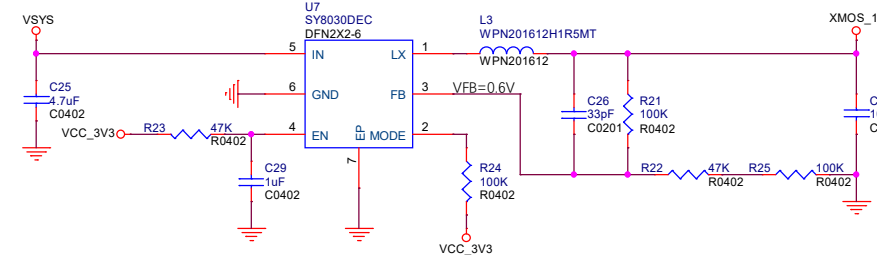
DAC Analog



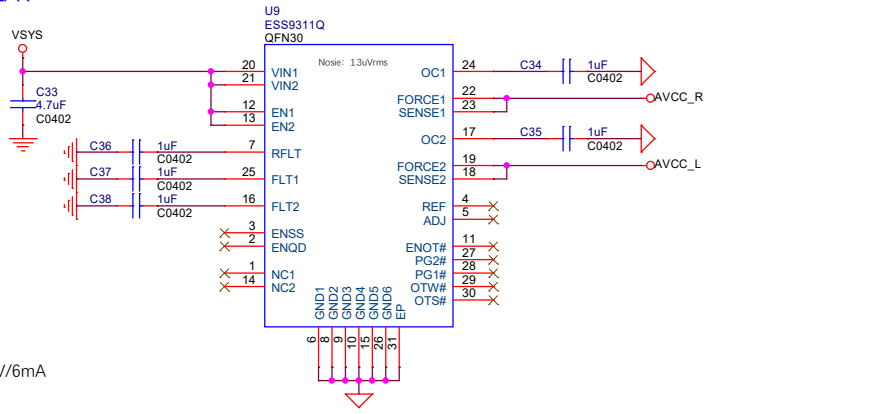
XMOS IO



XMOS Core



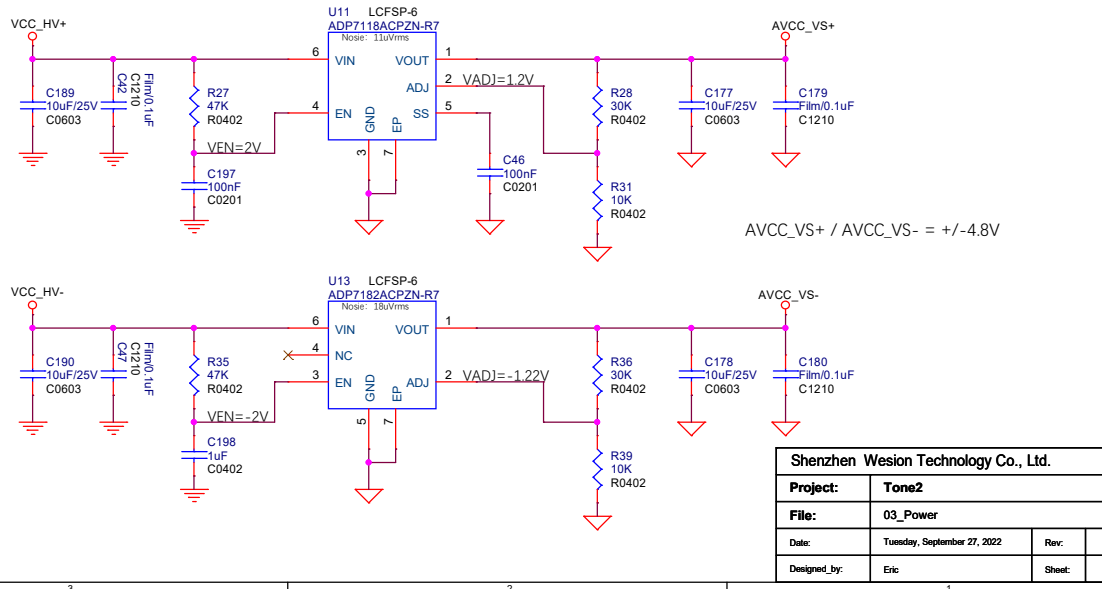
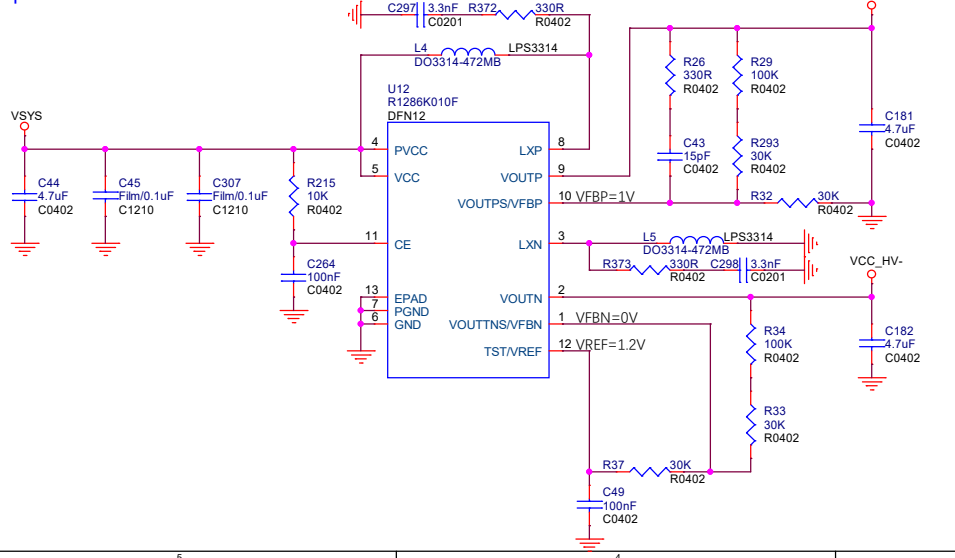
DAC Analog L/R



XMOS  
 VDD: 1V/350mA  
 PLL\_AVDD: 1V/7mA  
 VDD33: 3.3V/26.7mA  
 USB\_VDD: 1V/8.27mA

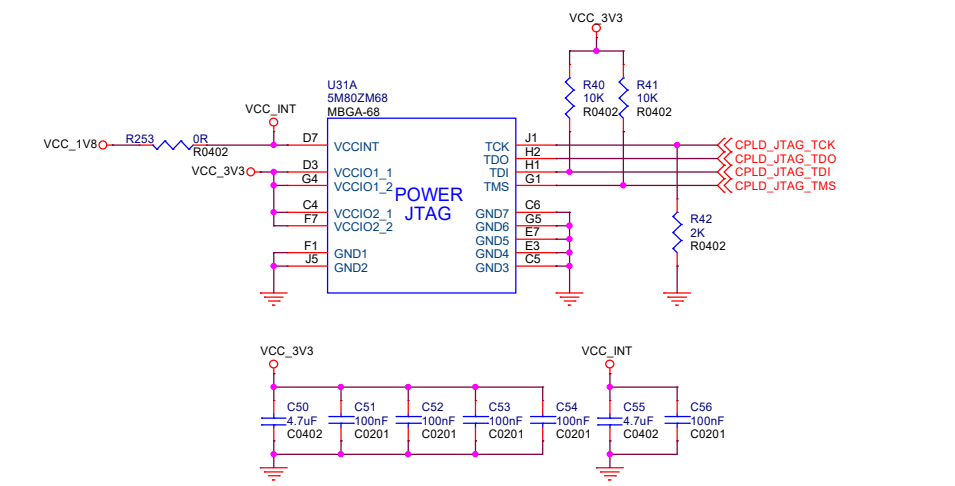
DAC  
 VCCA: 3.3V/2mA  
 AVCC\_L&AVCC\_R: 3.3V/6mA  
 DVCC: 3.3V/8mA

Amp

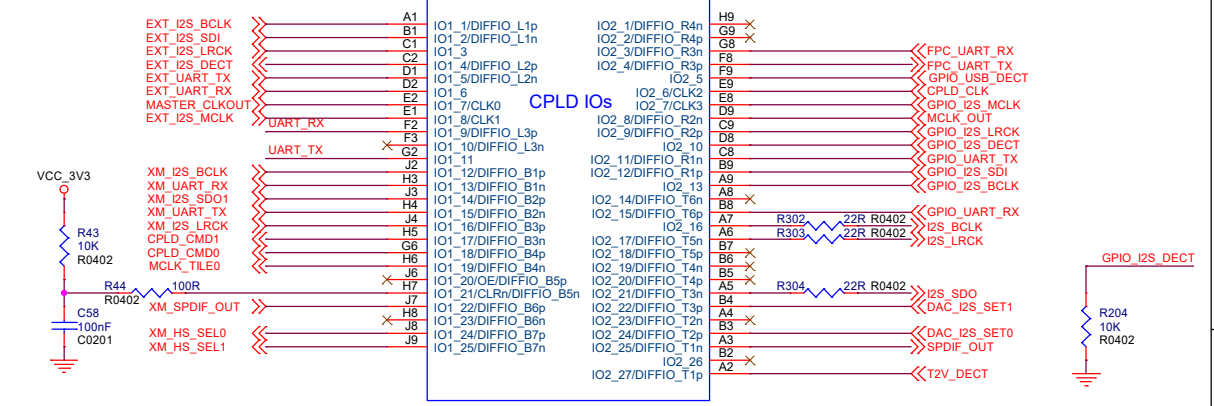


Shenzhen Wesion Technology Co., Ltd.			
Project:	Tone2		
File:	03_Power		
Date:	Tuesday, September 27, 2022	Rev:	V12
Designed by:	Eric	Sheet:	4

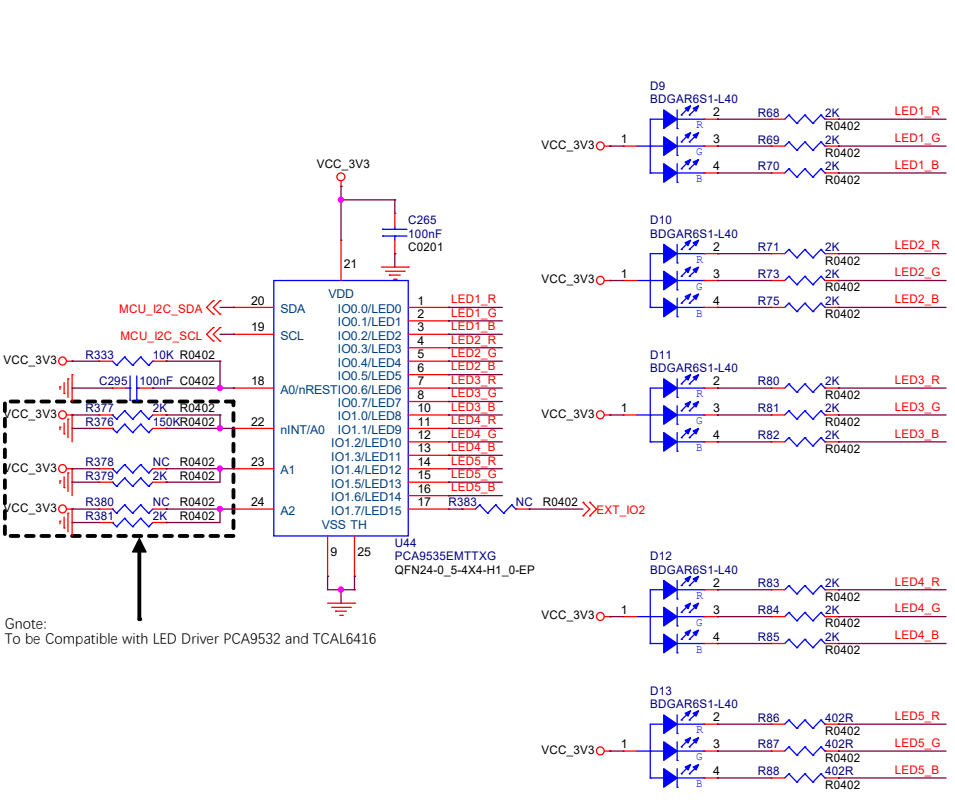
# CPLD Power



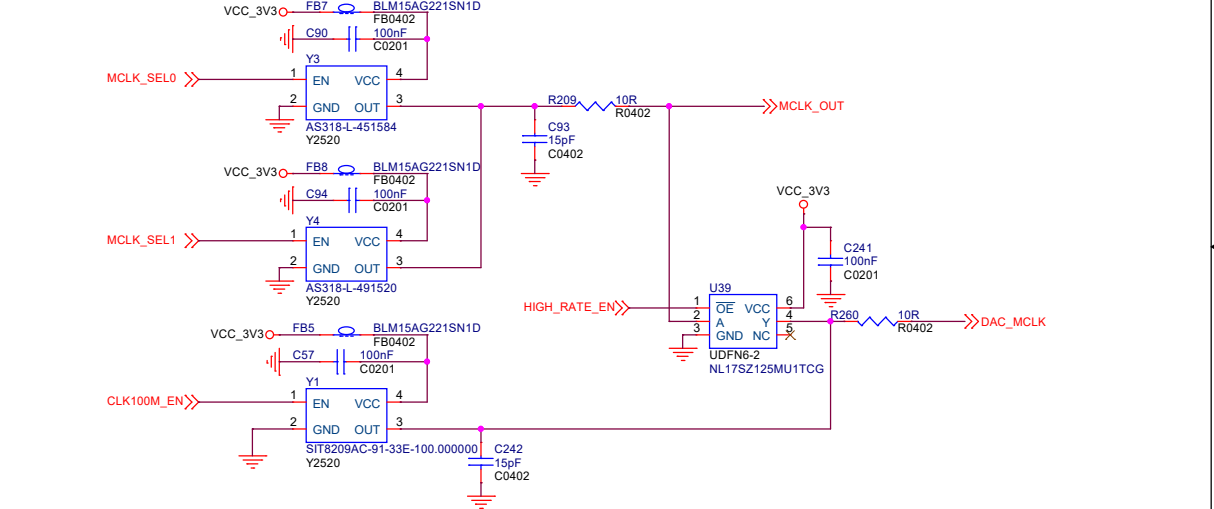
# CPLD IOs



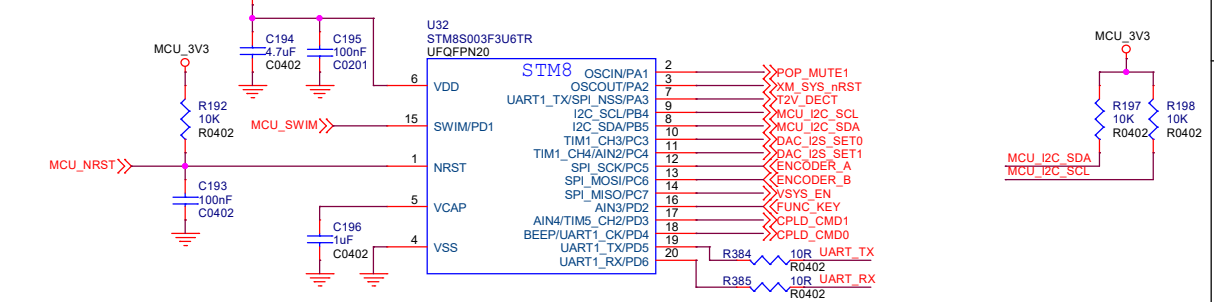
# LEDs & LED driver



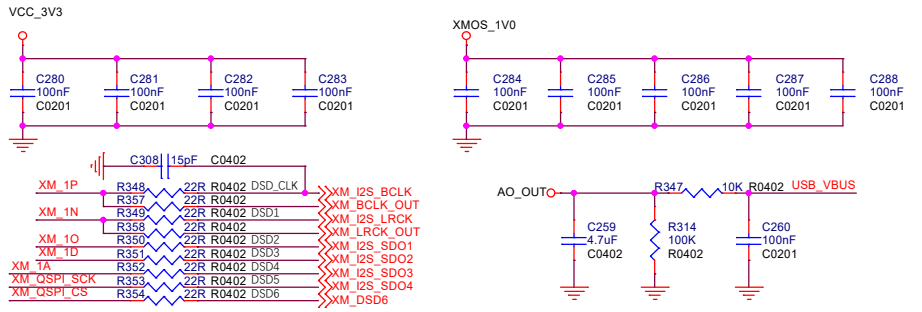
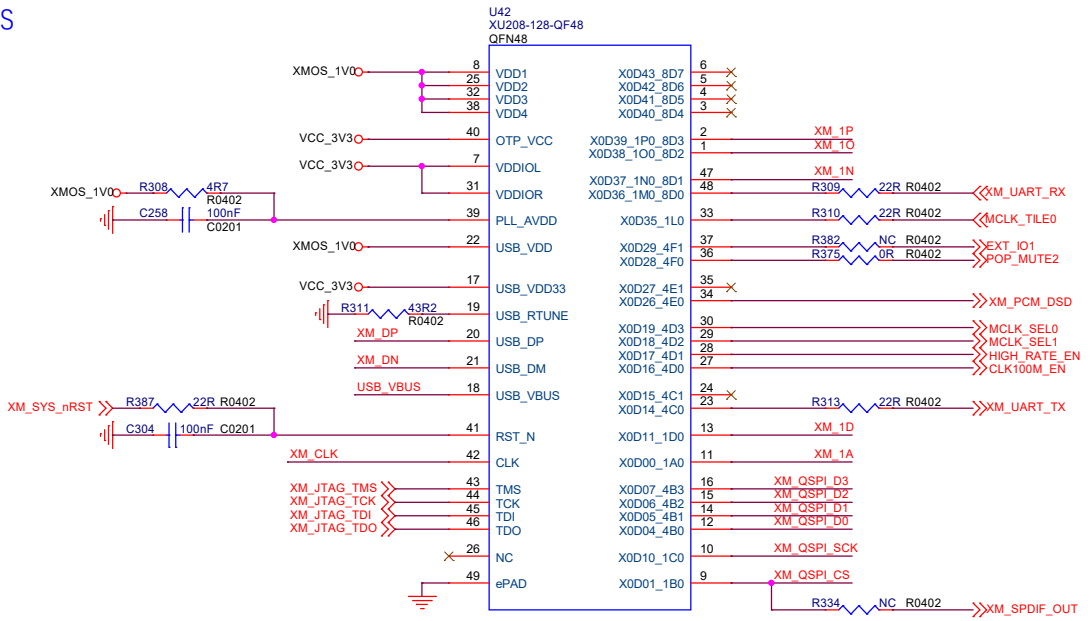
# Oscillator



# MCU System



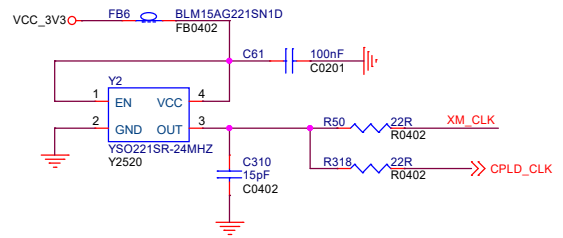
Shenzhen Wesion Technology Co., Ltd.			
Project:	Tone2		
File:	04_CPLD & MCU		
Date:	Tuesday, September 27, 2022	Rev:	V12
Designed by:	Eric	Sheet:	5



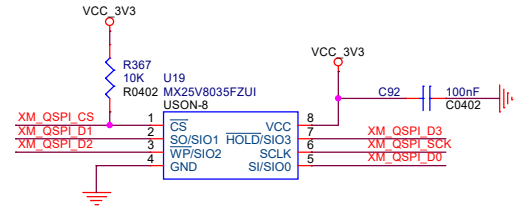
Format	XM PCM DSD
PCM	L
DSD	H

Sample Rate	XM MCLK	MCLK SEL0	MCLK SEL1	HIGH RATE_EN	CLK100M_EN	DAC MCLK
PCM44.1, PCM88.2, PCM176.4	45.1584M	L	L	L	L	45.1584M
PCM48, PCM96, PCM192	49.1520M	L	H	L	L	49.1520M
PCM352.8, PCM705.6, DSD512	45.1584M	H	L	H	H	100M
PCM384, PCM768	49.1520M	L	H	H	H	100M

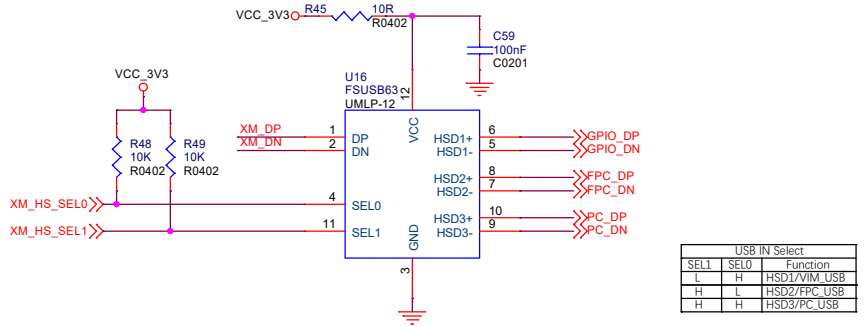
XMOS Clock



SPI FLASH

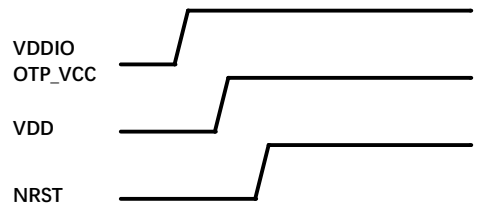


USB Switch

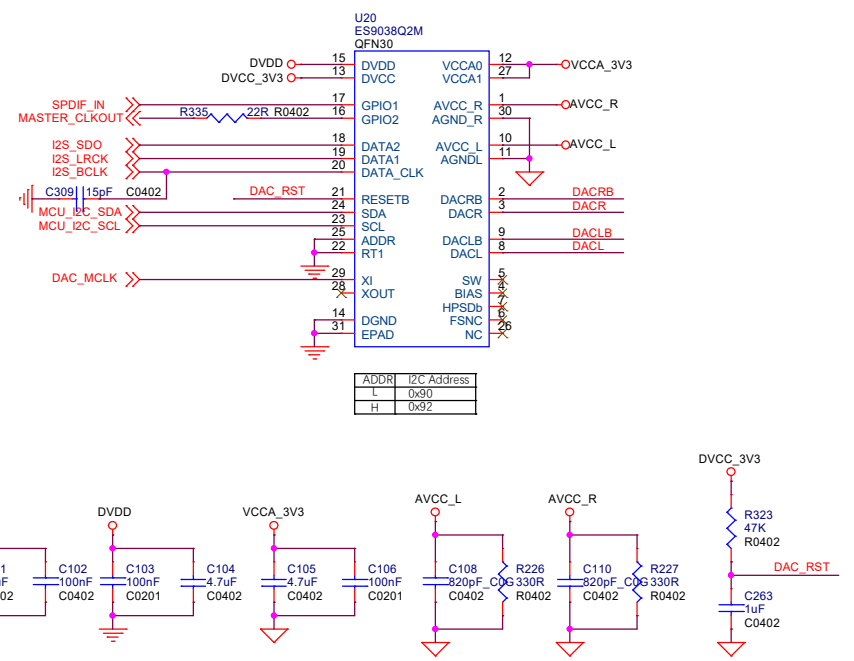


USB IN Select		
SEL1	SEL0	Function
L	H	HSD1/VM USB
H	L	HSD2/FPC USB
H	H	HSD3/PC USB

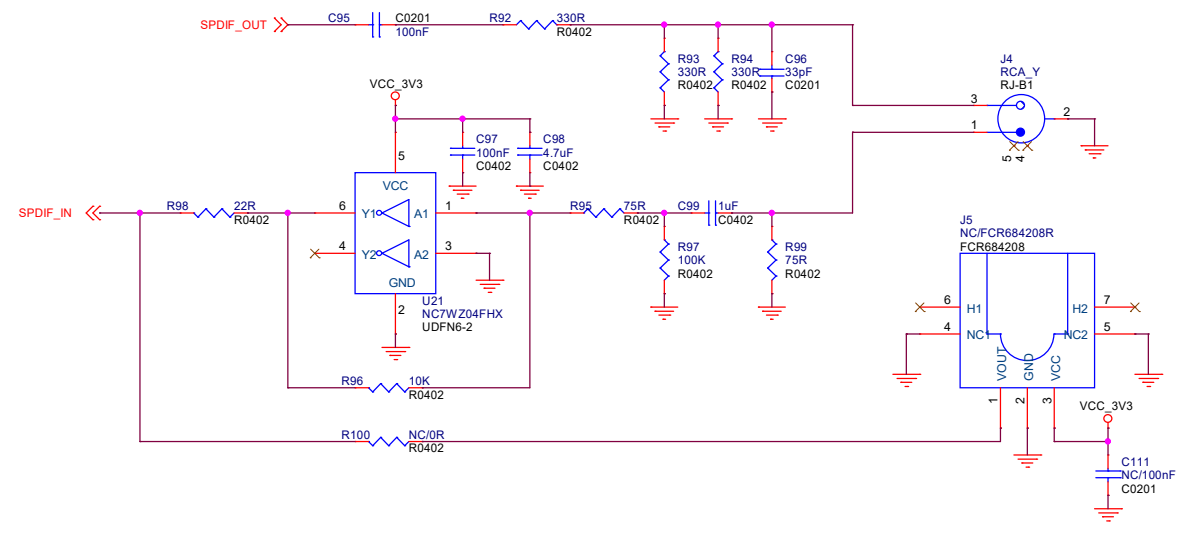
XMOS Power up Sequence



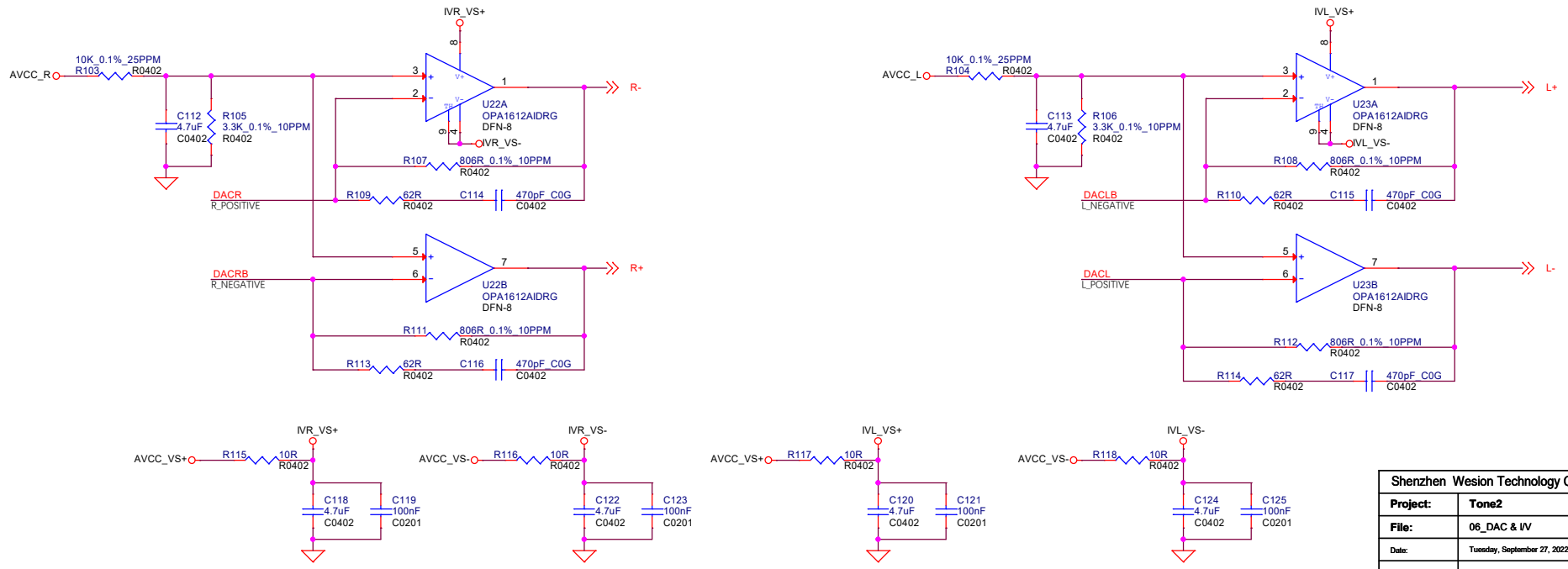
DAC



SPDIF:  
Coaxial IN/OUT  
TOSLINK IN(Opt)

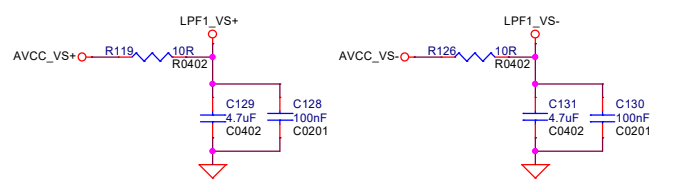
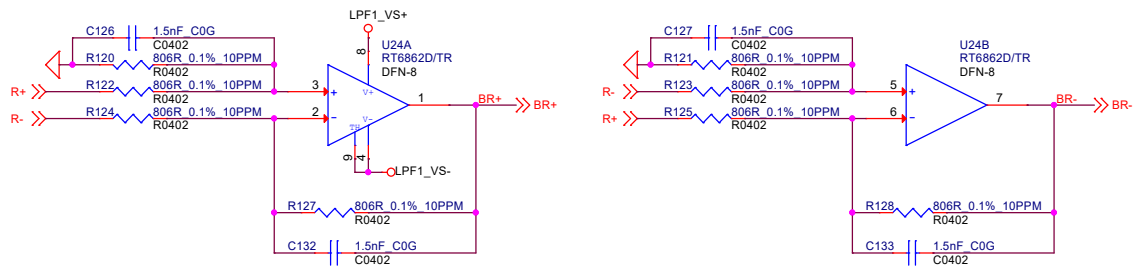


I/V Converter

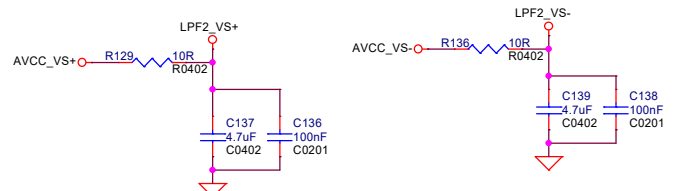
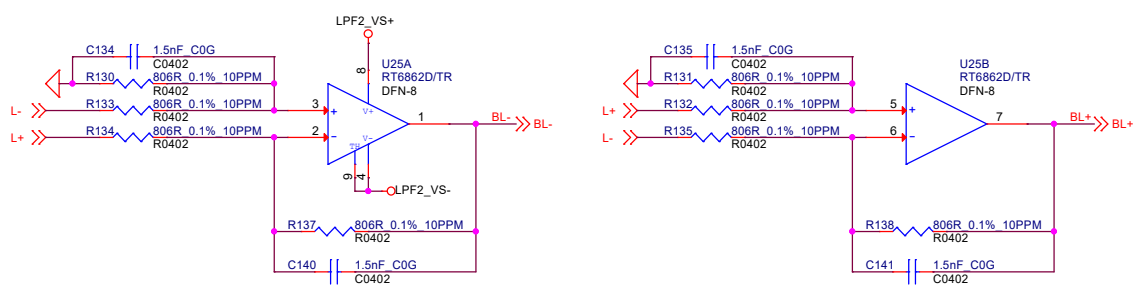


Shenzhen Wesion Technology Co., Ltd.			
Project:	Tone2		
File:	06_DAC & IV		
Date:	Tuesday, September 27, 2022	Rev:	V12
Designed by:	Eric	Sheet:	7

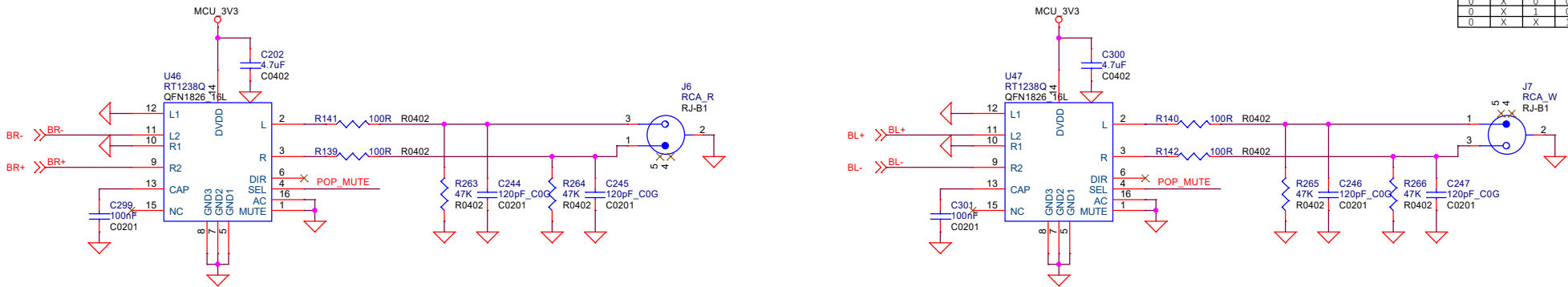
### Low-Pass Filter R



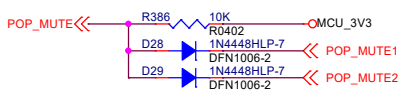
### Low-Pass Filter L



### Balanced RCA



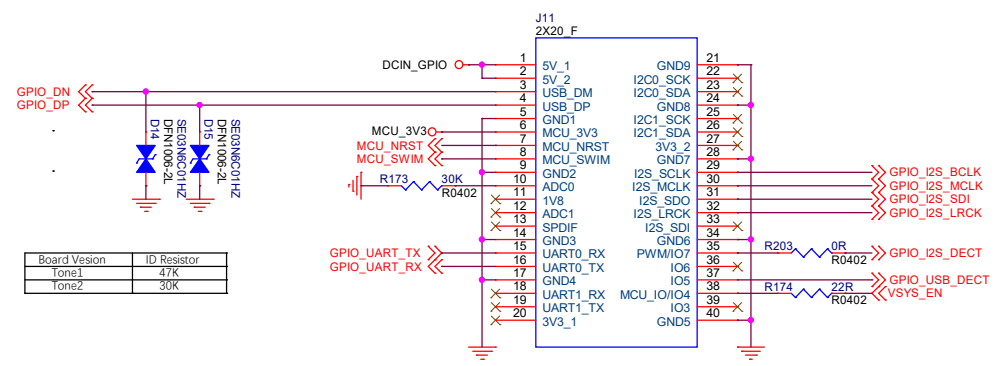
AC	DIR	SEL	MUTE	L1/R1	L2/R2
0	X	0	0	ON	OFF
0	X	1	0	OFF	ON
0	X	X	1	OFF	OFF



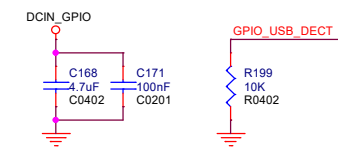
Shenzhen Wesion Technology Co., Ltd.			
<b>Project:</b>	Tone2		
<b>File:</b>	07_LPF & BAL RCA		
<b>Date:</b>	Tuesday, September 27, 2022	<b>Rev:</b>	V12
<b>Designed by:</b>	Eric	<b>Sheet:</b>	8



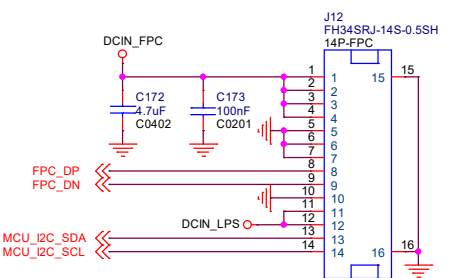
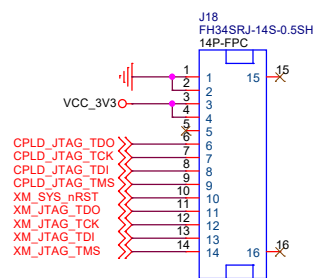
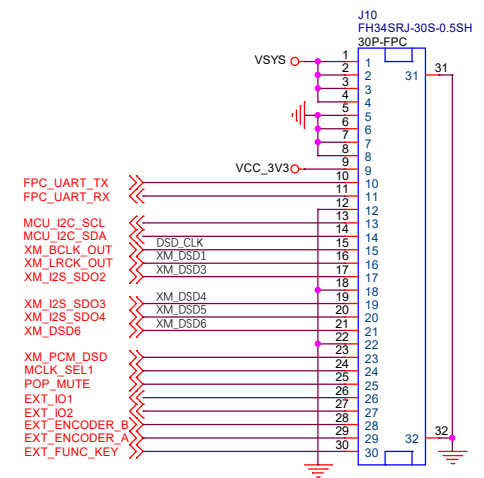
# GPIO Header



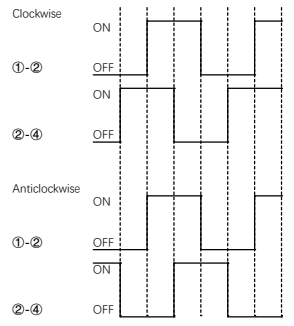
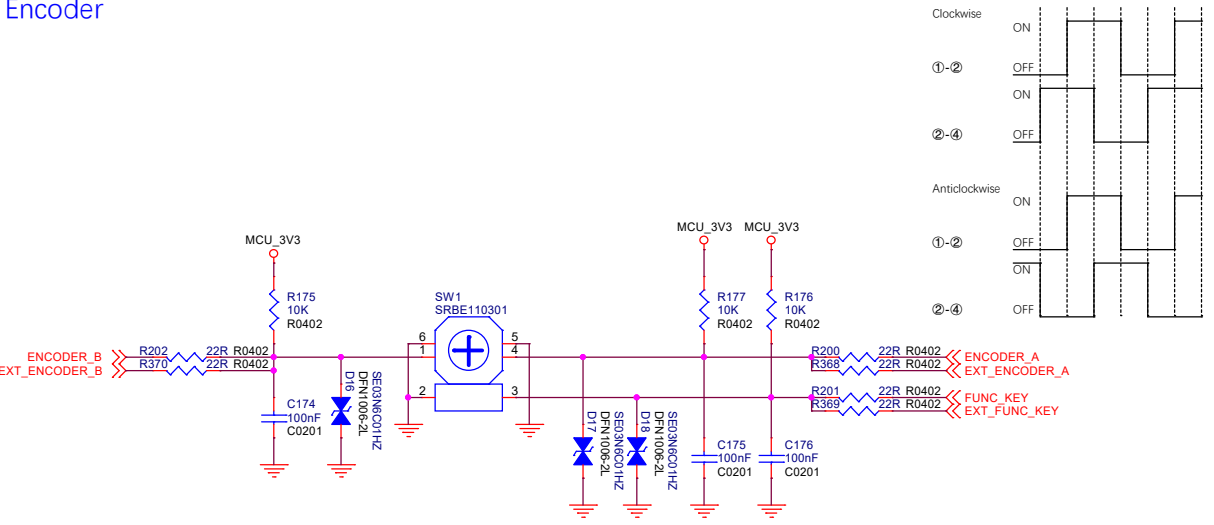
Board Vesion	ID Resistor
Tone1	47K
Tone2	30K



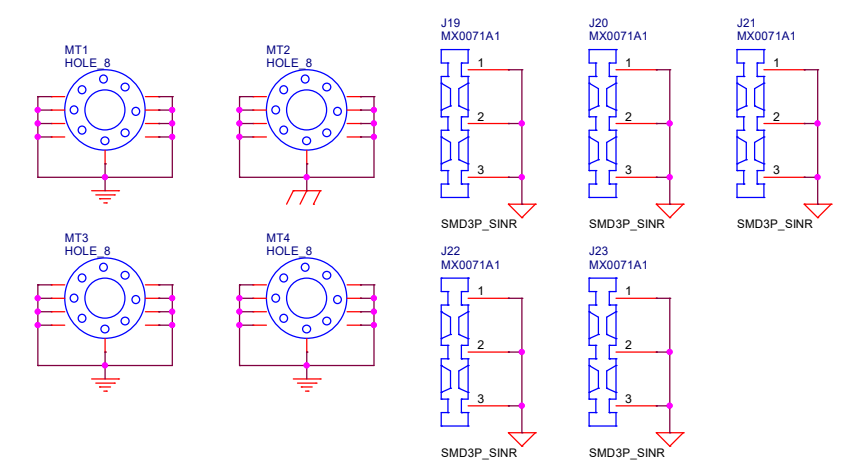
# FPC Connector



# Encoder



# Screw hole & Shield can clip



Shenzhen Wesion Technology Co., Ltd.			
Project:	Tone2		
File:	08_Connector & Encoder		
Date:	Tuesday, September 27, 2022	Rev:	V12
Designed by:	Eric	Sheet:	9