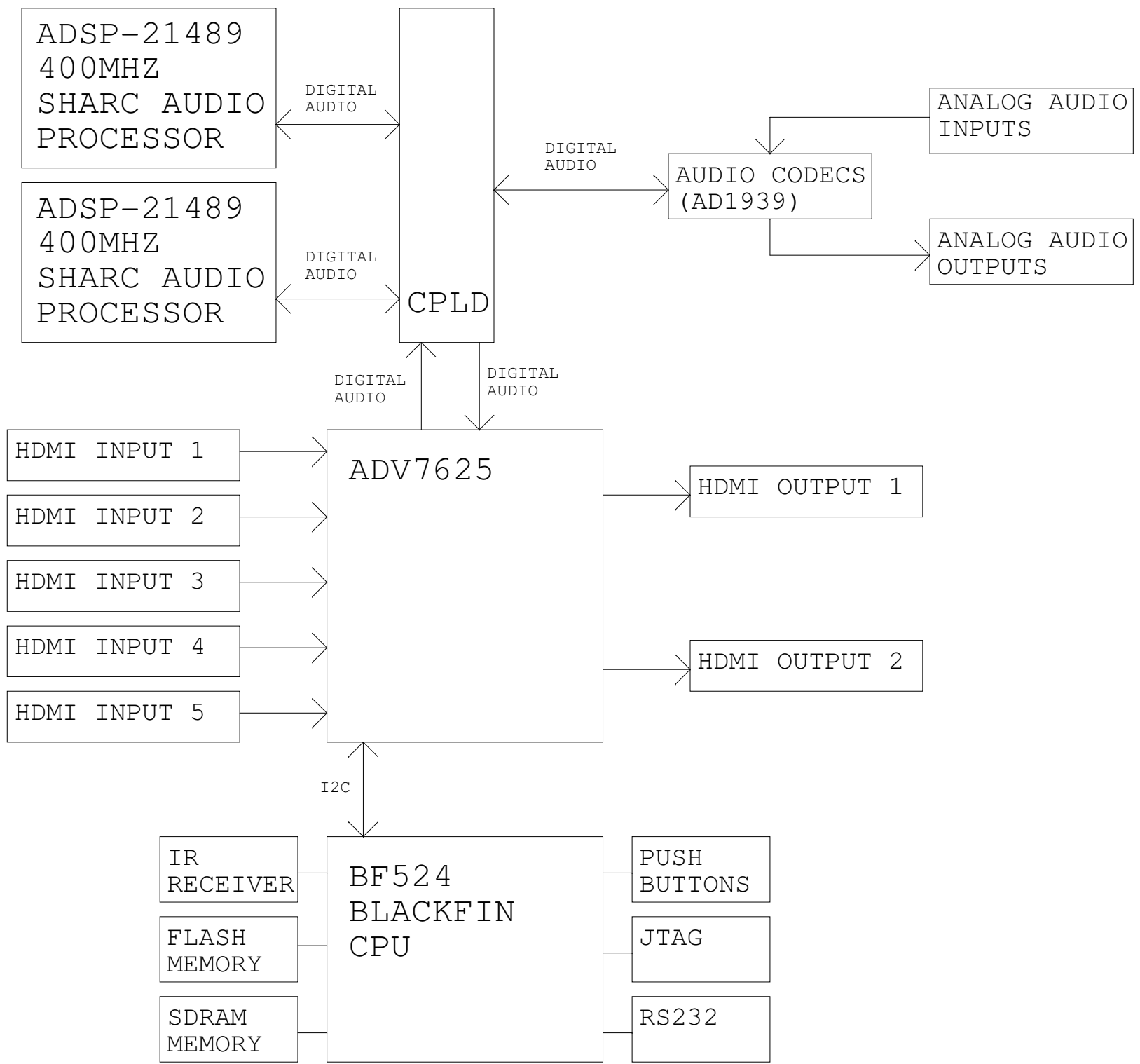
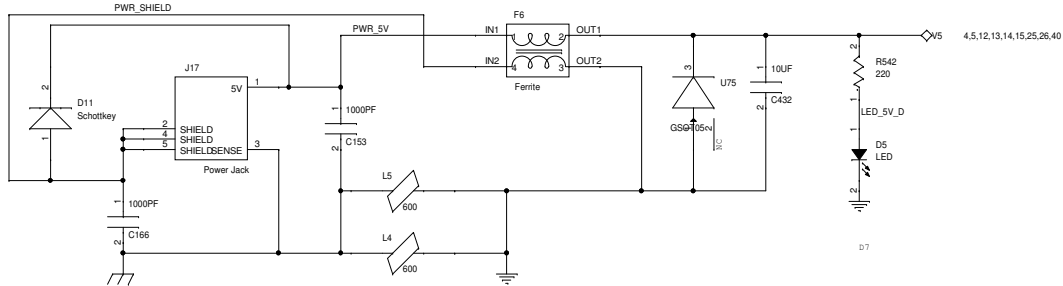
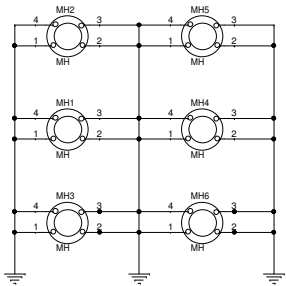


EVAL-MELODY-5 Audio/Video Evaluation Board

Change Log

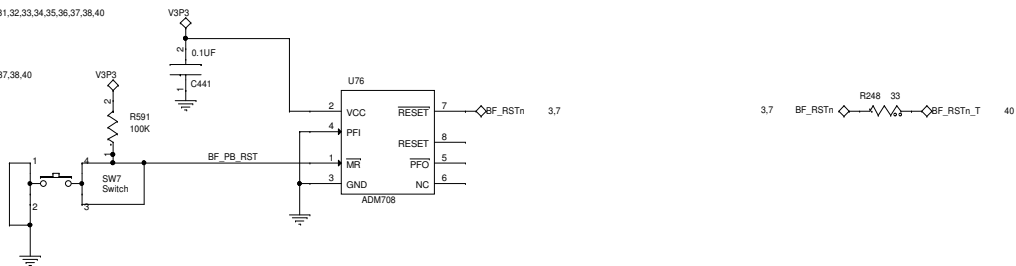
Revision	Date	Description
0.1	2013/12/20	Initial Release
0.2	2014/03/21	Rev 0.1 PCBs were manufactured incorrectly. Bumped Rev to 0.2 for new PCBs.
0.3	2015/01/14	Changed CPLD from XC2C128-7CPG132C to XC2C256-7CPG132C in order to allow connection of 7625_AP1_OUT_MCLK_T to AD1939A_MCLK and AD1939B_MCLK. Changed AD1939A_RESETEn from pull-up resistor to pull-down resistor and connected to BF524 PF7. Changed AD1939B_RESETEn from pull-up resistor to pull-down resistor and connected to BF524 PF8. Connected SH1_FLAG3 and SH2_FLAG3 to LEDs for visual status indicator. Minor changes to improve robustness of system.
0.3	2015/08/11	Added note that ADSP-21489 pins 137,139,140,142,145 must be connected to GND.
0.3	2015/08/21	Added note that CPLD core voltage should have been connected to 1.8V rather than 3.3V and that CPLD device might fail at some point as a result.





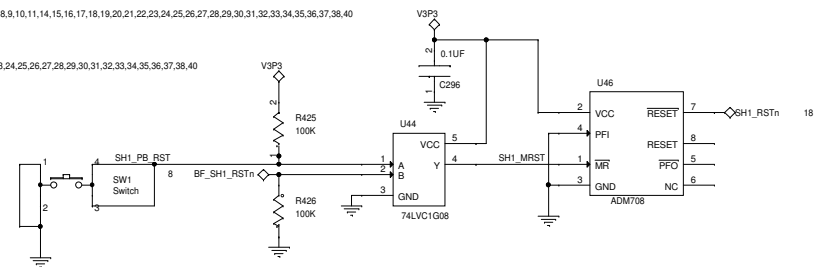
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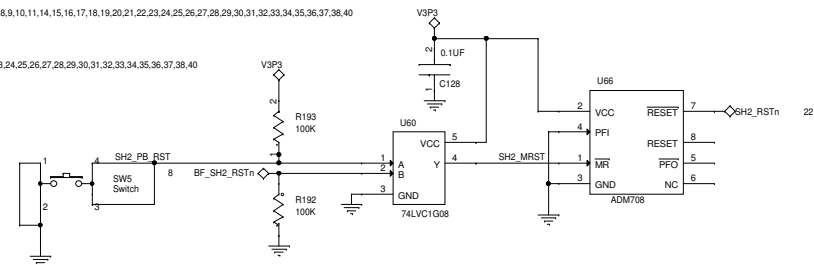
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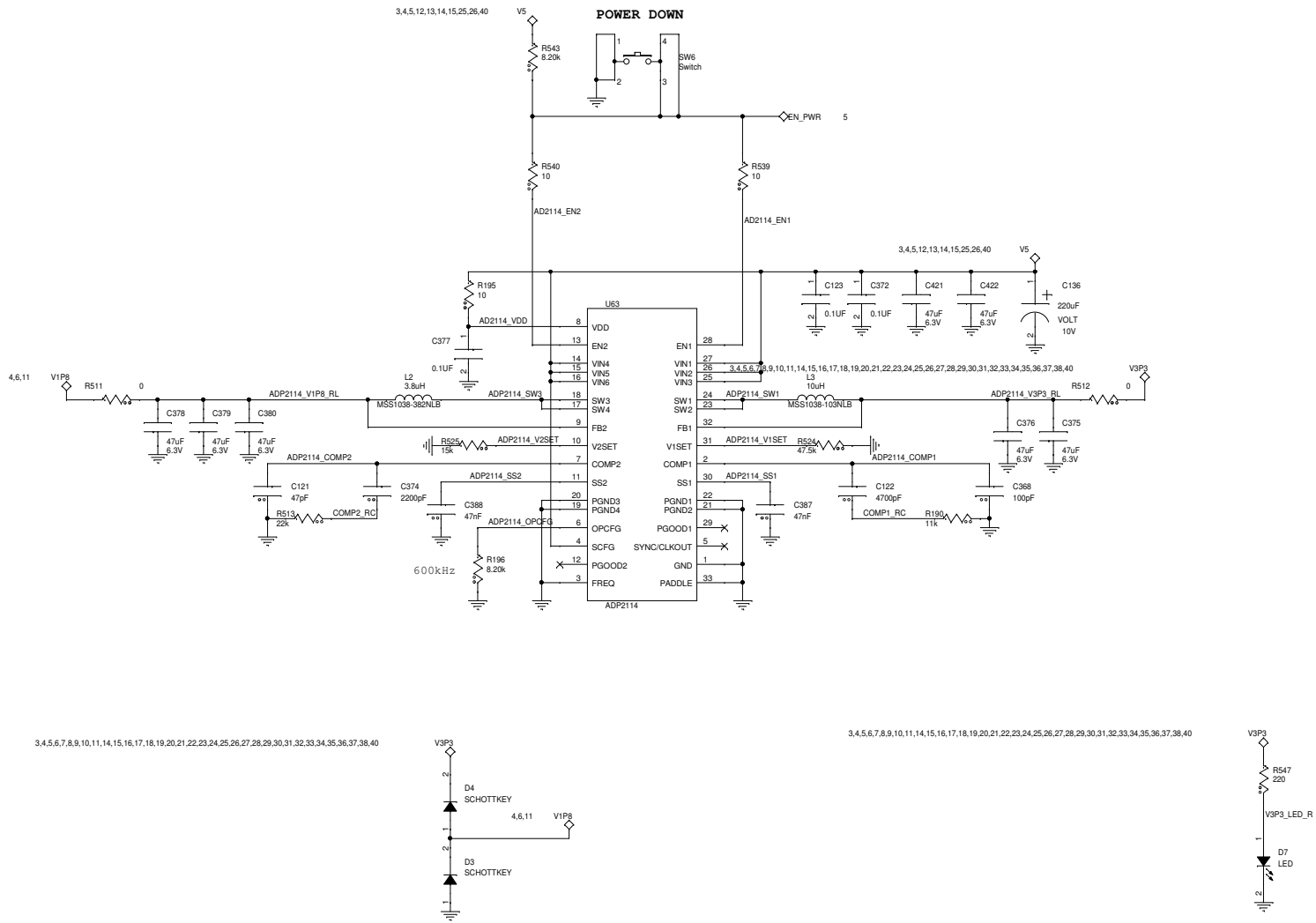


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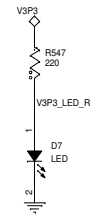


Title		BOARD POWER	
Size	Document Number	EVAL-MELODY-5 Audio/Video Evaluation Board	
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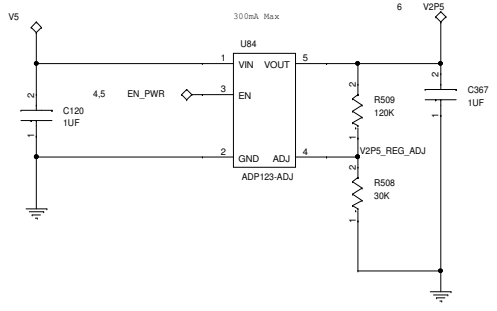
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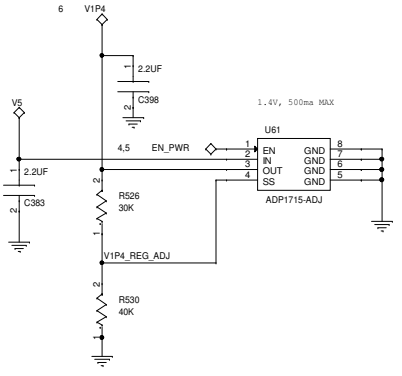


Title		
SWITCHING REGULATOR FOR 3.3V AND 1.8V		
Size	Document Number	Rev
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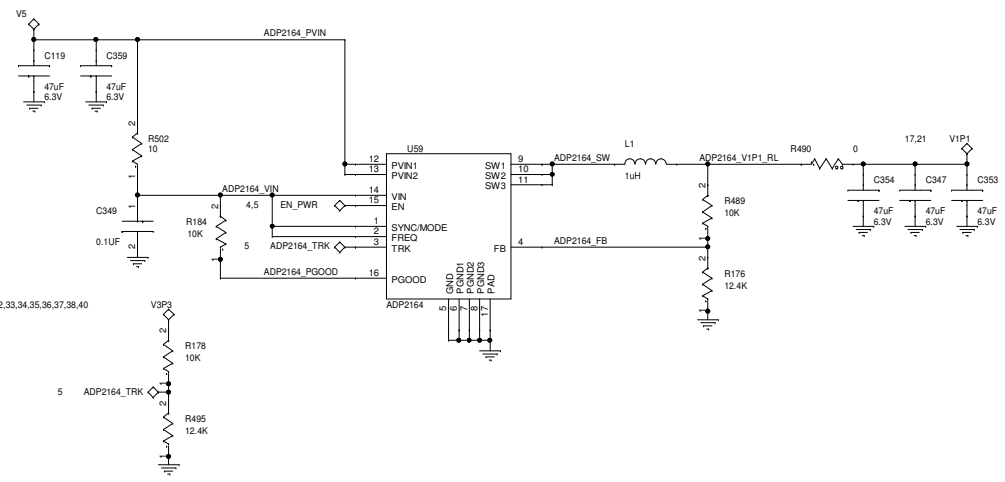
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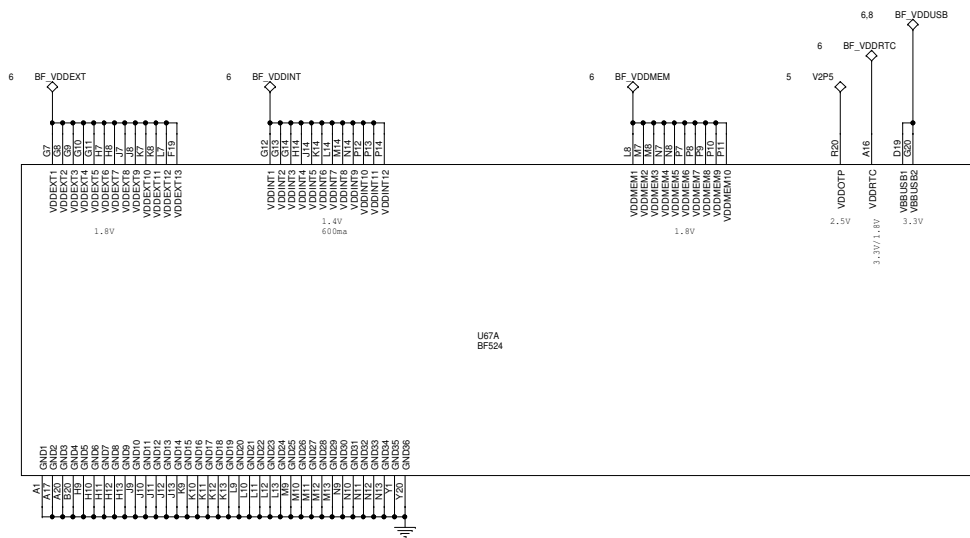
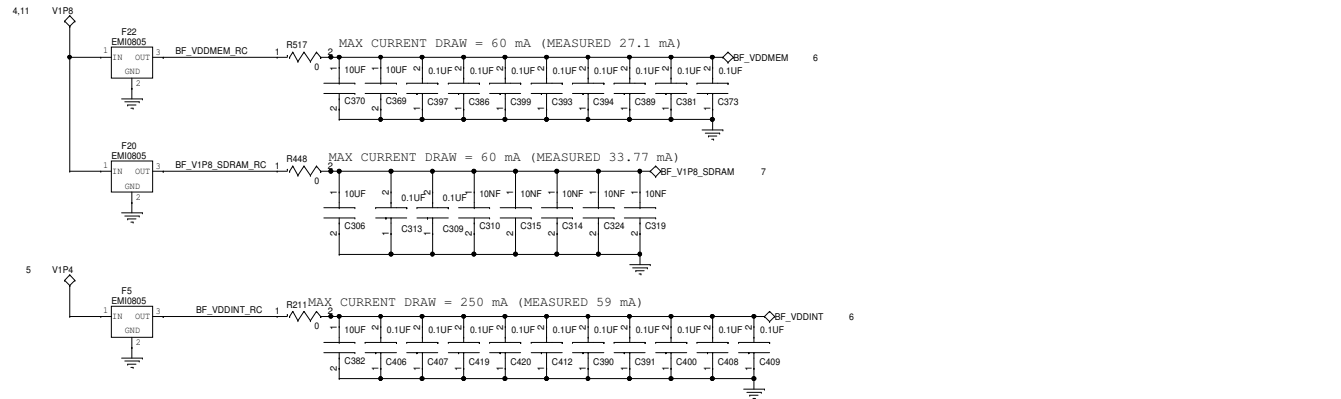
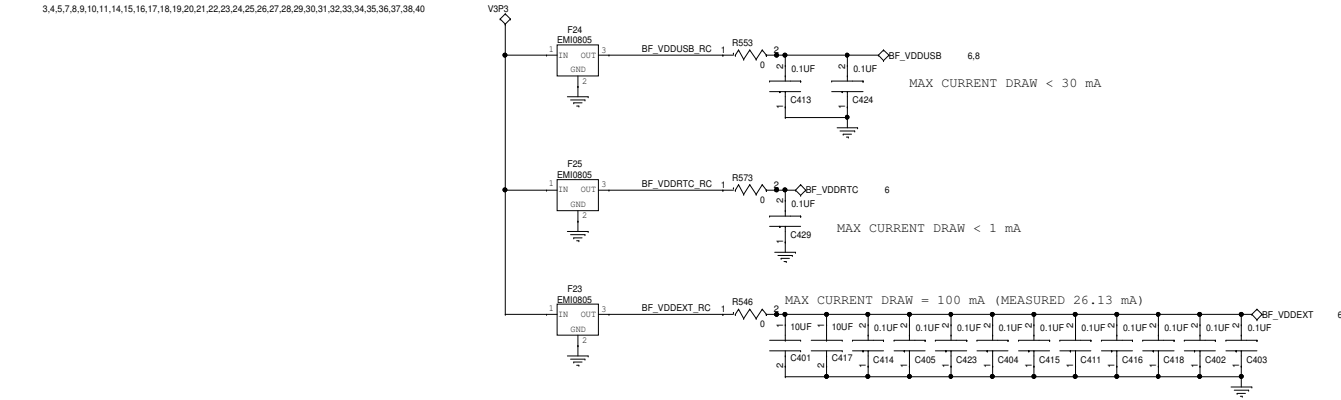


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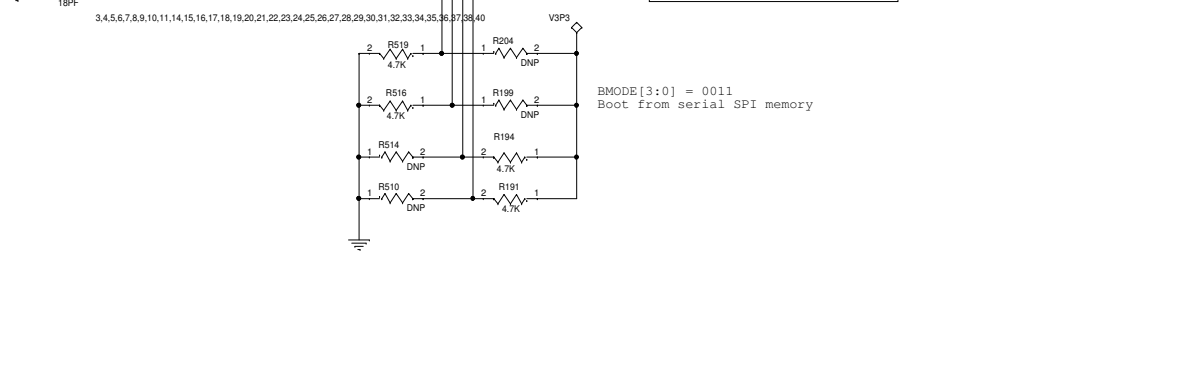
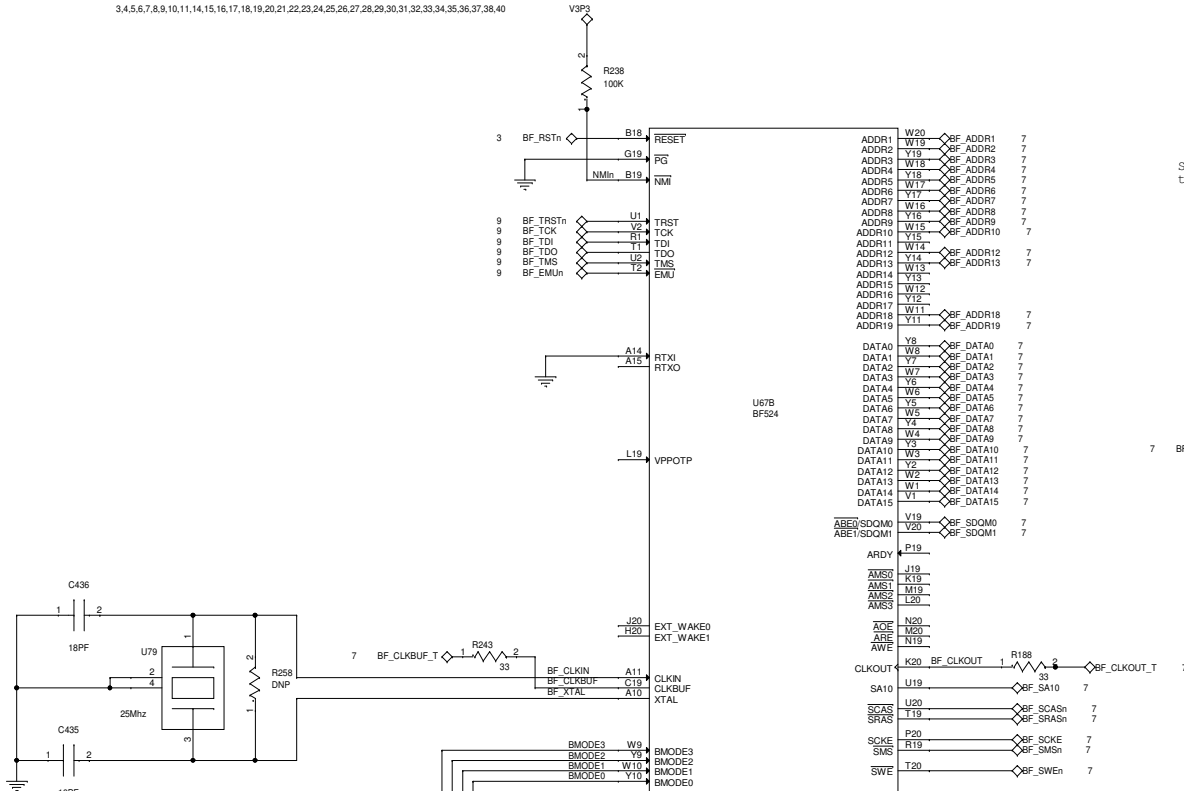


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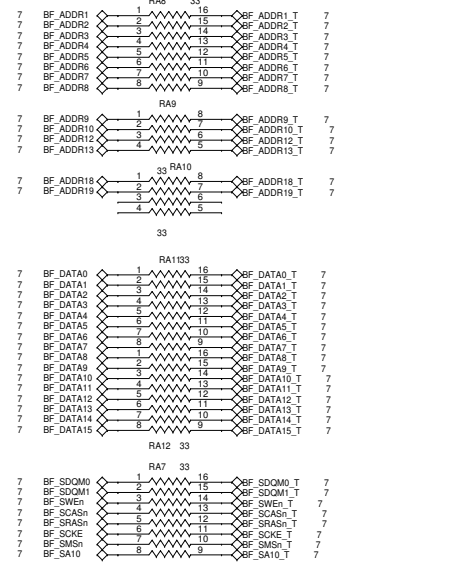
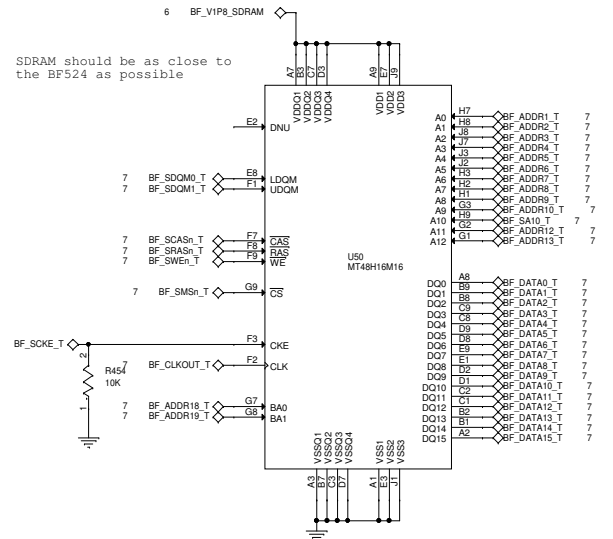
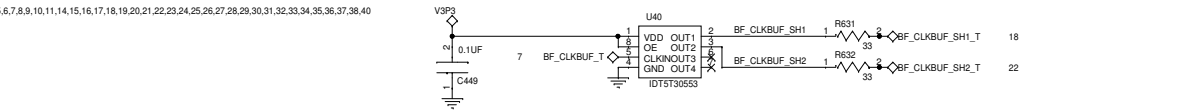
Title		
SWITCHING REGULATOR FOR 1.1V		
Size	Document Number	Rev
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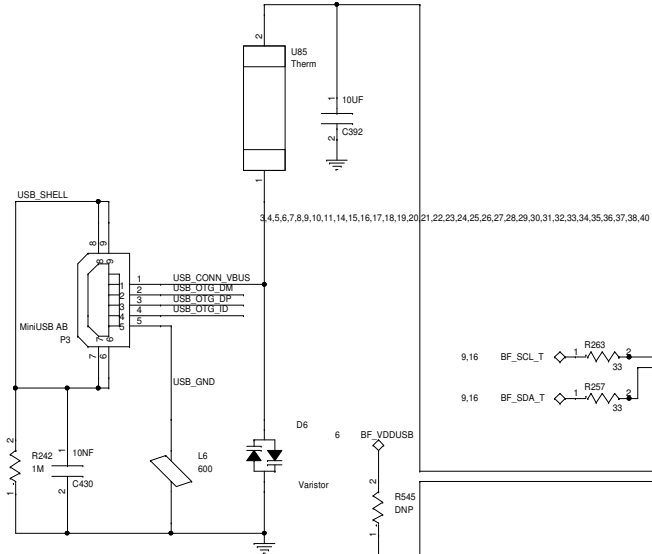


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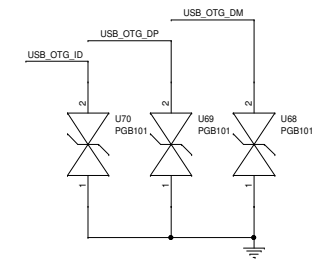


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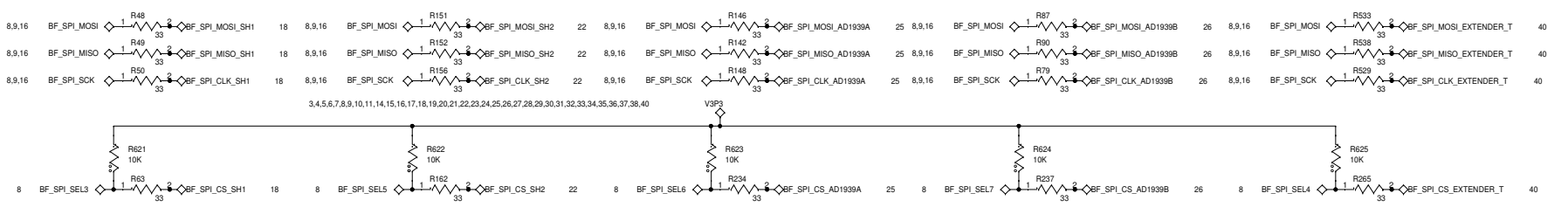
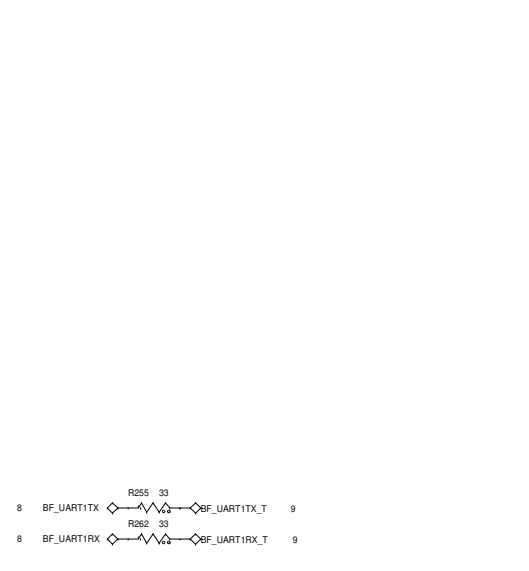
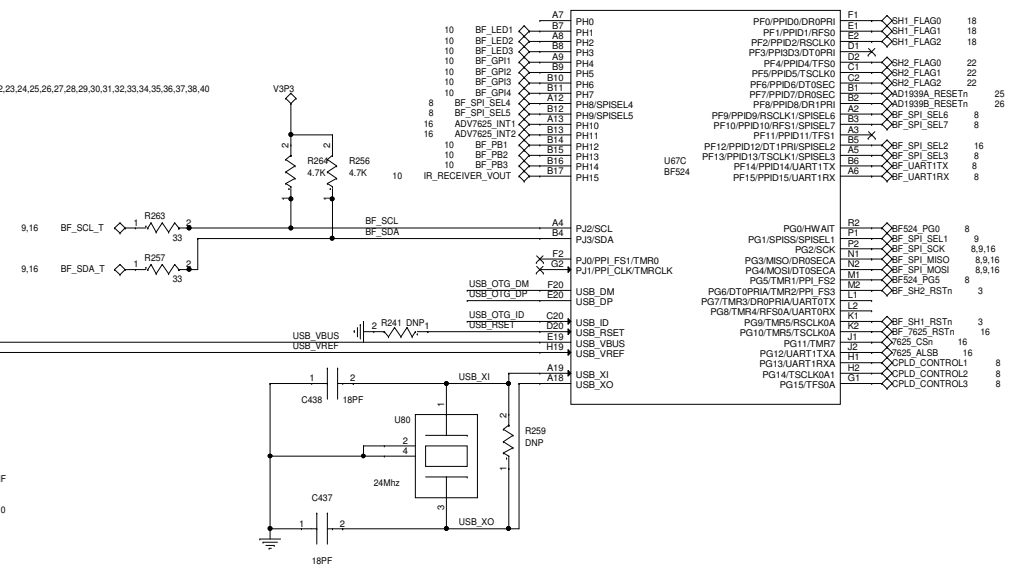




USB_OTG_DM and USB_OTG_DP are differential pairs with 90 ohms impedance and should be as short as possible

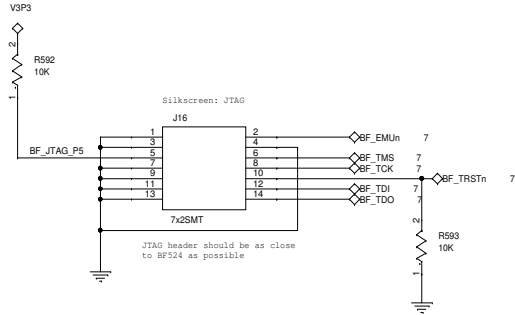


- BF_SPI_SEL1: BF524 SERIAL FLASH MEMORY
- BF_SPI_SEL2: ADV7625 SERIAL FLASH MEMORY
- BF_SPI_SEL3: SHARC 1 SPI CS
- BF_SPI_SEL4: DAUGHTERBOARD CS
- BF_SPI_SEL5: SHARC 2 SPI CS
- BF_SPI_SEL6: AD1939A SPI CS
- BF_SPI_SEL7: AD1939B SPI CS

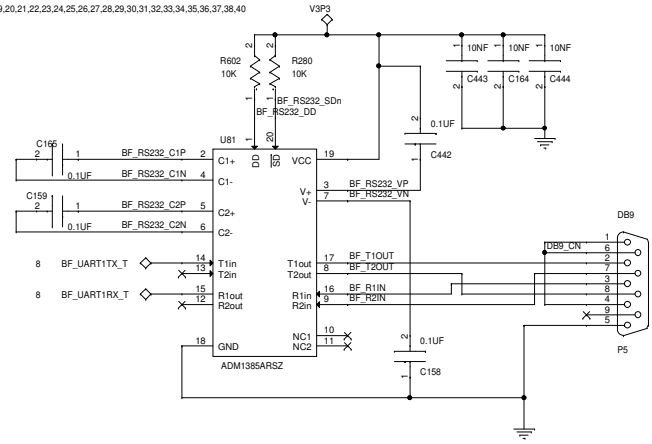


Title			BF524 PERIPHERALS		
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C	EVAL-MELODY-5 Audio/Video Evaluation Board	Tuesday, August 11, 2015			0.3
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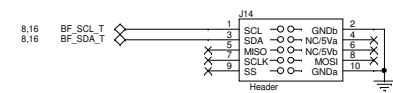
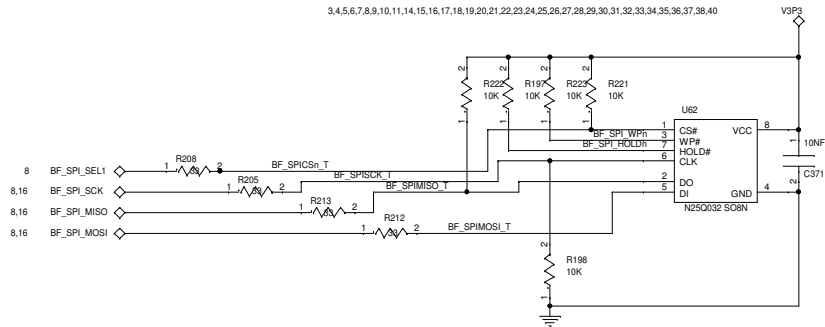
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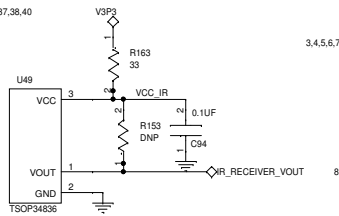
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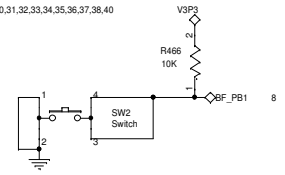
USBi or Aardvark I2C INTERFACE

Title		
BF524 FLASH / JTAG / RS232		
Size	Document Number	Rev
C	EVAl-MELODY-5 Audio/Video Evaluation Board	0.3
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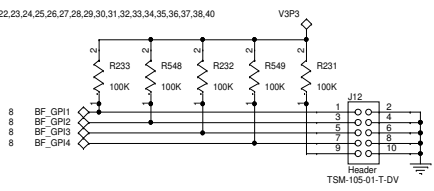
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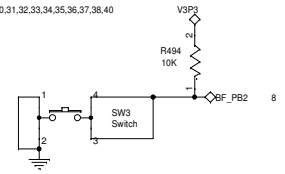
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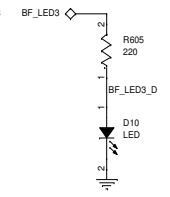
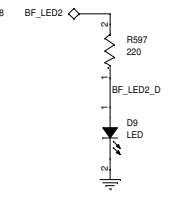
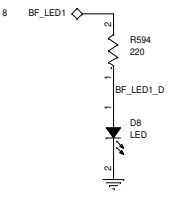
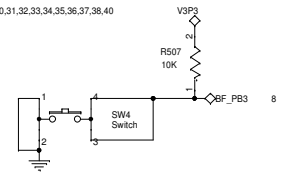
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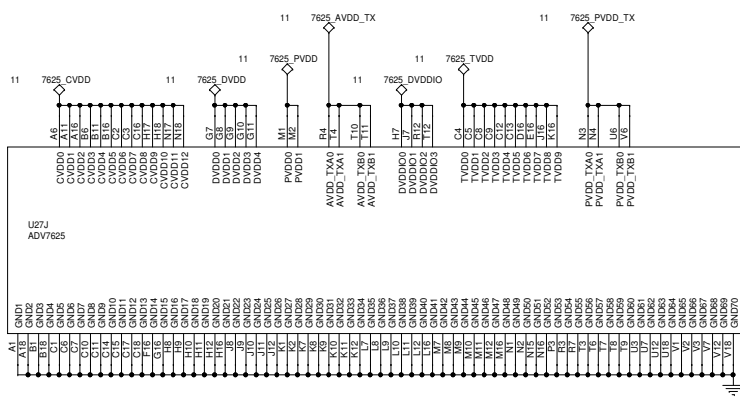
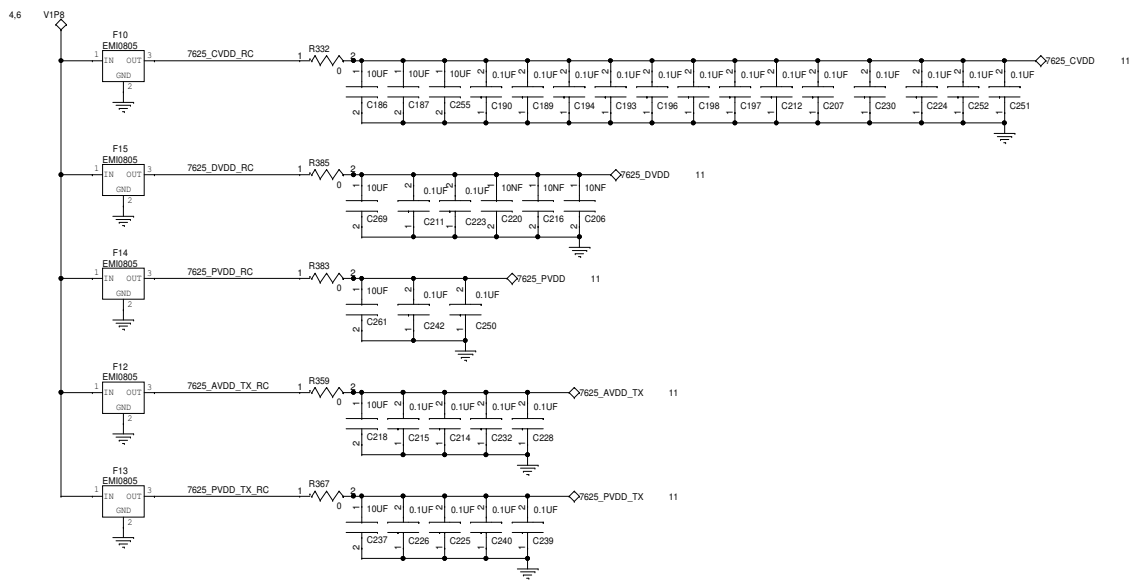
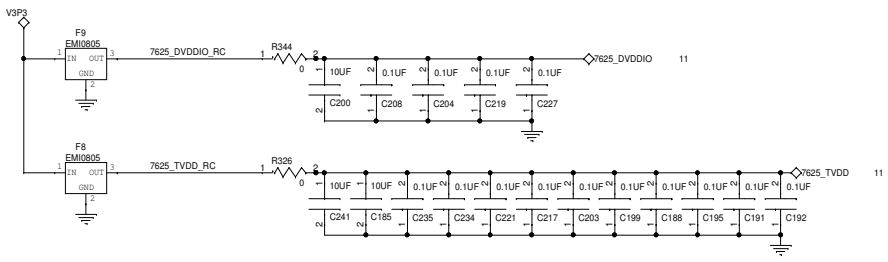
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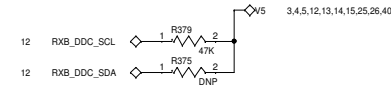
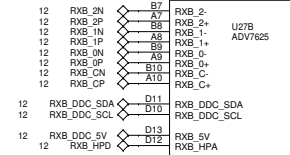
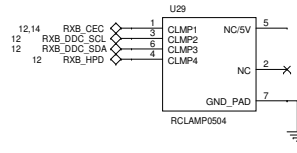
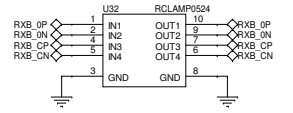
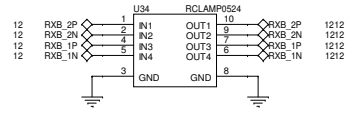
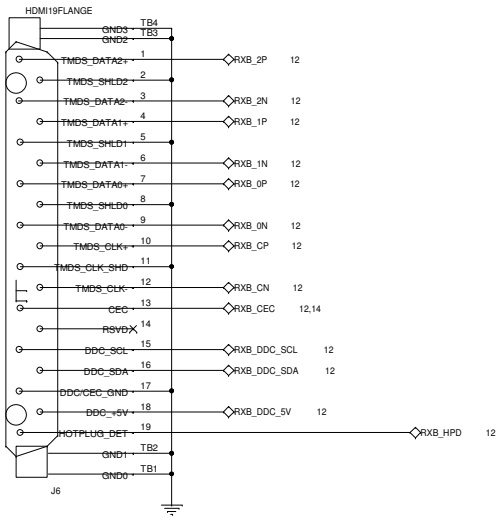
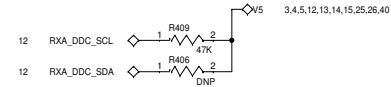
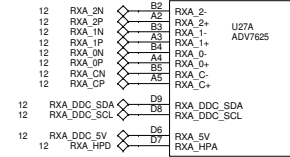
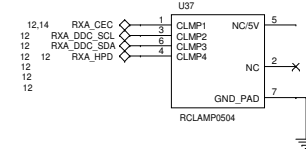
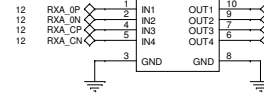
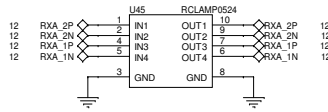
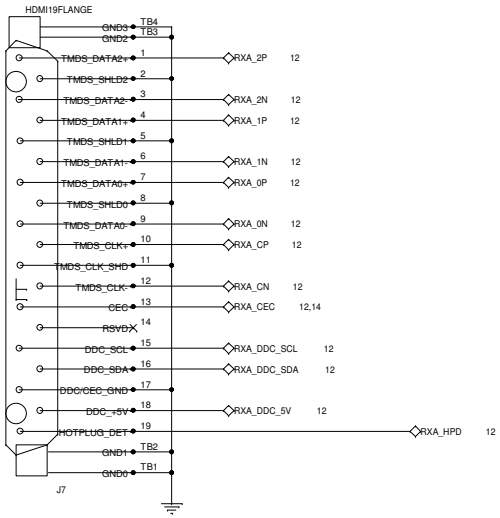


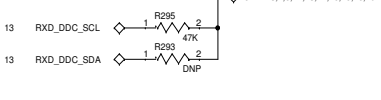
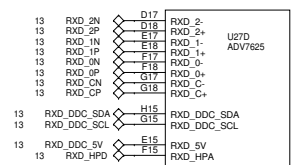
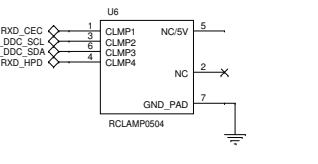
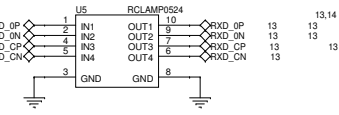
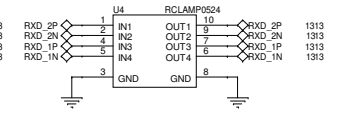
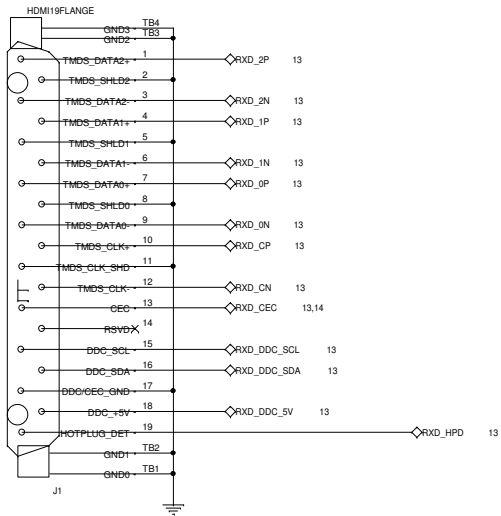
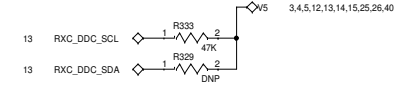
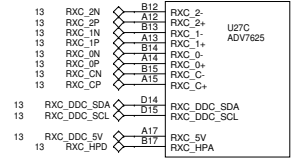
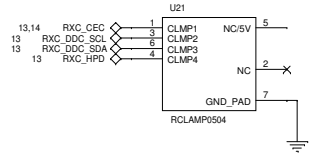
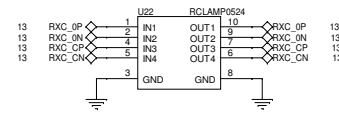
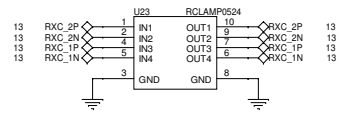
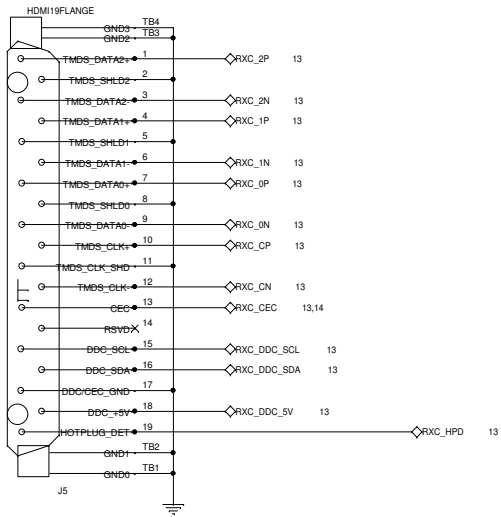
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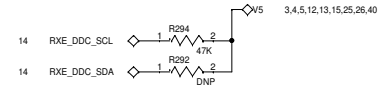
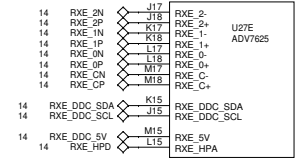
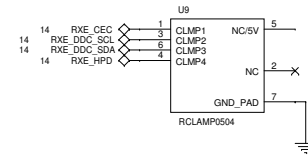
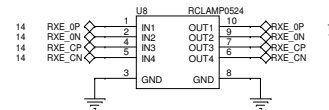
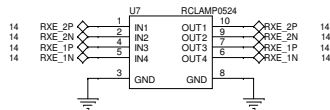
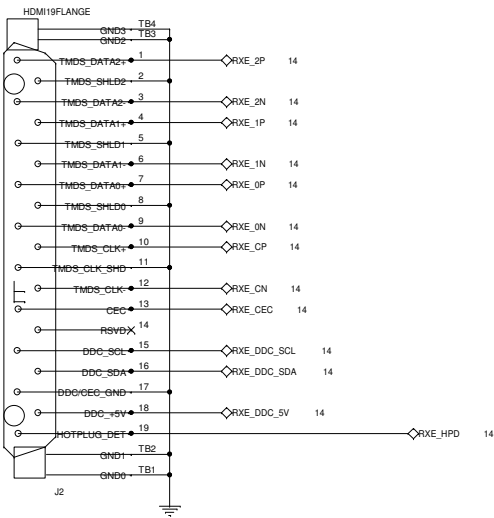
Title		
BF524 GP INPUTS / OUTPUTS		
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C	EVAL-MELODY-5 Audio/Video Evaluation Board	0.3
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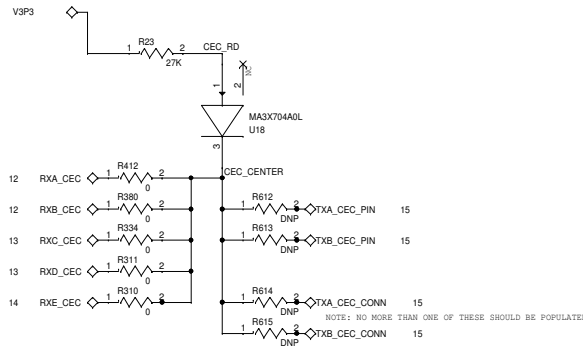


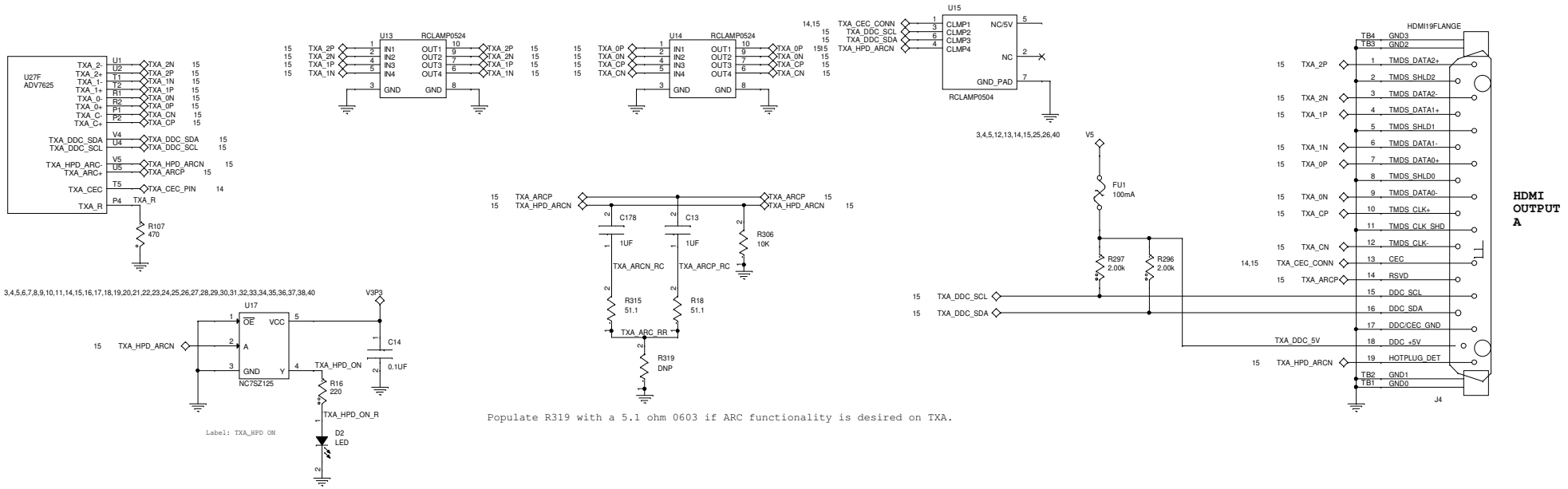


Title		
ADV7625 HDMI INPUTS C AND D		
Size	Document Number	Rev
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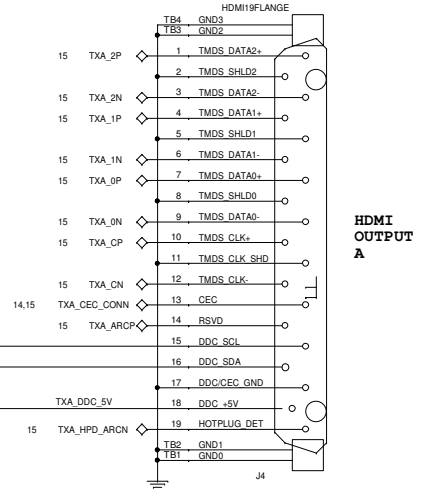


3,4,5,6,7,8,9,10,11,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,40

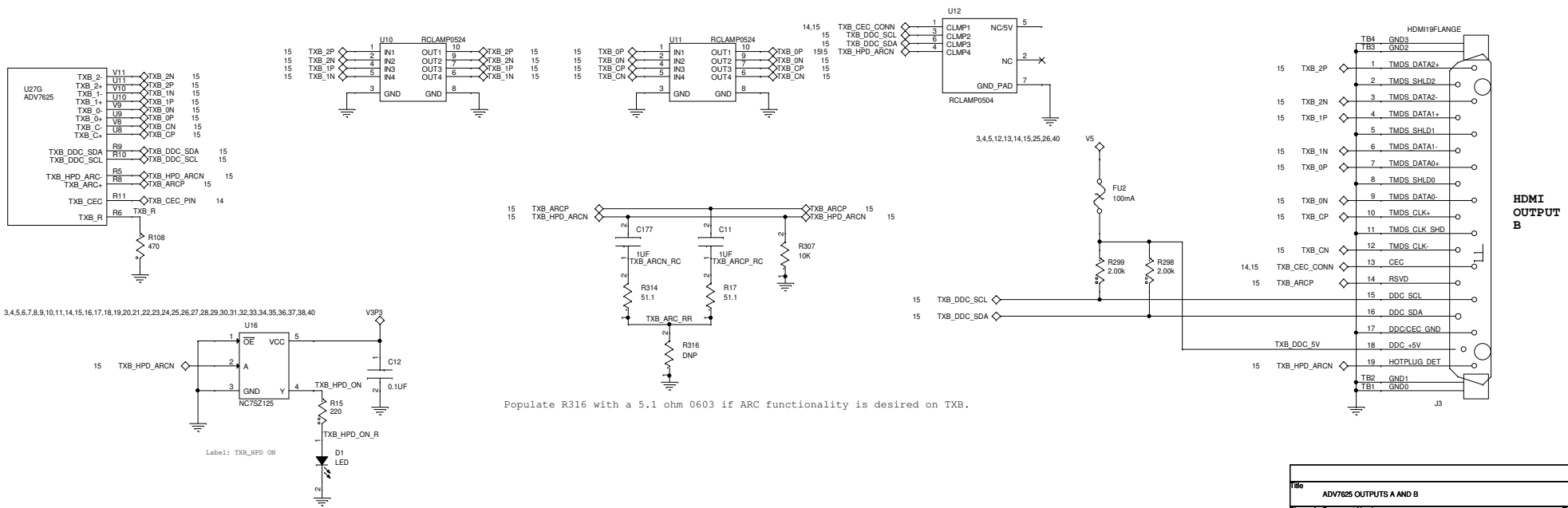




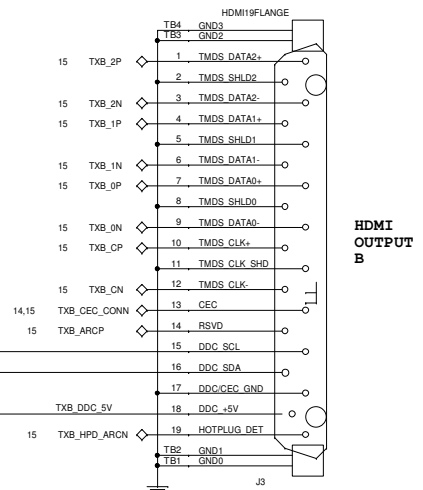
Populate R319 with a 5.1 ohm 0603 if ARC functionality is desired on TXA.



HDMI OUTPUT A

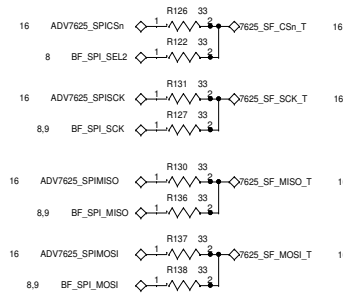
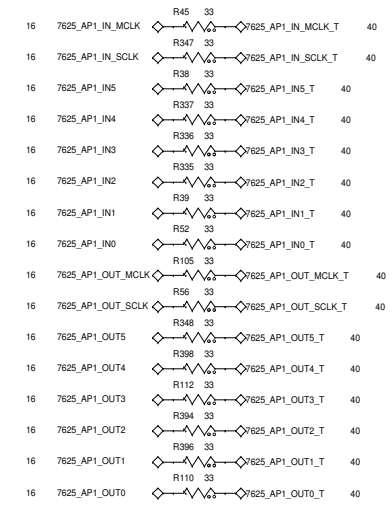
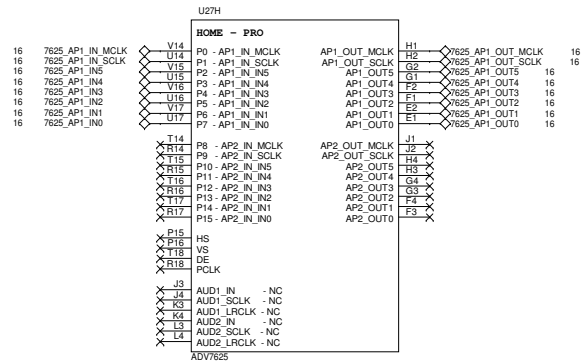


Populate R316 with a 5.1 ohm 0603 if ARC functionality is desired on TXB.

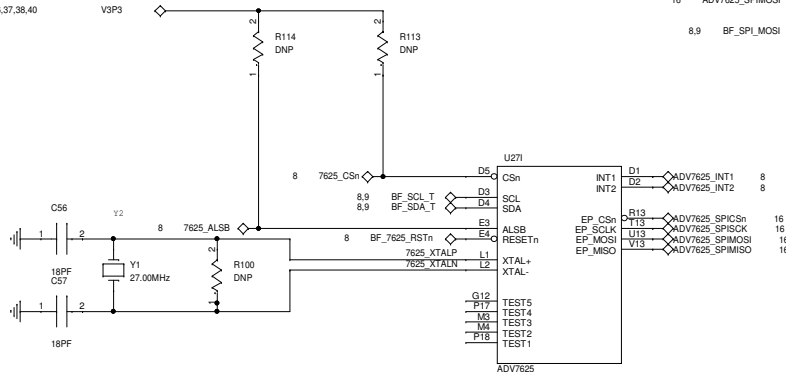


HDMI OUTPUT B

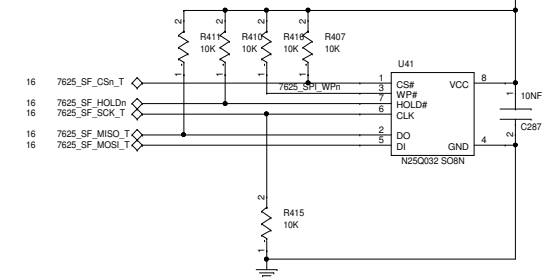
Title		
ADV7625 OUTPUTS A AND B		
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3,4,5,6,7,8,9,10,11,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,40

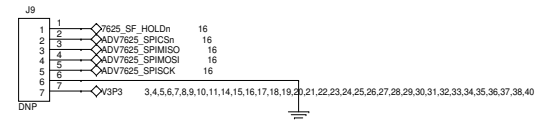


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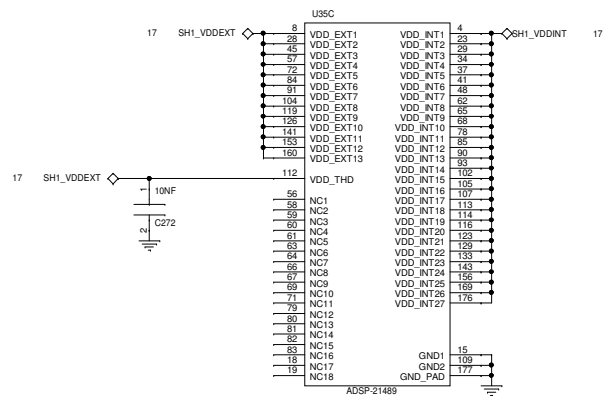
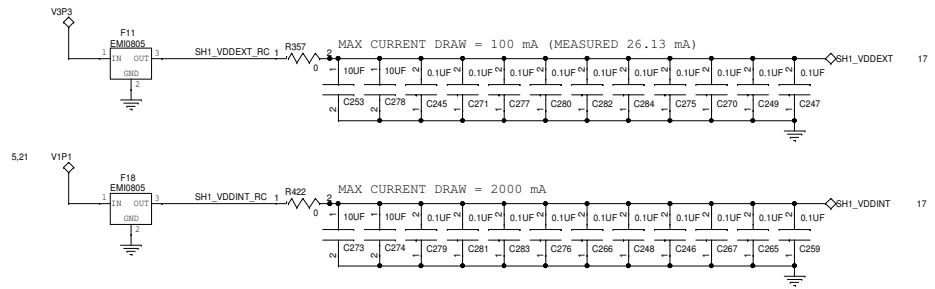
ADV7625 I2C ADDRESS:
 ALSB Low : IO Map address is 0xB0 (default)
 ALSB High : IO Map address is 0xB2

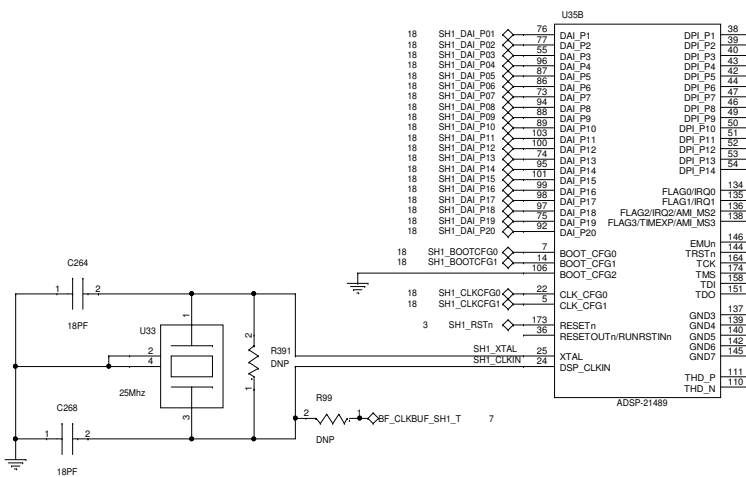
8003-STYLE MASTER SPI HEADER (NOT POPULATED)



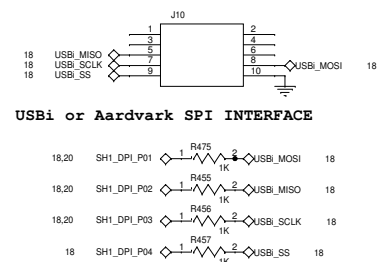
7-PIN HEADER

Title		
ADV7625 MISC		
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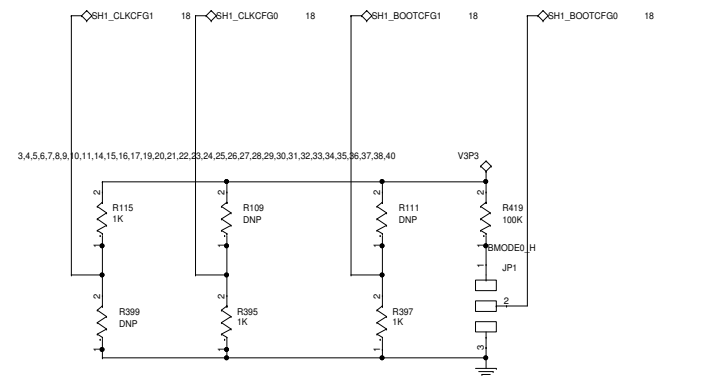
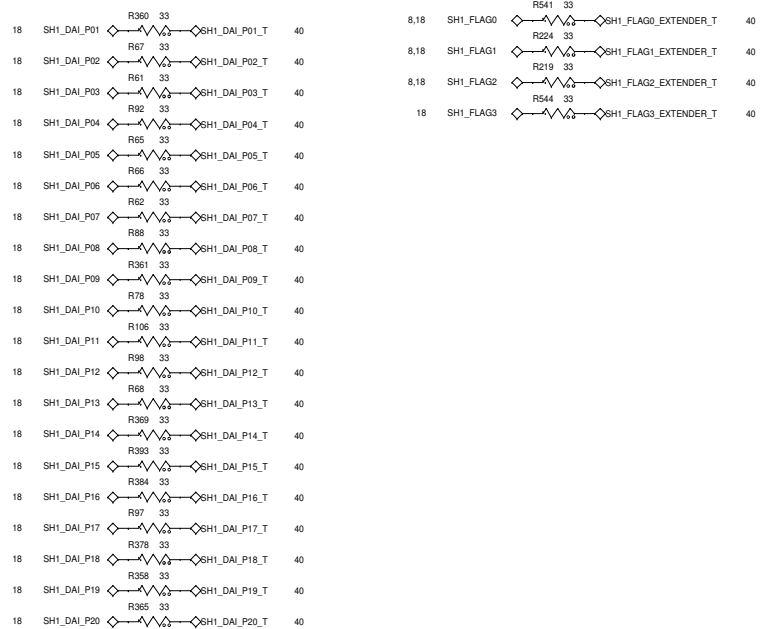
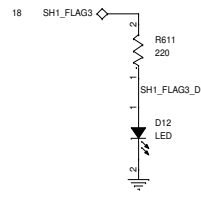
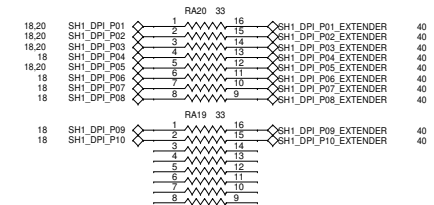


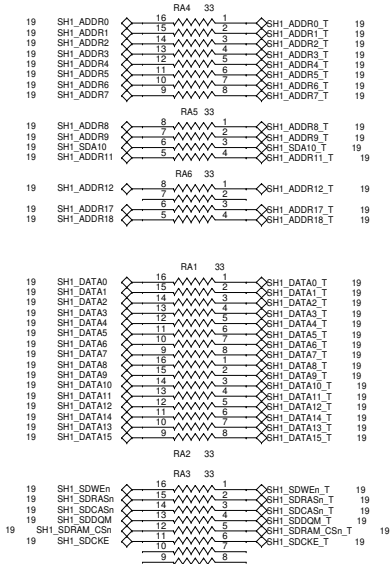
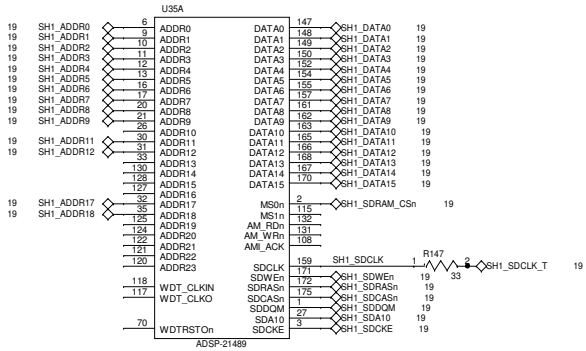


CAUTION: ADSP-21489 PINS 137, 139, 140, 142, 145 MUST BE TIED TO GND!

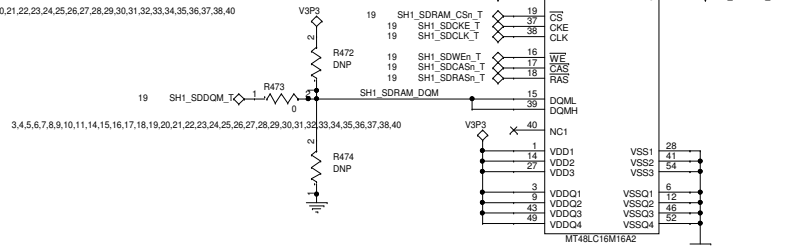


USBi or Aardvark SPI INTERFACE

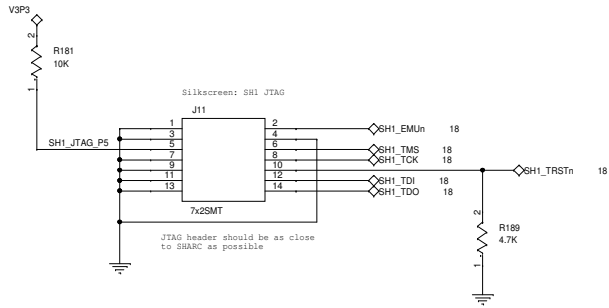




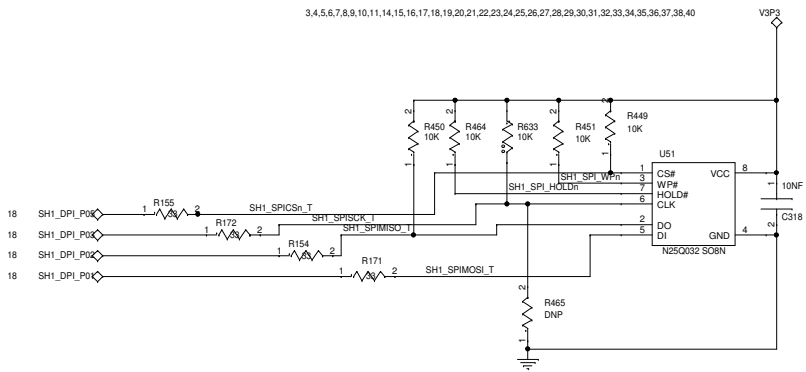
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3,4,5,6,7,8,9,10,11,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,40

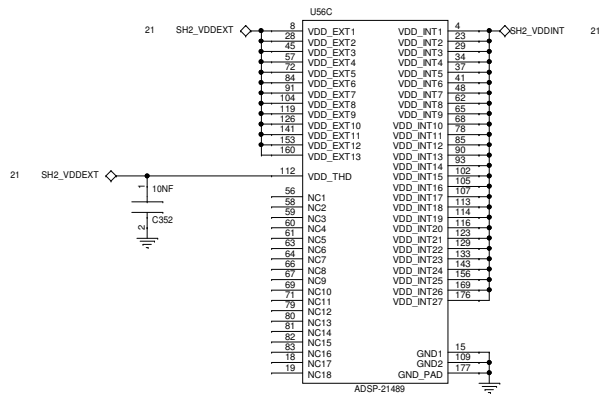
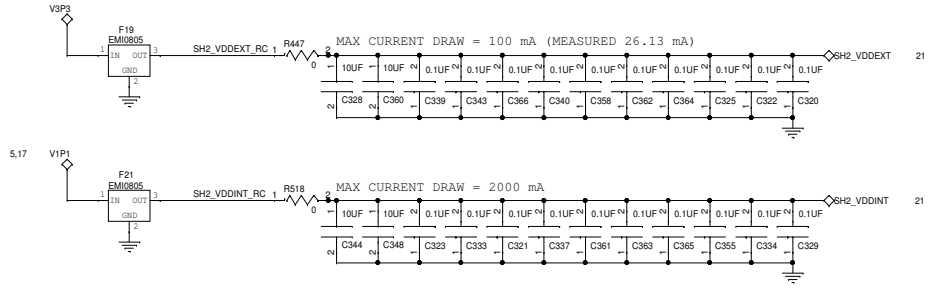


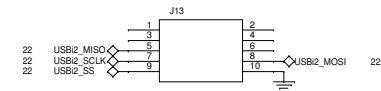
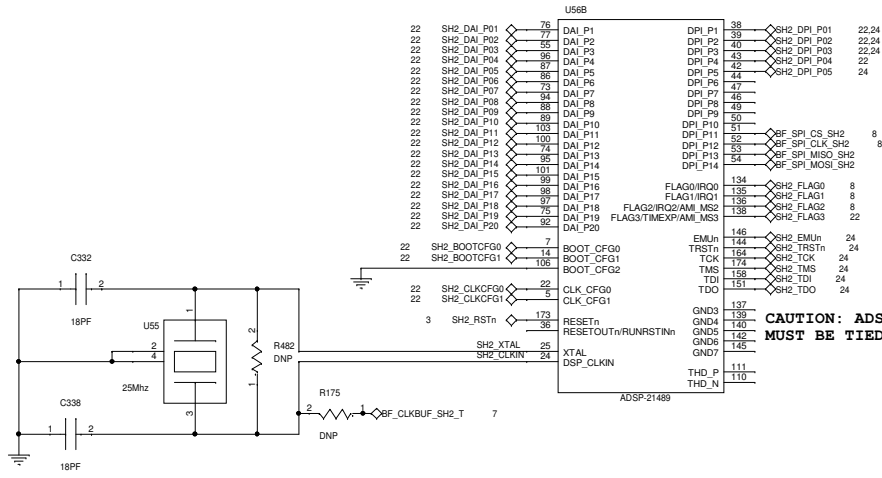
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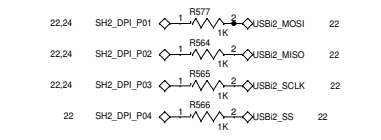
Title		
SHARC 1 FLASH / JTAG		
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3,4,5,6,7,8,9,10,11,14,15,16,17,18,19,20,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,40

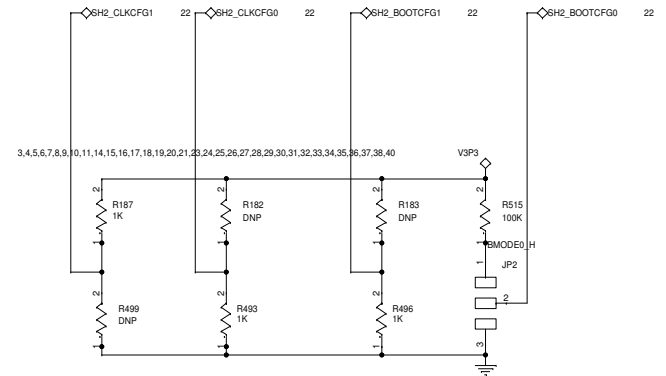
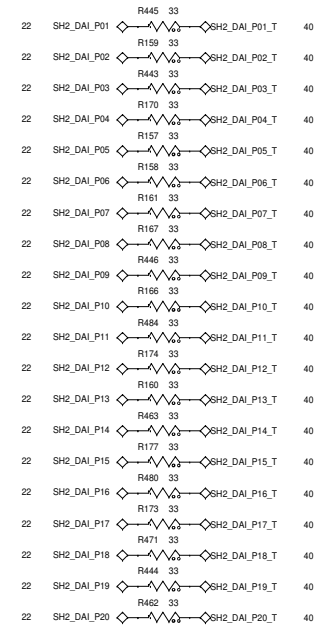
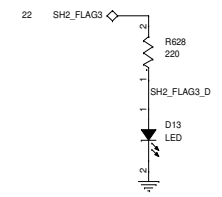


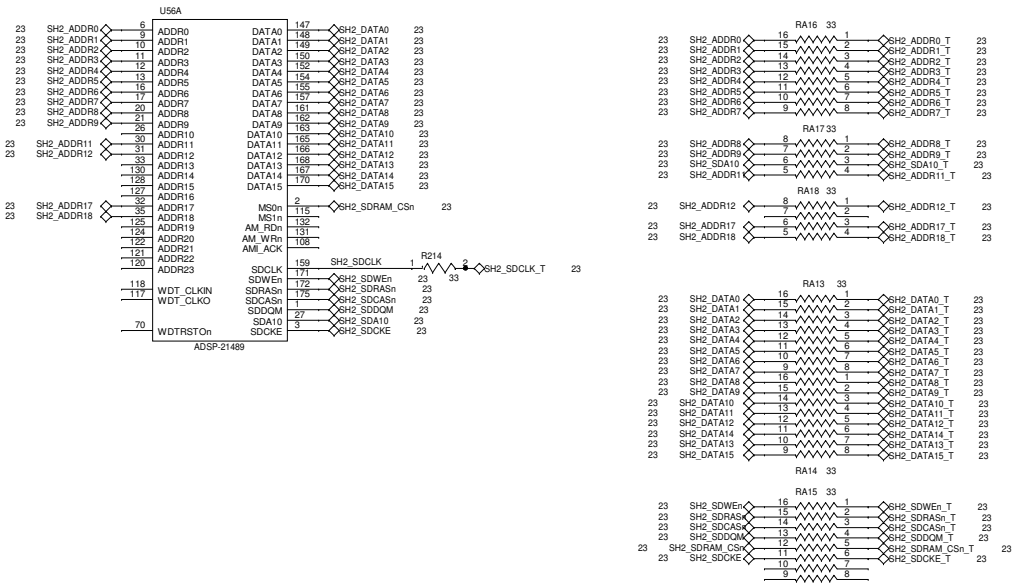


USBi or Aardvark SPI INTERFACE



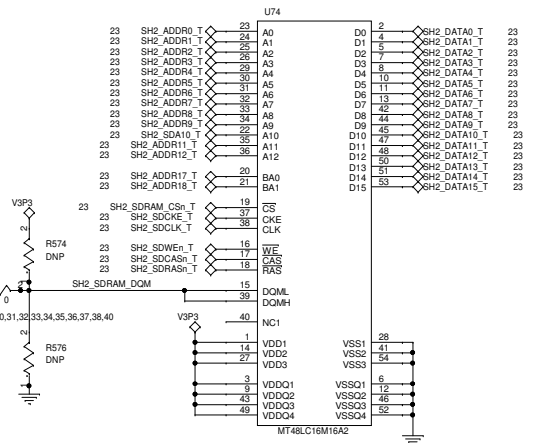
CAUTION: ADSP-21489 PINS 137, 139, 140, 142, 145 MUST BE TIED TO GND!



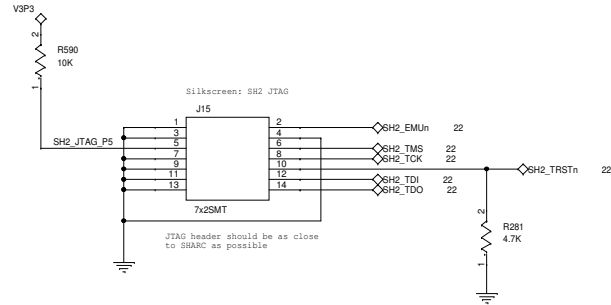


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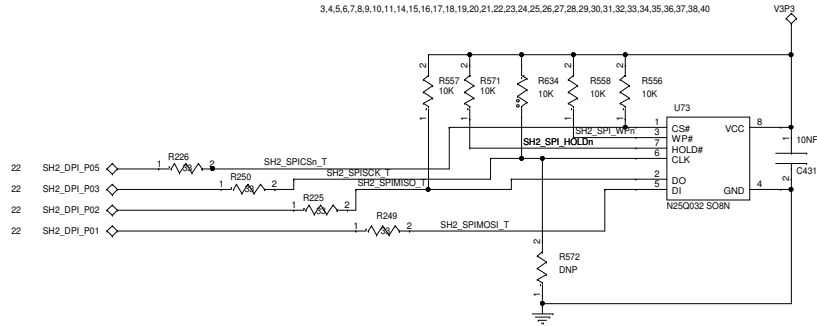
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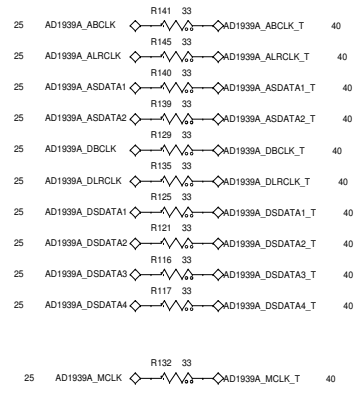
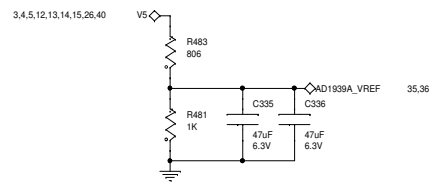
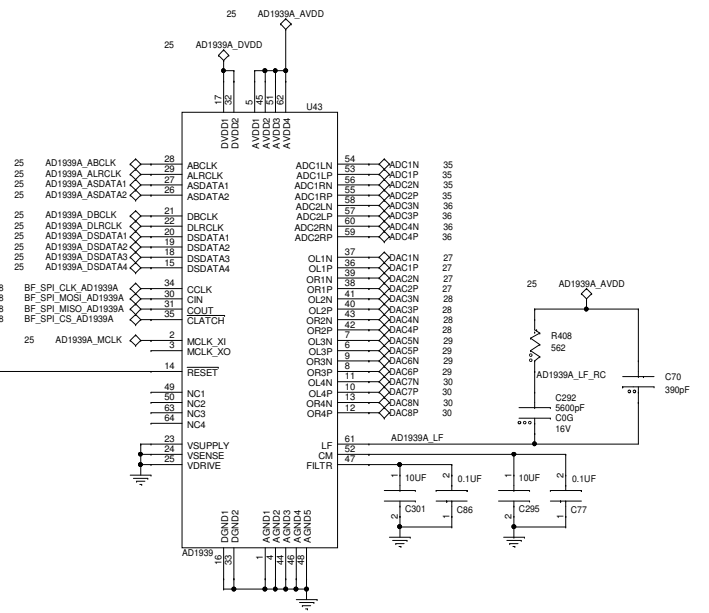
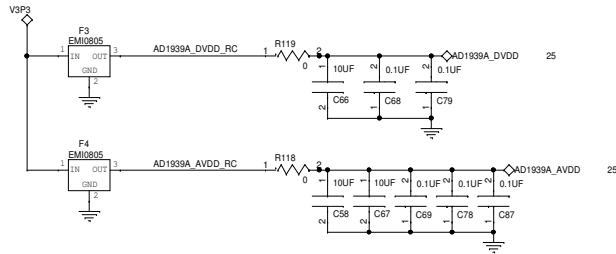
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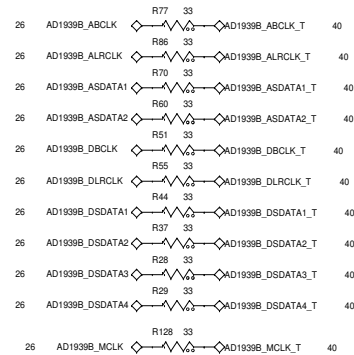
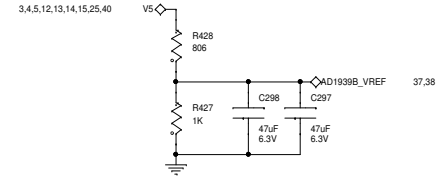
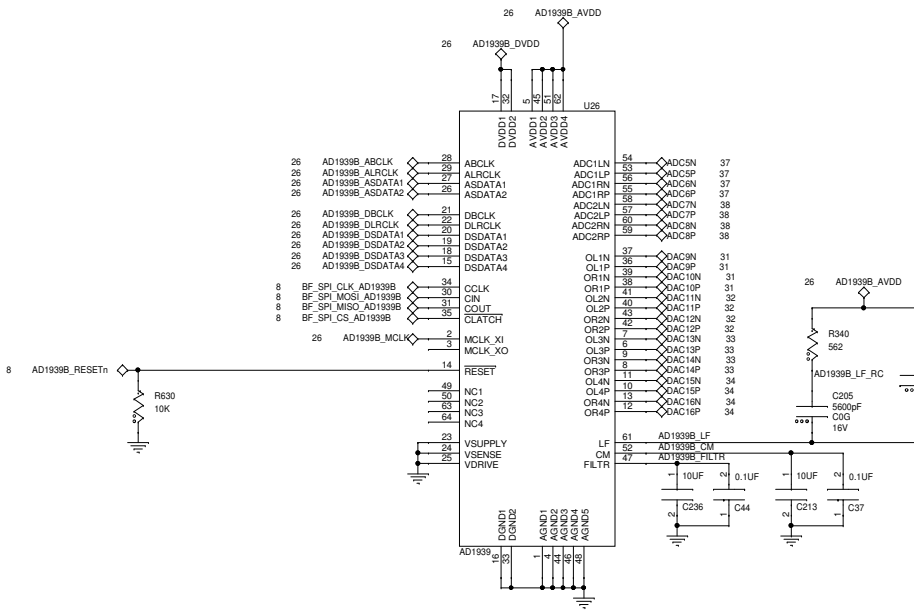
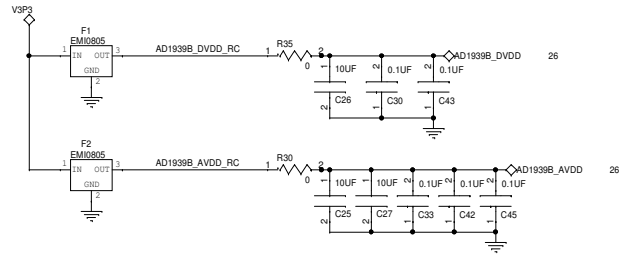
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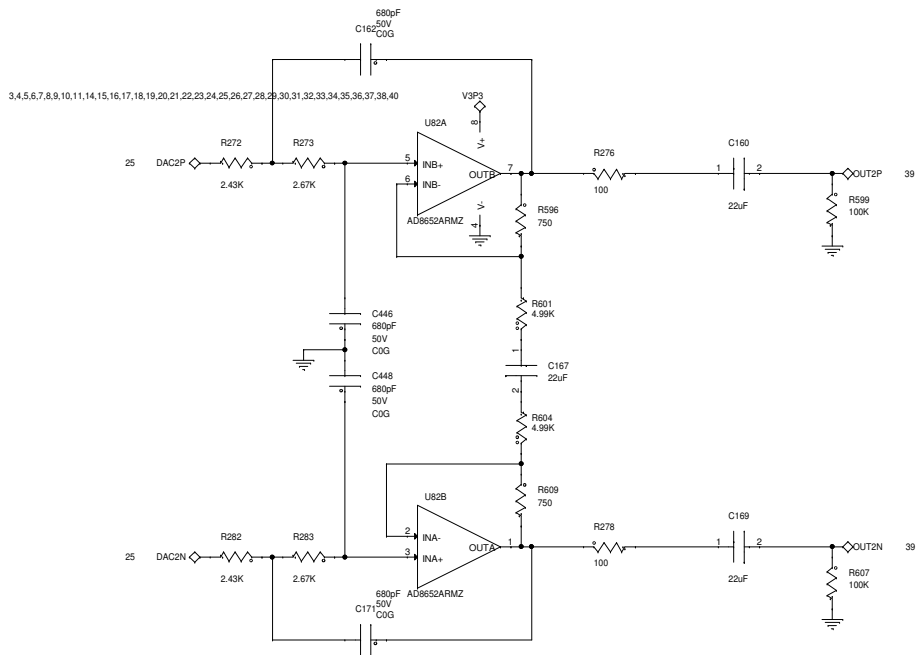
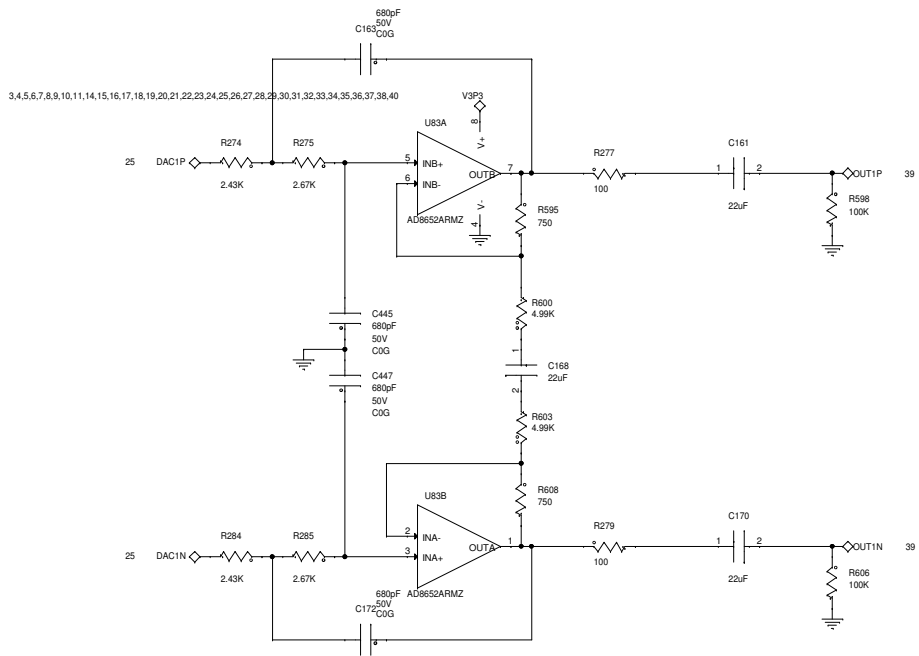


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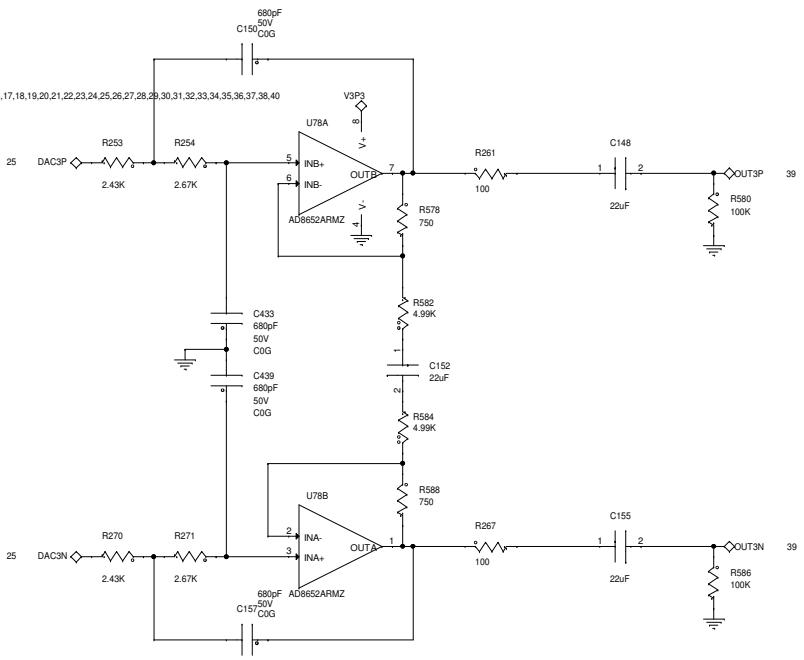
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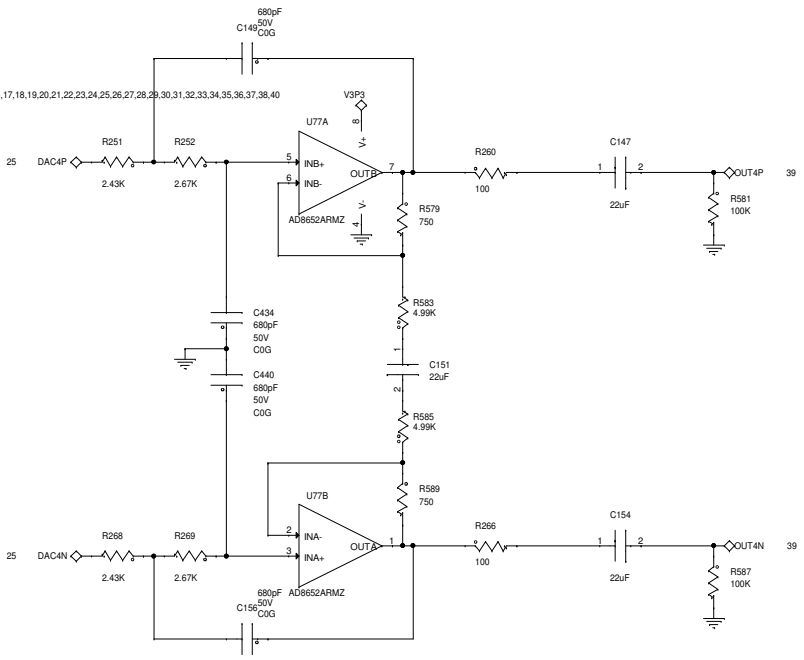


Title		
OUT1 / OUT2		
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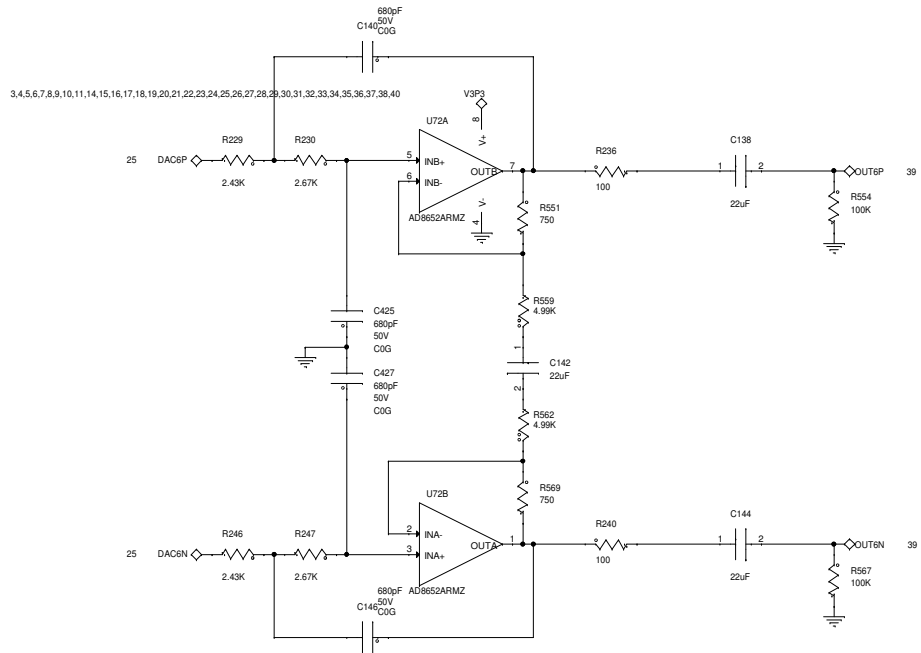
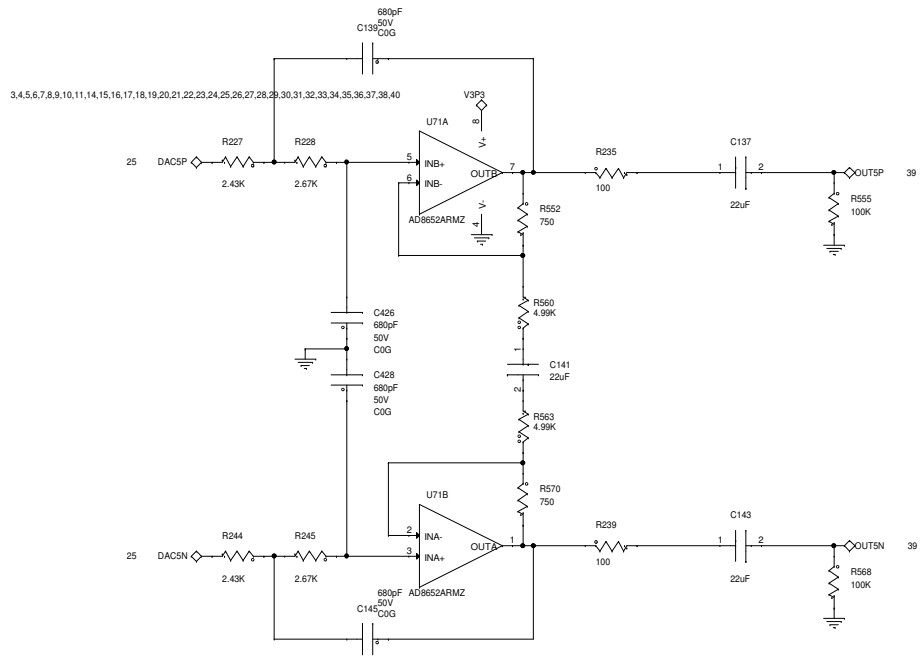
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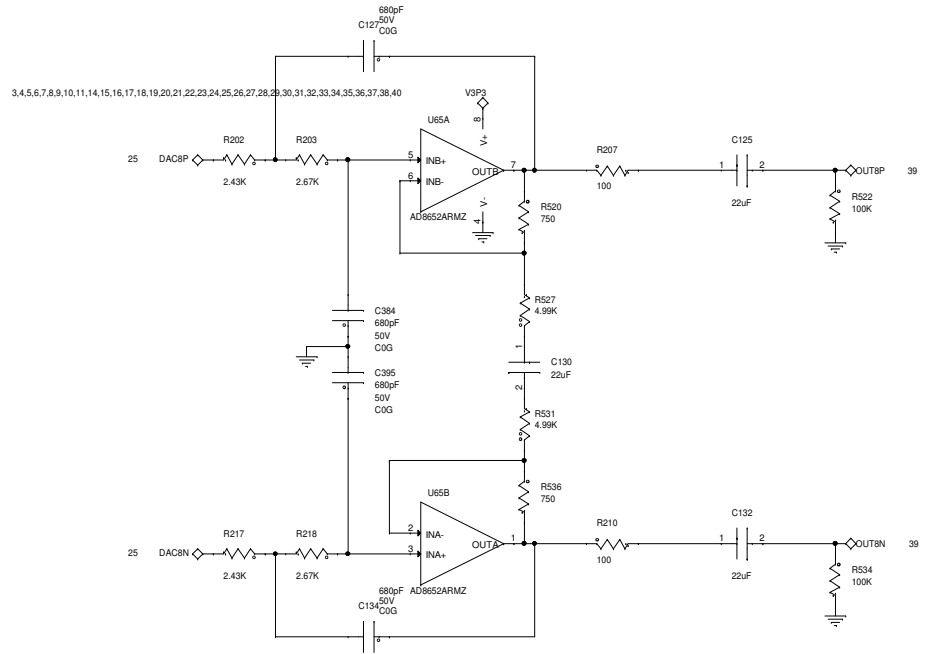
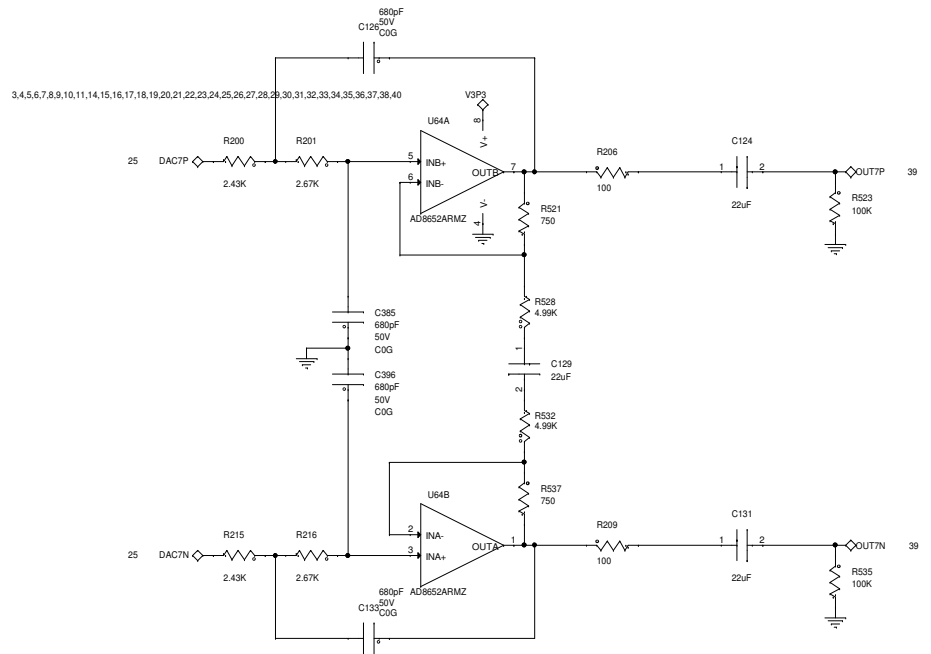
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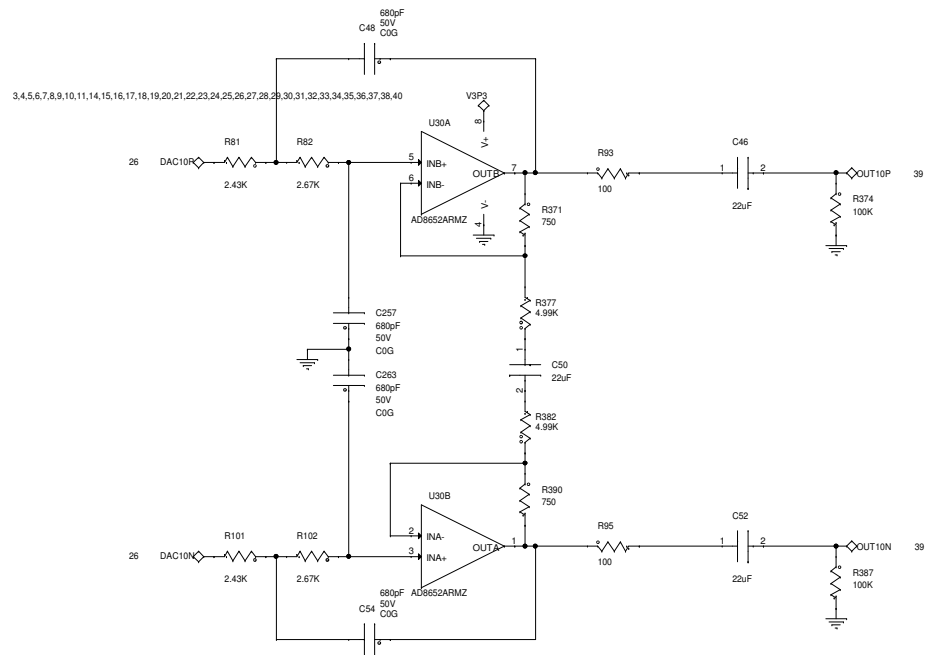
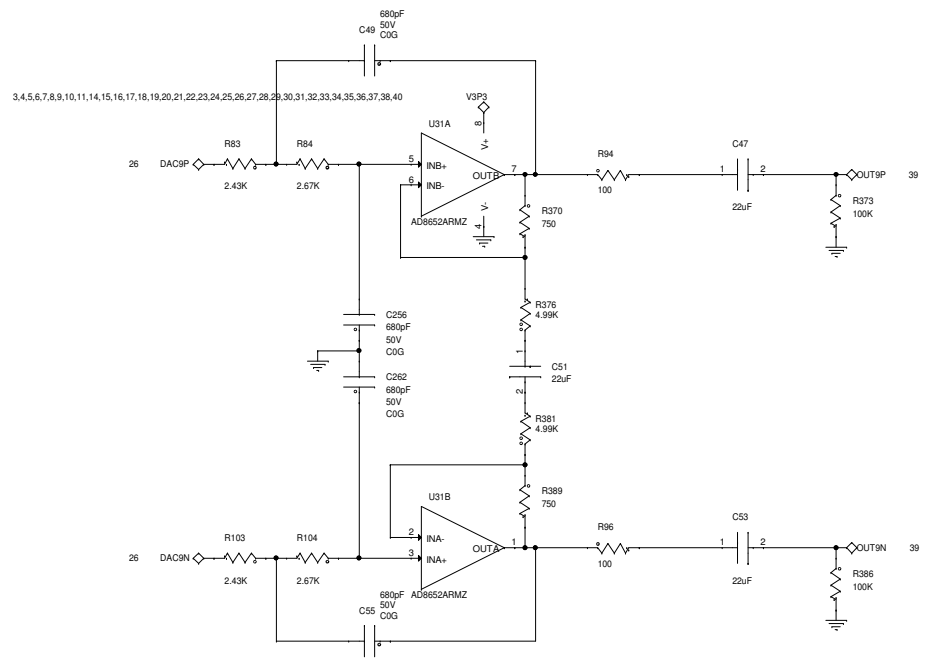
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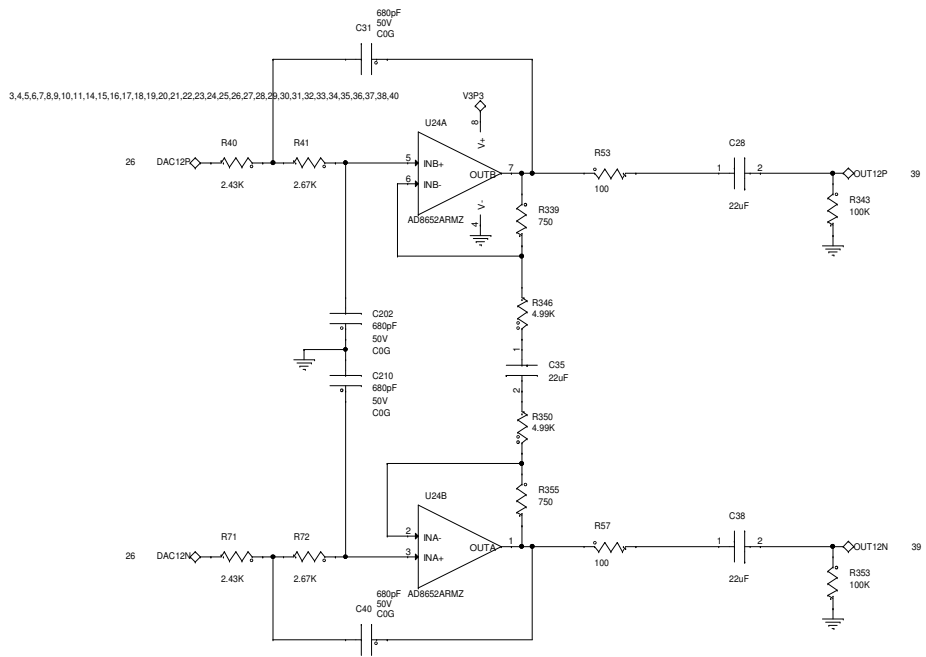
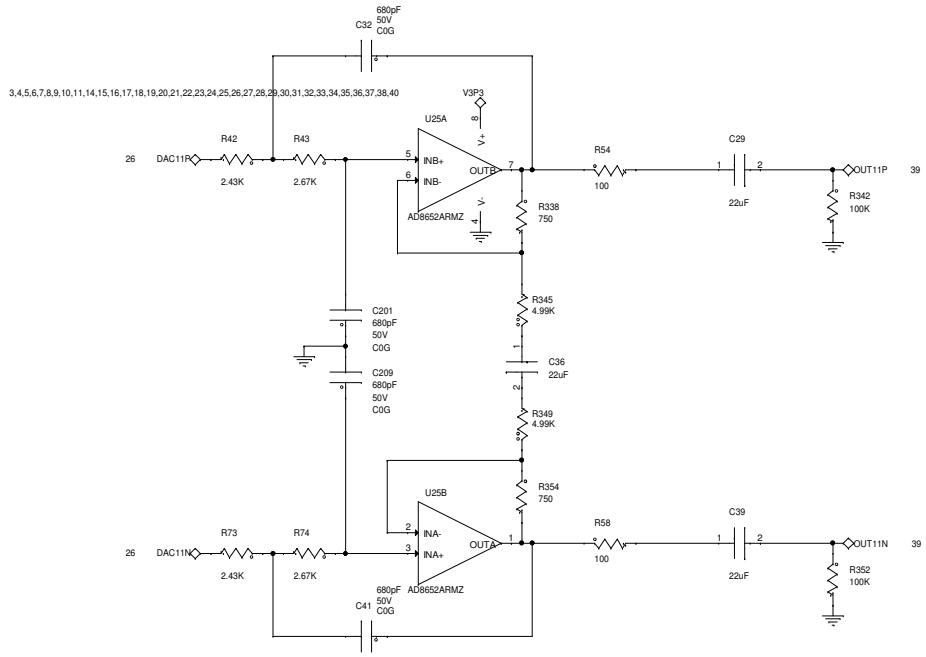
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Size	Document Number	Rev
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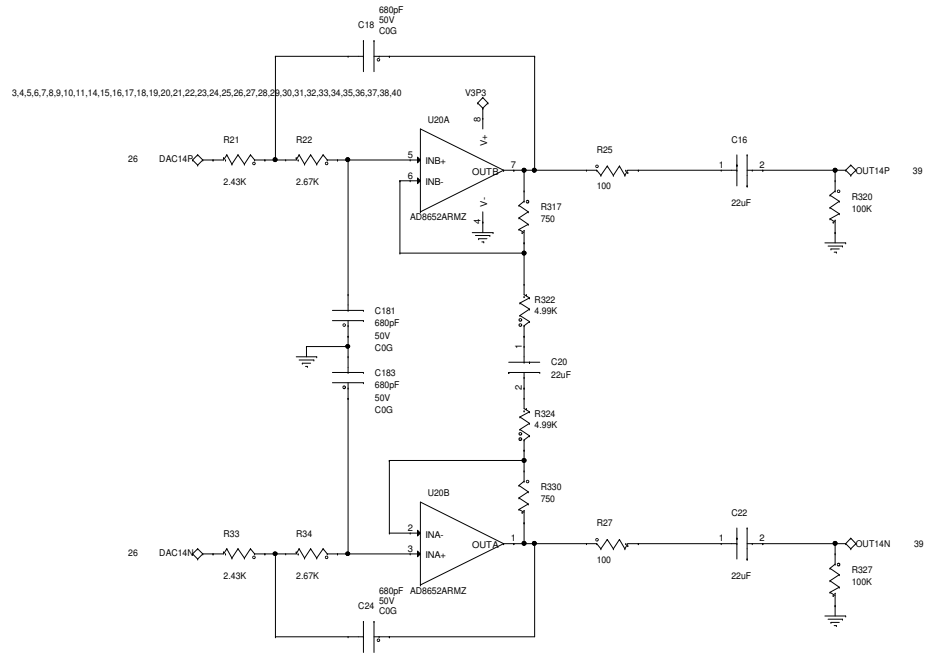
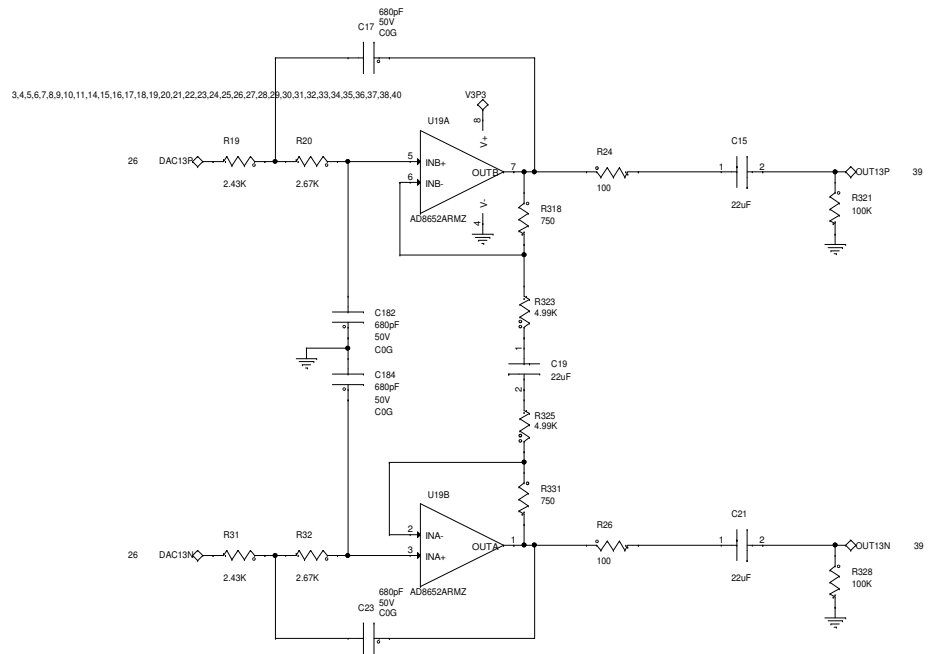
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Size	Document Number	Rev	
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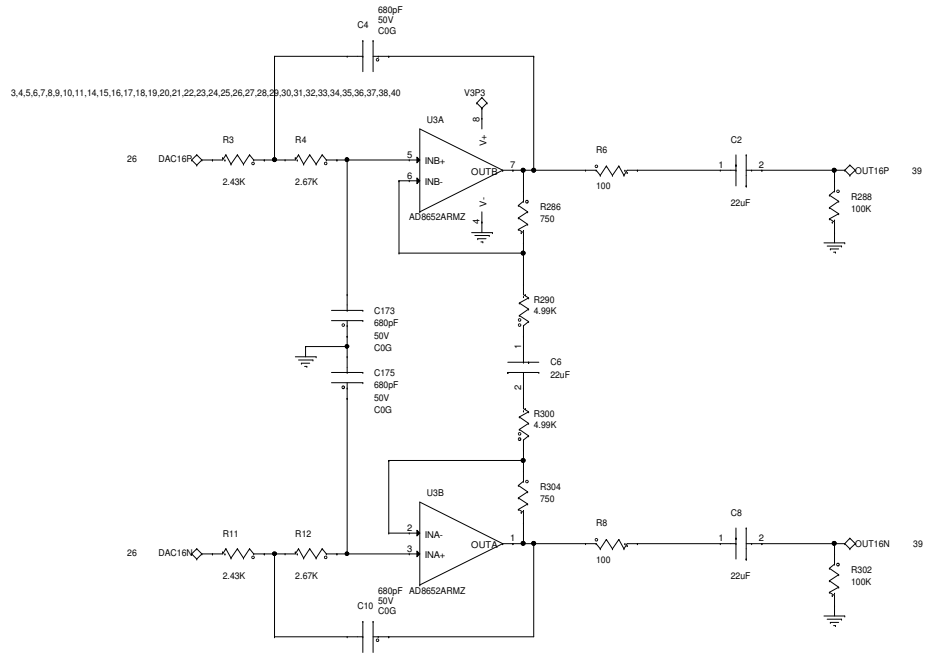
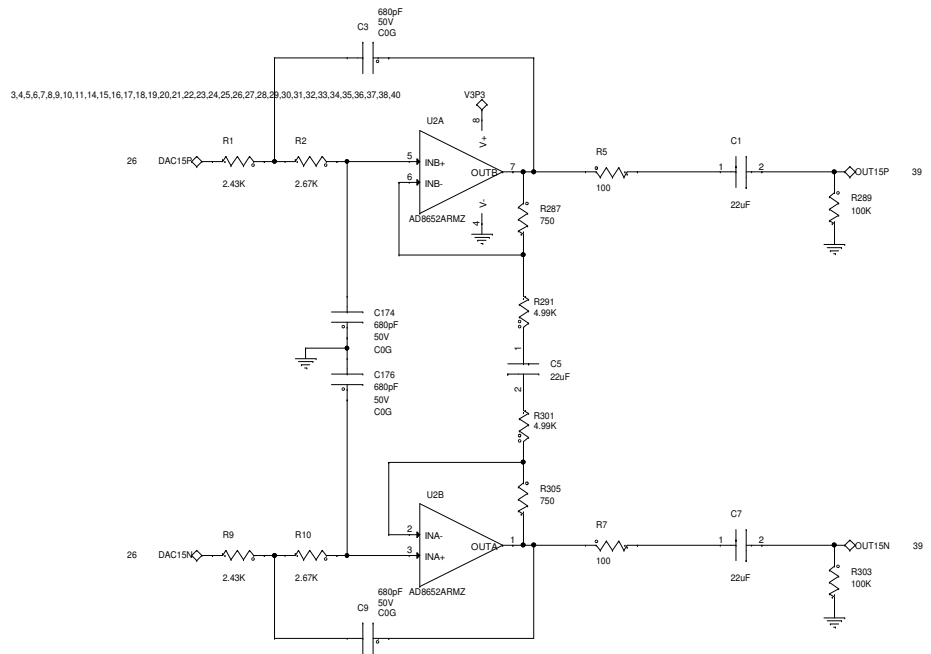
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Size	Document Number	EVAL-MELODY-5 Audio/Video Evaluation Board	
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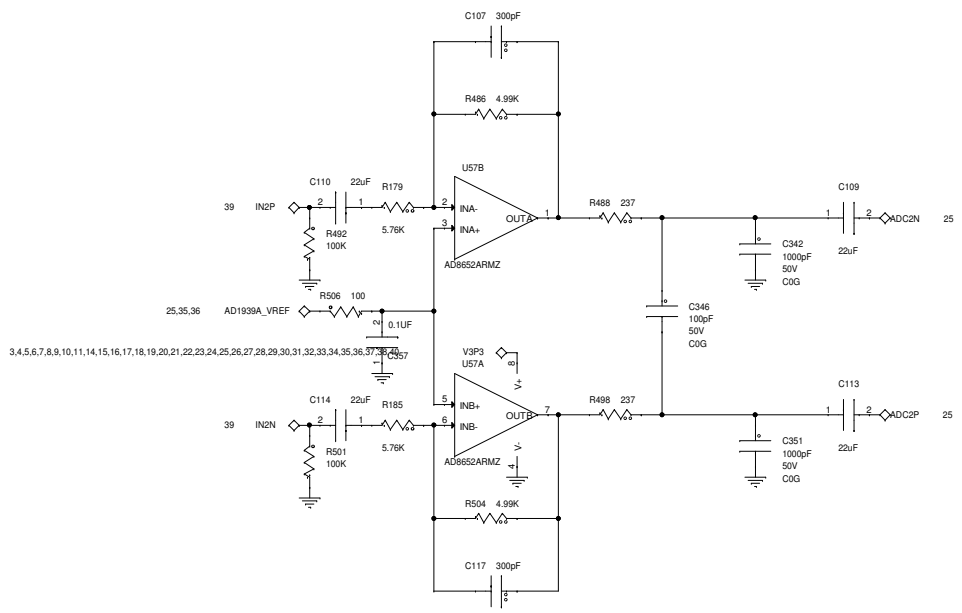
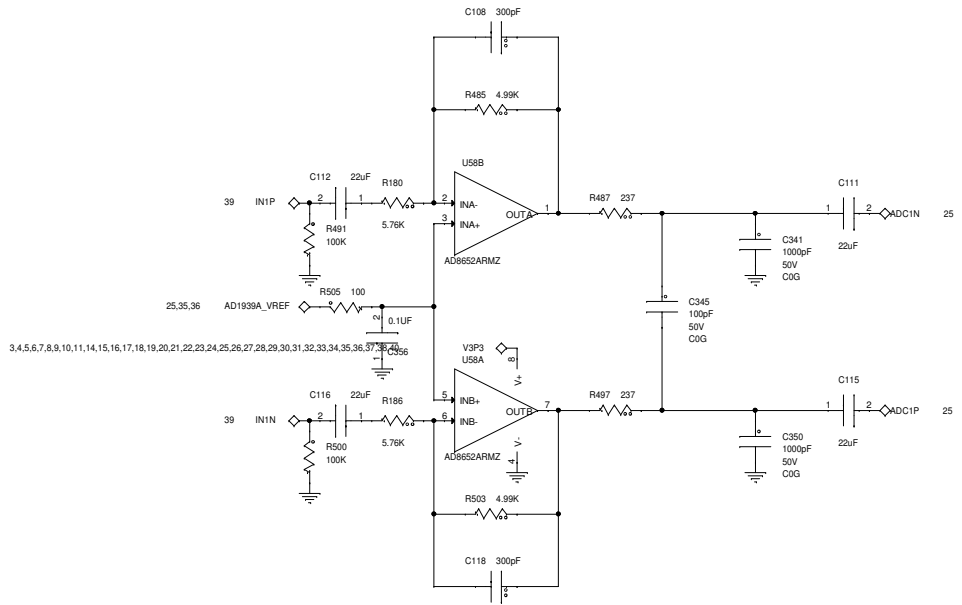
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Size	Document Number	Rev
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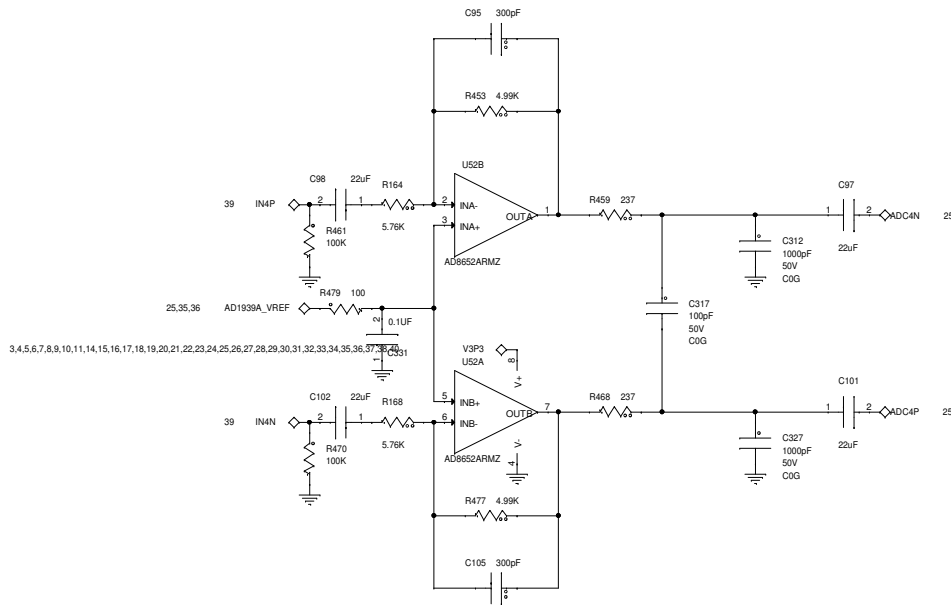
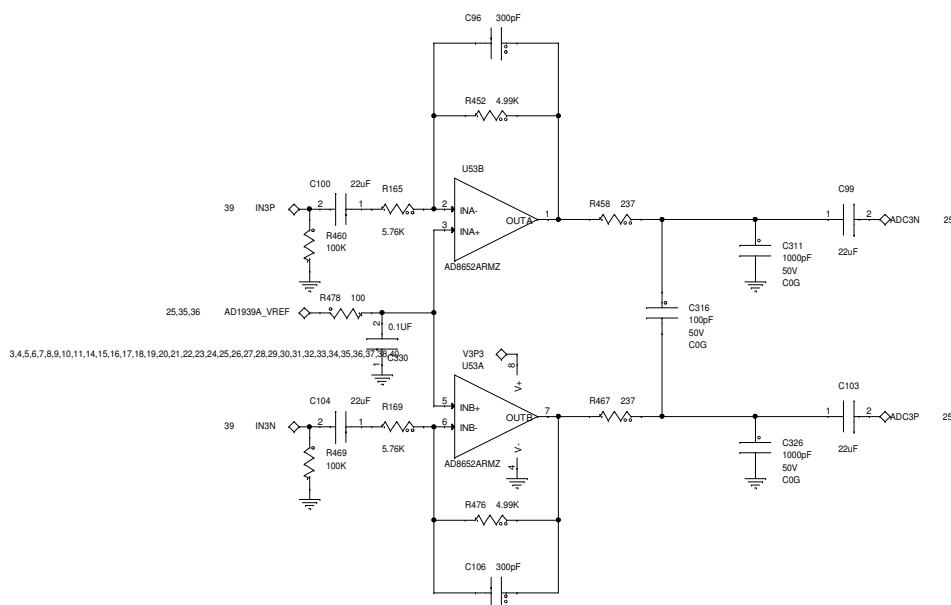
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Size	Document Number	EVAL-MELODY-5 Audio/Video Evaluation Board	
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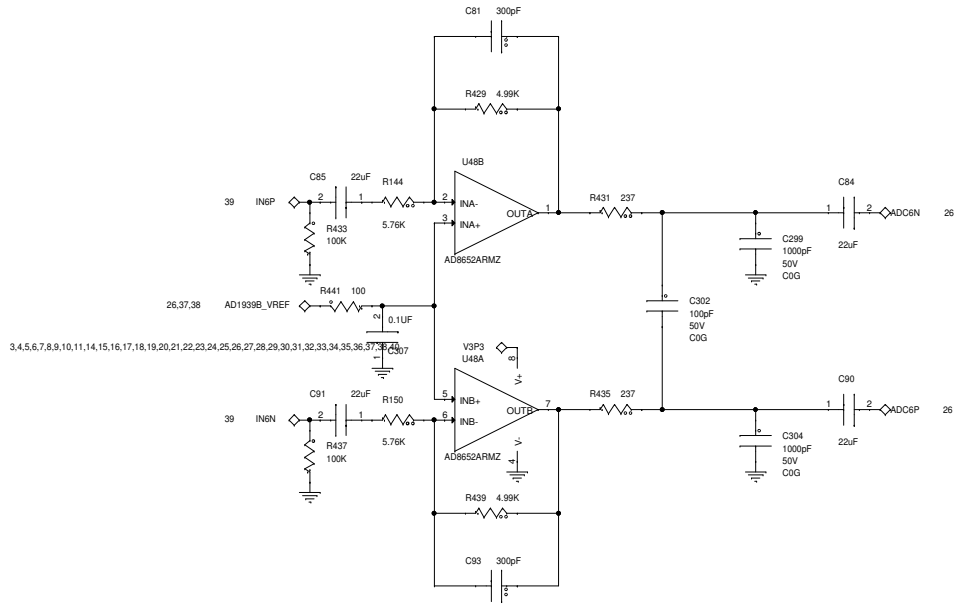
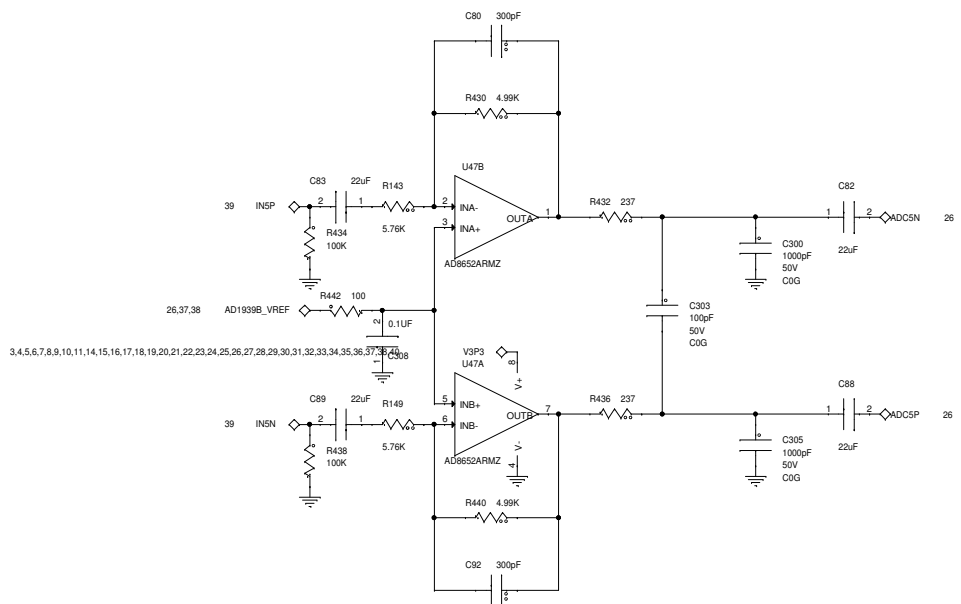
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Size	Document Number	Rev
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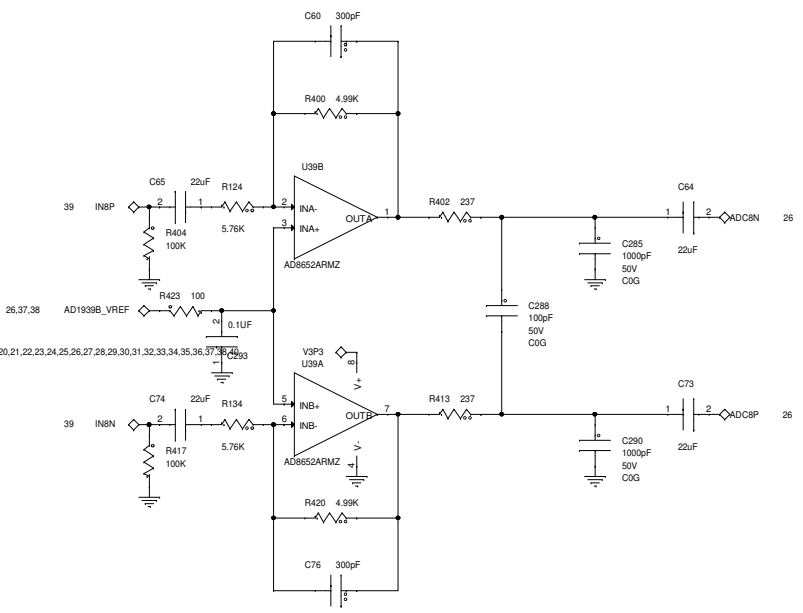
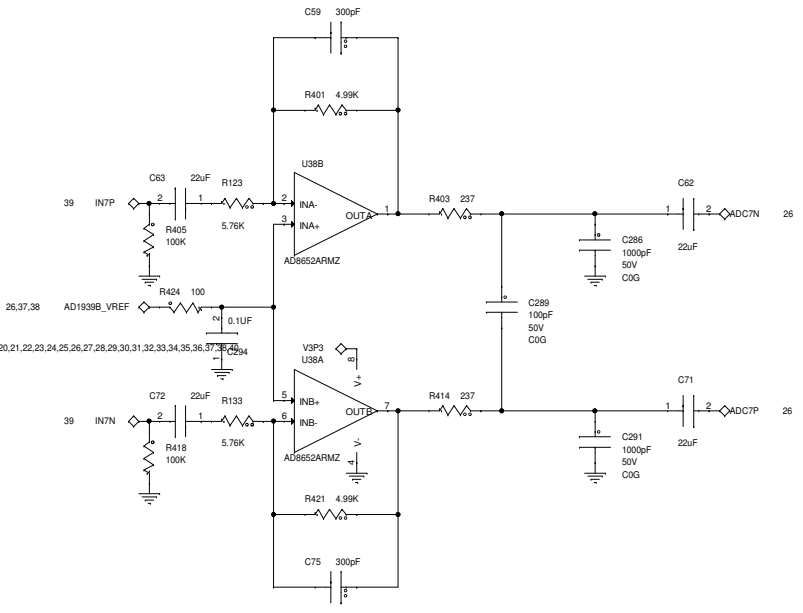
Title		
IN1 / IN2		
Size	Document Number	Rev
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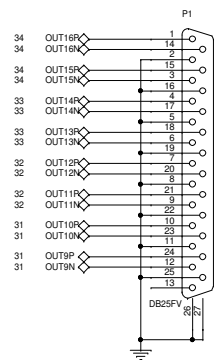
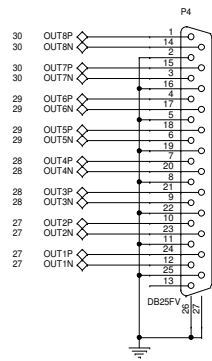
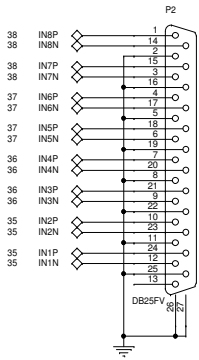
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Size	Document Number	EVAL-MELODY-5 Audio/Video Evaluation Board	
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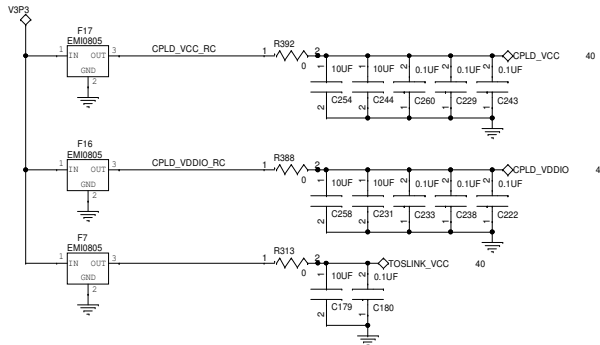


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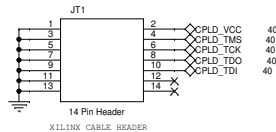
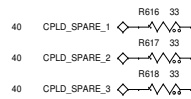
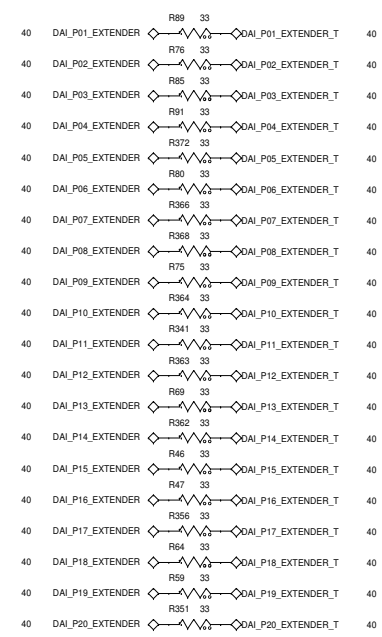
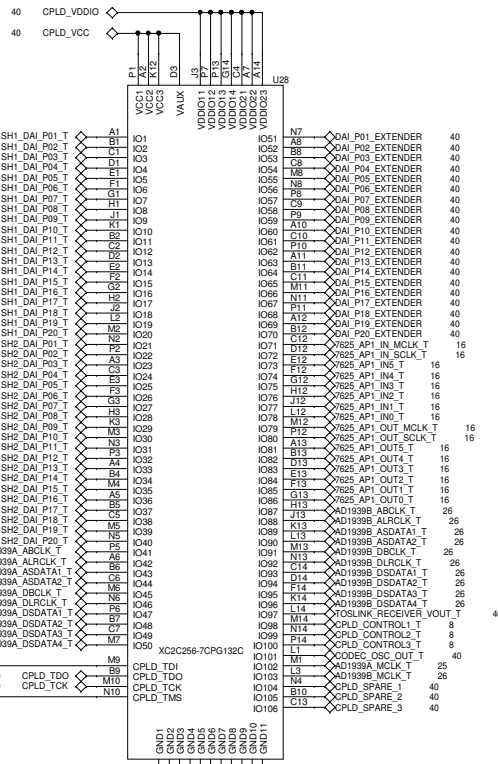
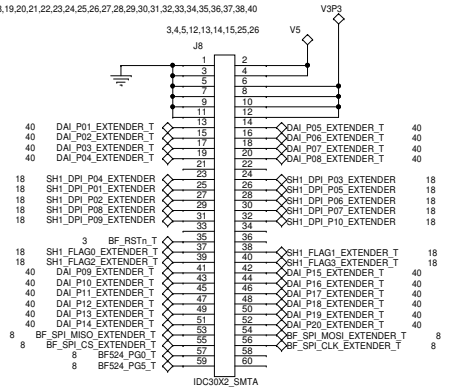


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**NOTE: CPLD CORE VOLTAGE SHOULD BE 1.8V NOT 3.3V.
THIS MAY RESULT IN THE CPLD DEVICE FAILING AT SOME POINT.**



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