

6

5

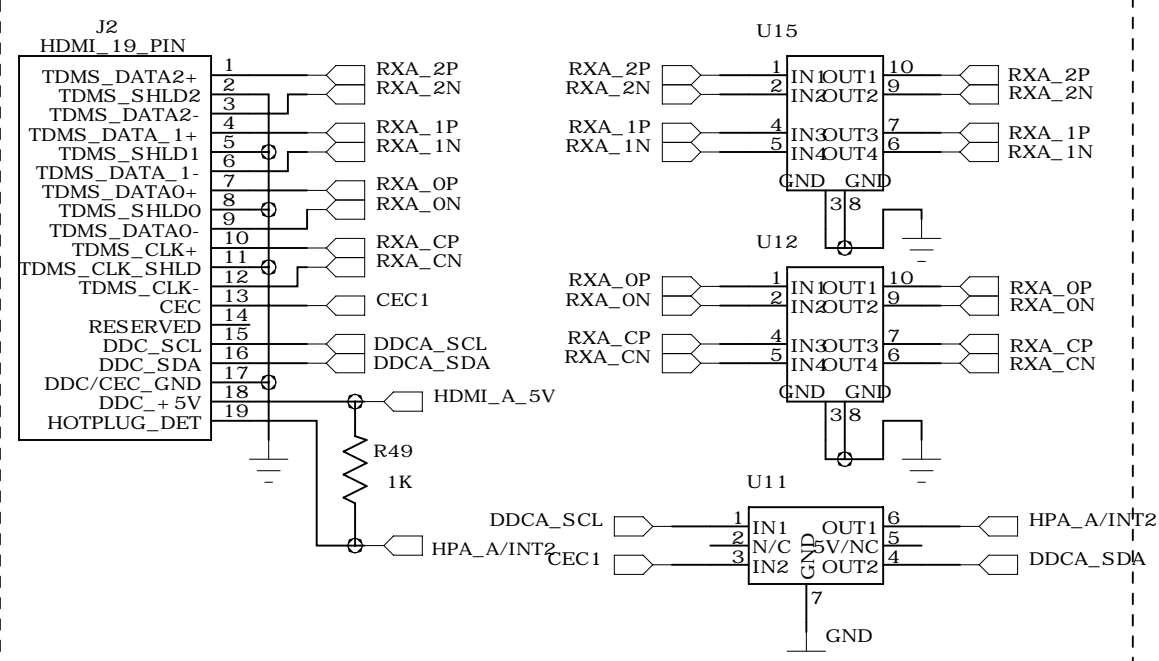
4

3

2

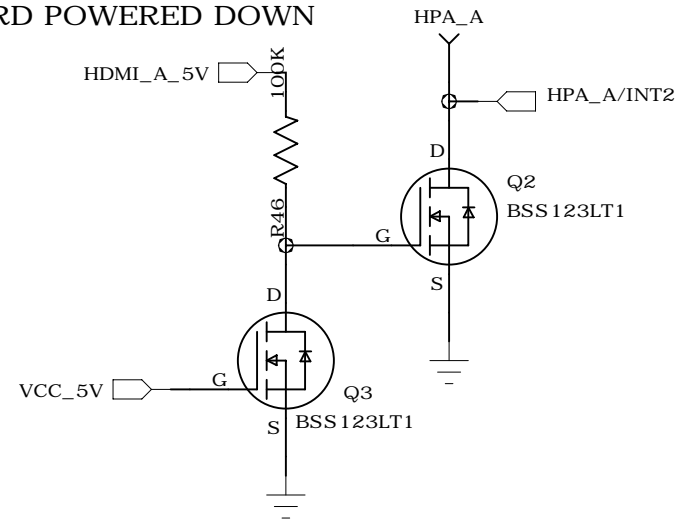
1

HDMI Port A - Connector and ESD Suppression



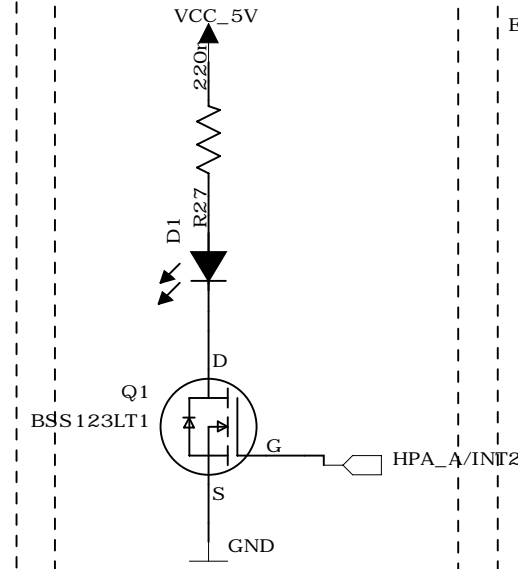
HPD A

SHORTS HPA_A TO GND WHEN BOARD POWERED DOWN

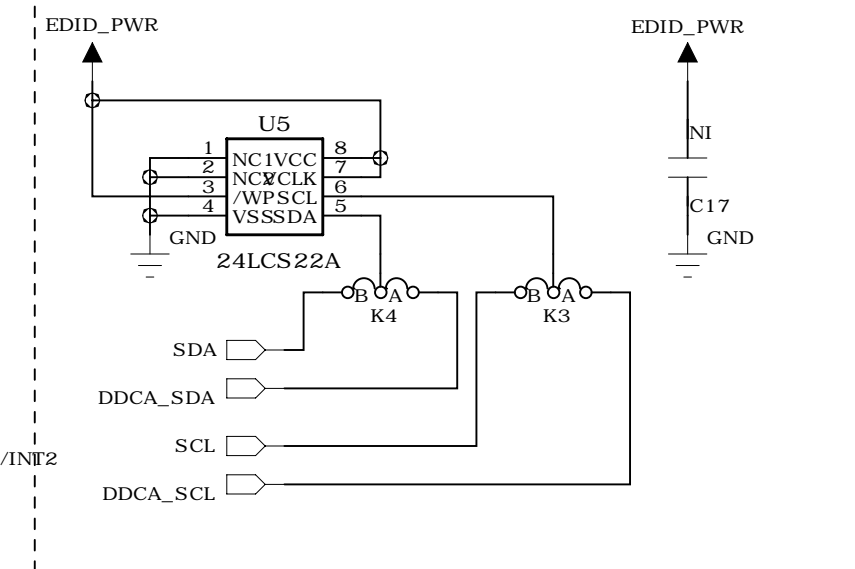


INSERT THIS ONLY WHEN NO EXT. EDID

HPD A LED



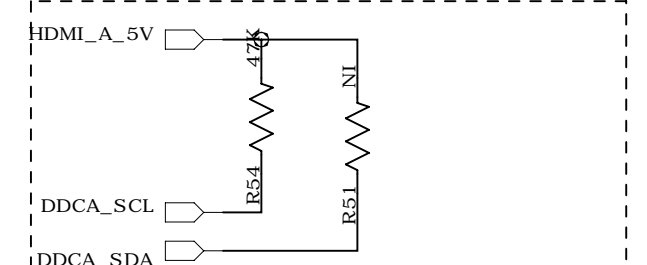
EXT EDID1



INSERT ONLY ONE: U14 OR Q4

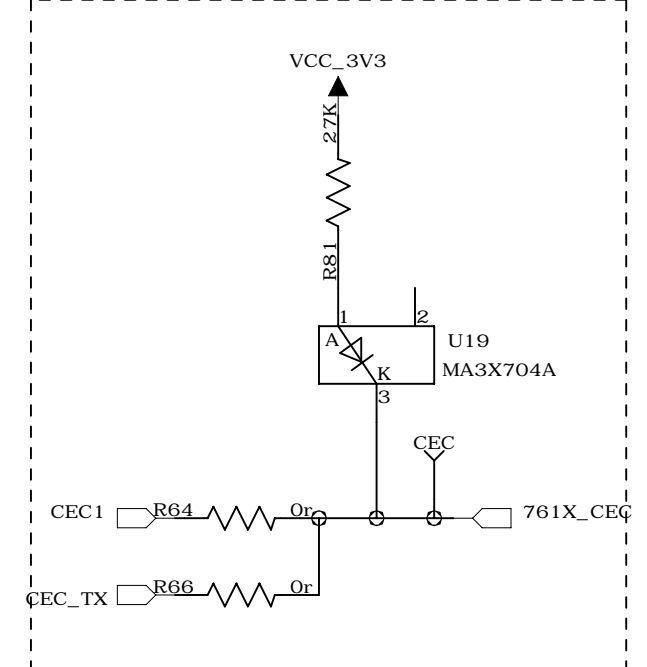
REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

DDC A Circuitry



DDC lines should be as short as possible to DUT. The 0 ohm resistors on these lines should be placed to minimise track length.

CEC To 168-Pin Connector



	R36	
	Q7	
OPTION:	Q6	U14
EXTERNAL EDID-		INSERT
NO EXTERNAL EDID		INSERT-

COMPANY: Analog Devices

TITLE: ATV Group

ADV7610 Eval Board:
HDMI Connector Sheet 1

DRAWN:	DATED: 05/30/12
CHECKED:	DATED:
QUALITY CONTROL:	DATED:
RELEASED:	DATED:

CODE:	SIZE:	DRAWING NO:	REV: O
SCALE:			SHEET: Df 9

6

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4

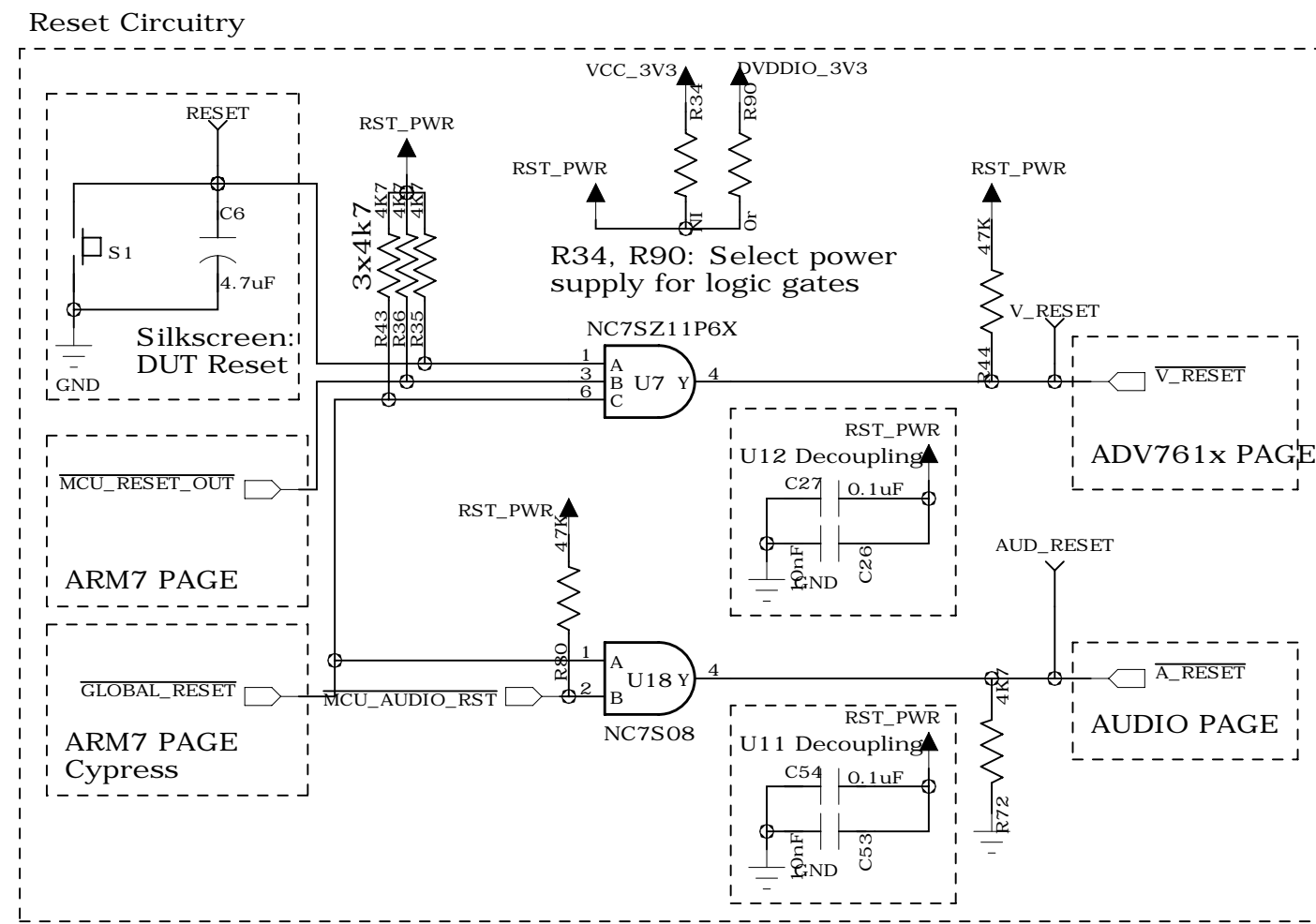
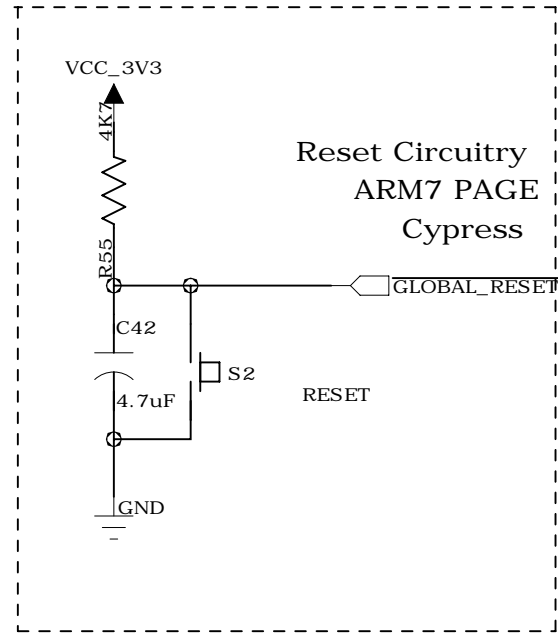
3

2

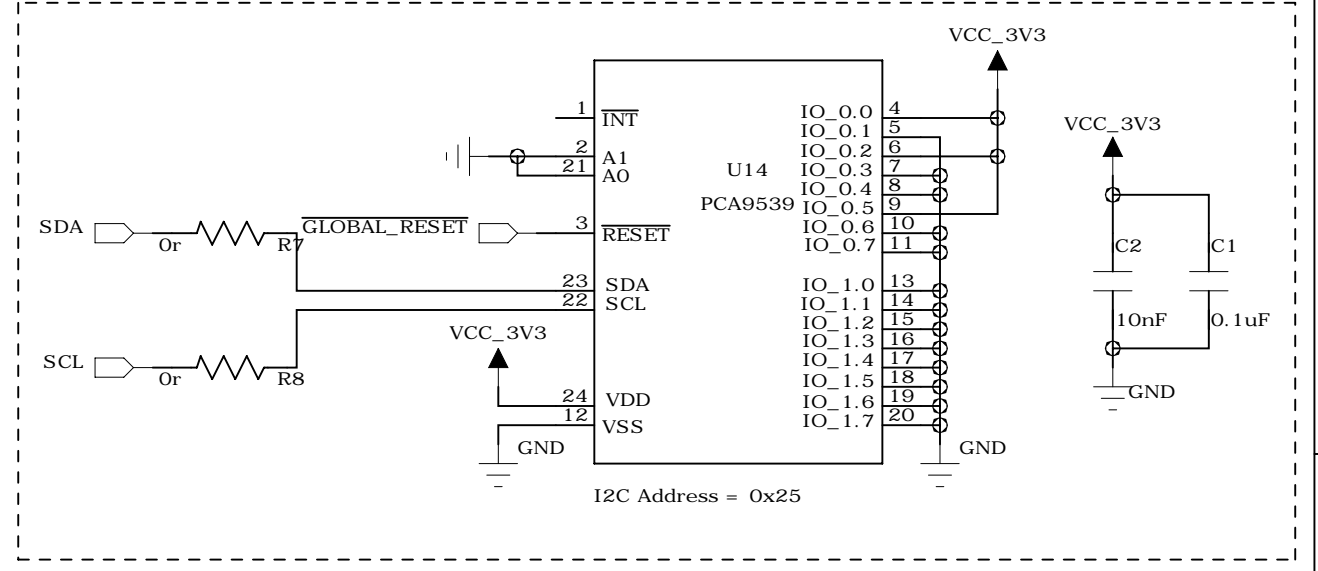
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REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

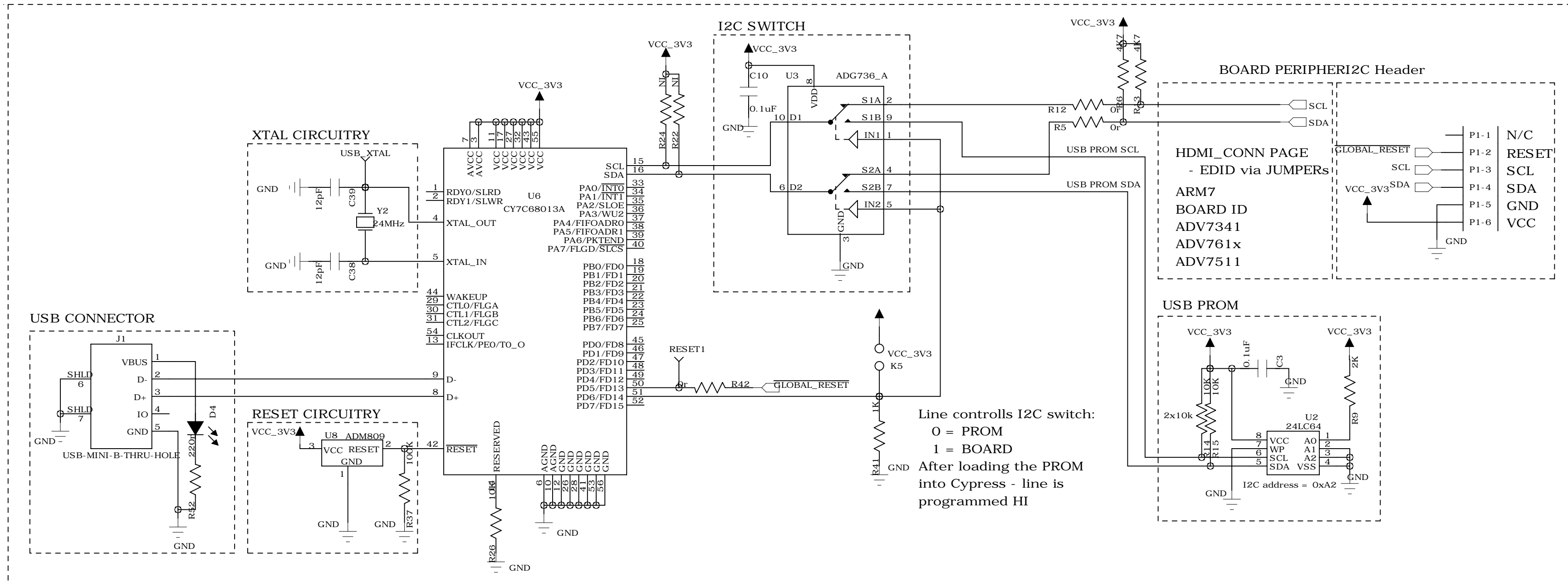
D Global Reset



Board Identification Bus Expander

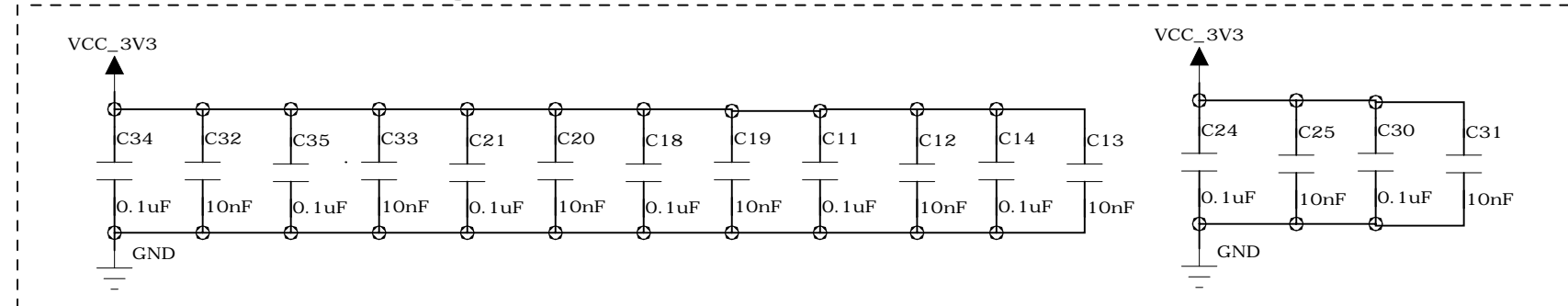


C



B

U19 Decoupling



A

COMPANY: Analog Devices			
TITLE: ATV Group			
ADV7610 Eval Board: USB+ RESET			
DRAWN:	DATED: 05/30/12	CODE:	SIZE:
CHECKED:	DATED:	DRAWING NO:	REV: O
QUALITY CONTROL:	DATED:	SCALE:	
RELEASED:	DATED:	SHEET: 2 OF 9	

6

5

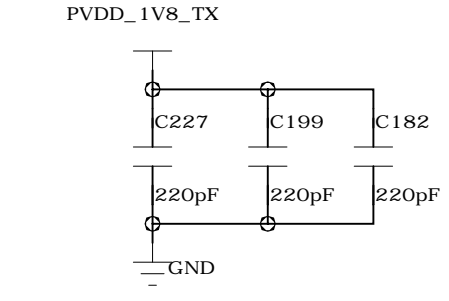
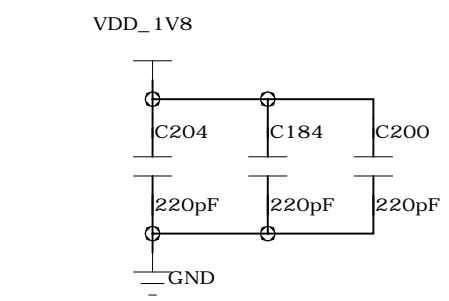
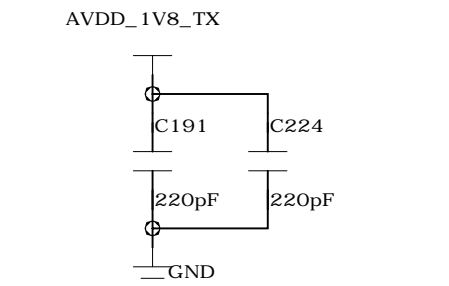
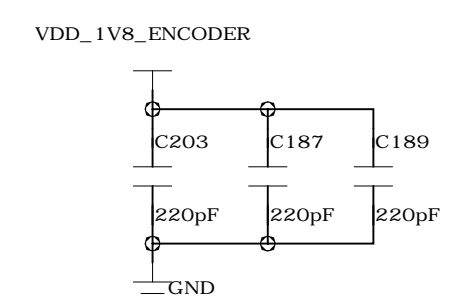
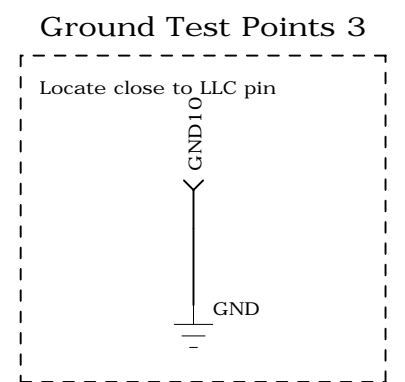
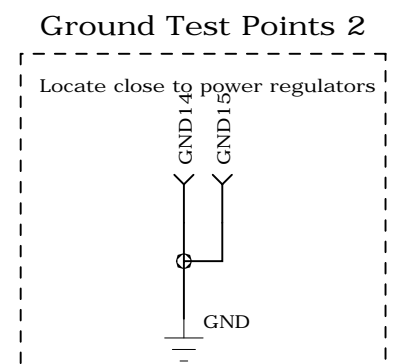
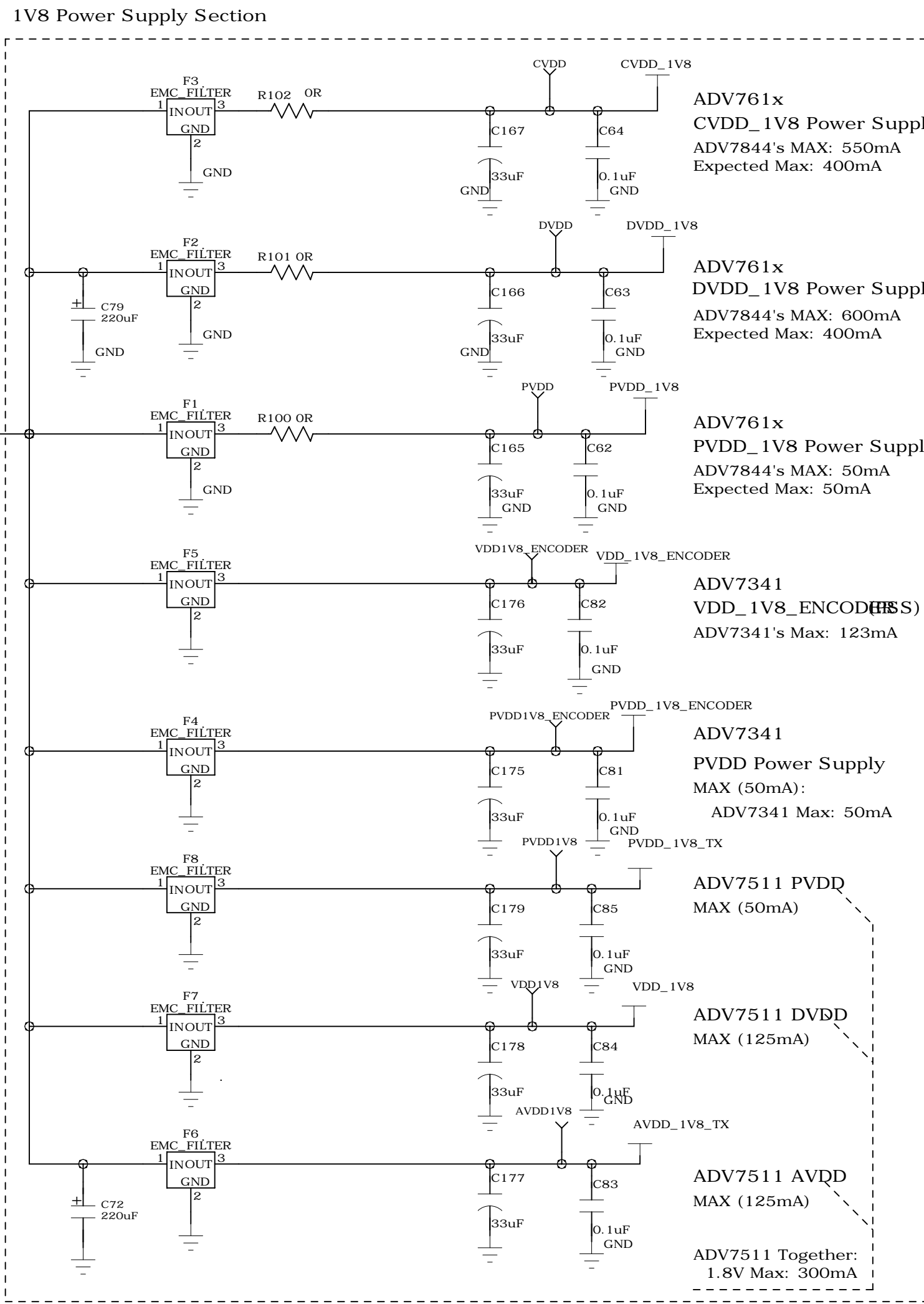
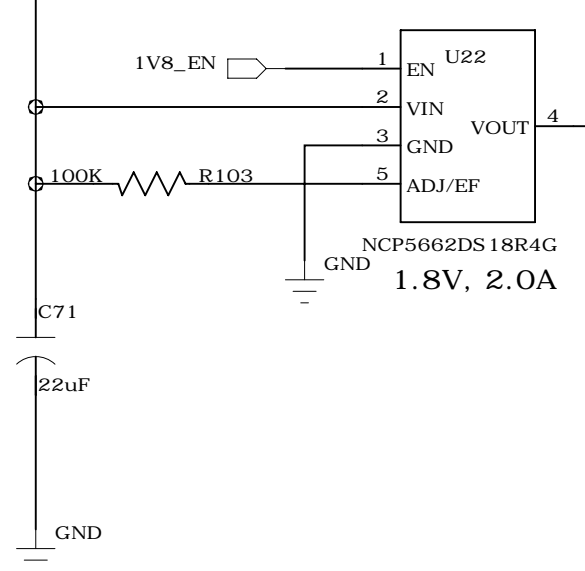
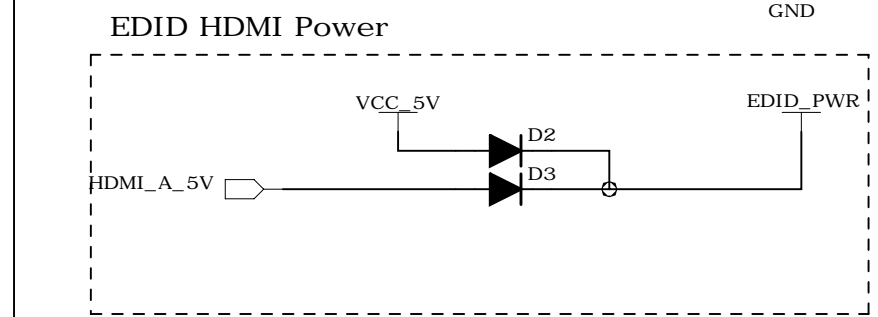
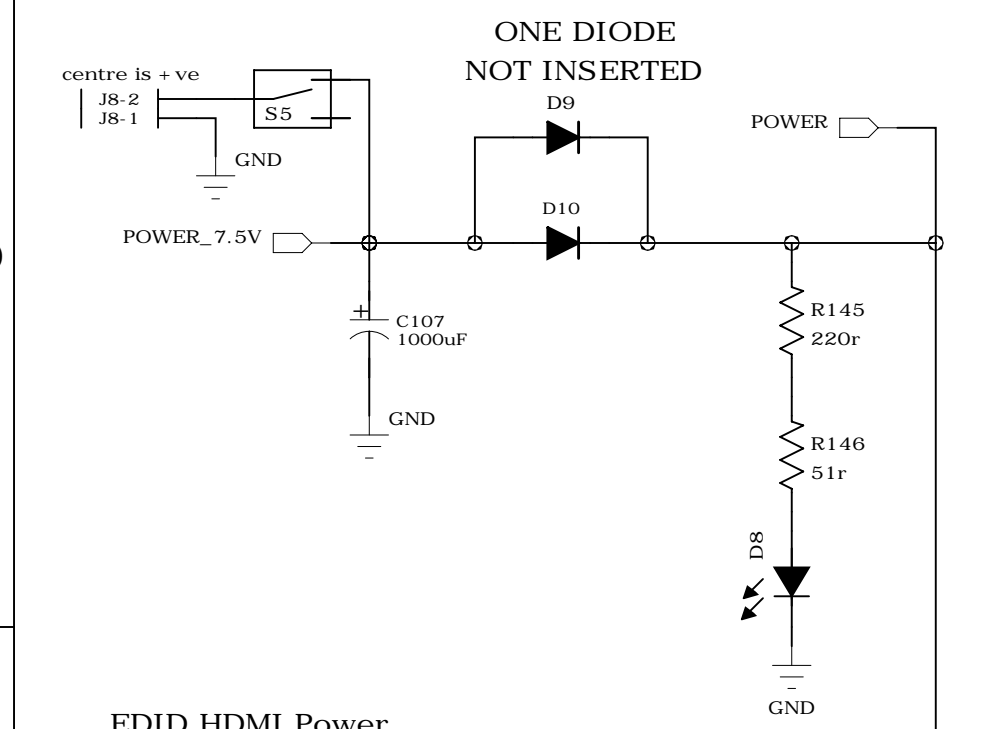
4

3

2

1

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



COMPANY: Analog Devices			
TITLE: ATV Group			
ADV7610 Eval Board: Board Power Supply Sheet			
CODE:	SIZE:	DRAWING NO:	REV: O
SCALE:			SHEET: 4 OF 8

DRAWN:	DATED: 05/30/12
CHECKED:	DATED:
QUALITY CONTROL:	DATED:
RELEASED:	DATED:

D

C

B

A

D

C

B

A

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D

C

B

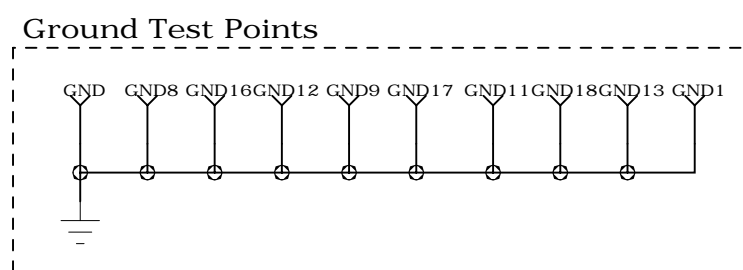
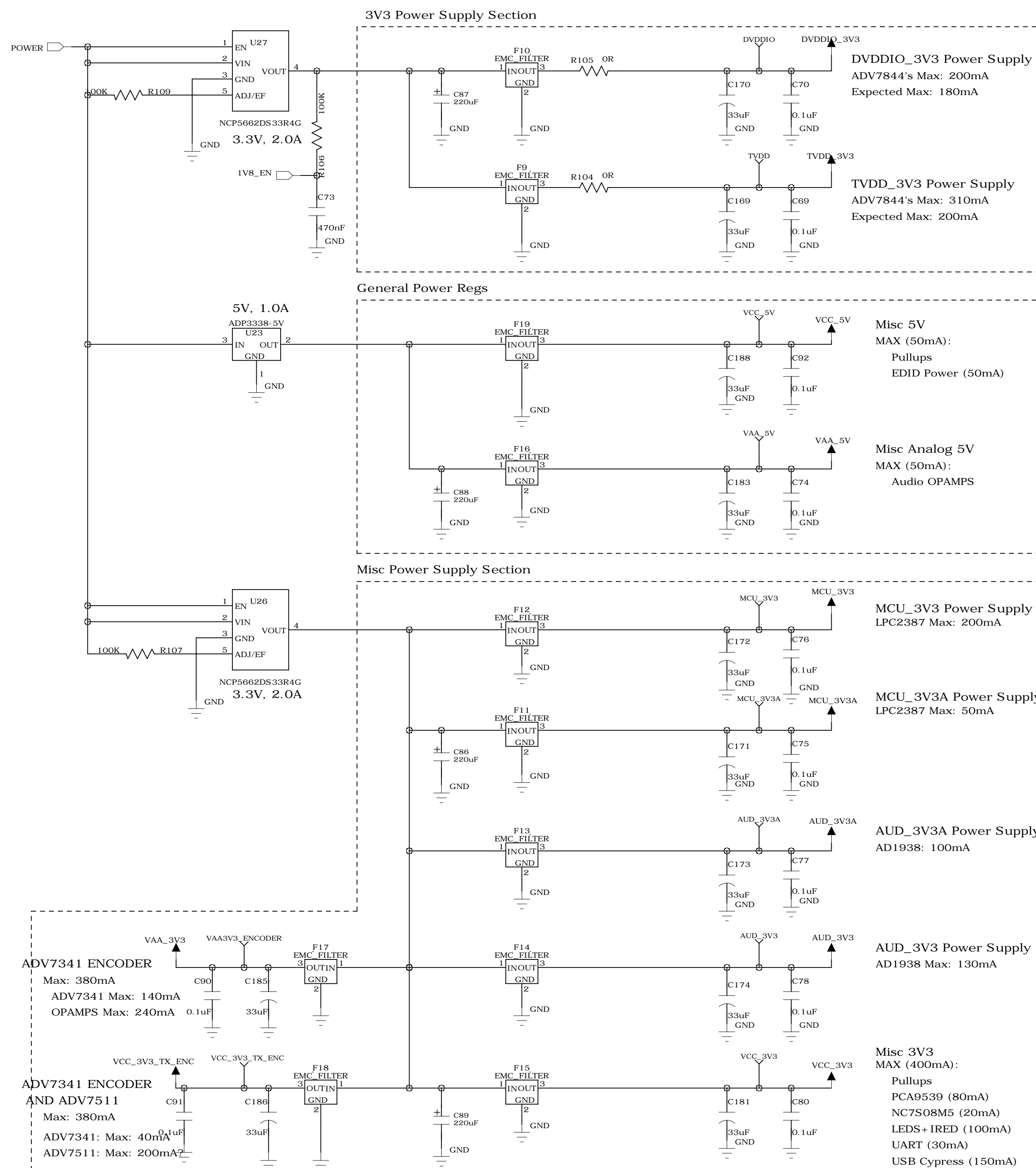
A

D

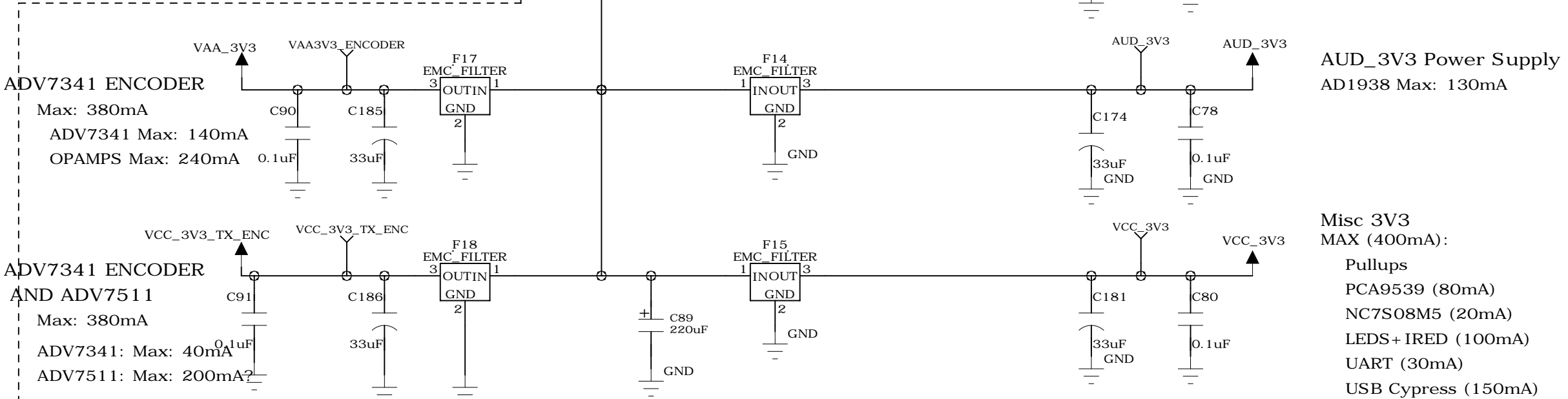
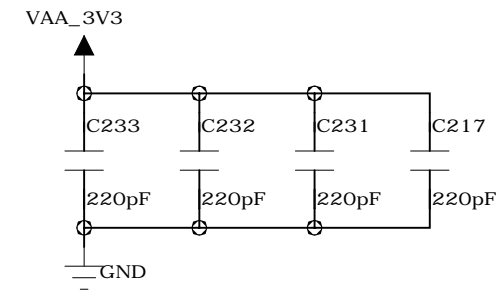
C

B

A



REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



COMPANY: Analog Devices			
TITLE: ATV Group ADV7610 Eval Board: Board Power Supply Sheet			
CODE:	SIZE:	DRAWING NO:	REV:
SCALE:	SHEET: 5 OF 9		

DRAWN:	DATED: 05/30/12
CHECKED:	DATED:
QUALITY CONTROL:	DATED:
RELEASED:	DATED:

6

5

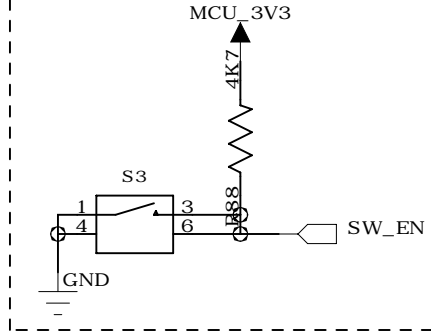
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3

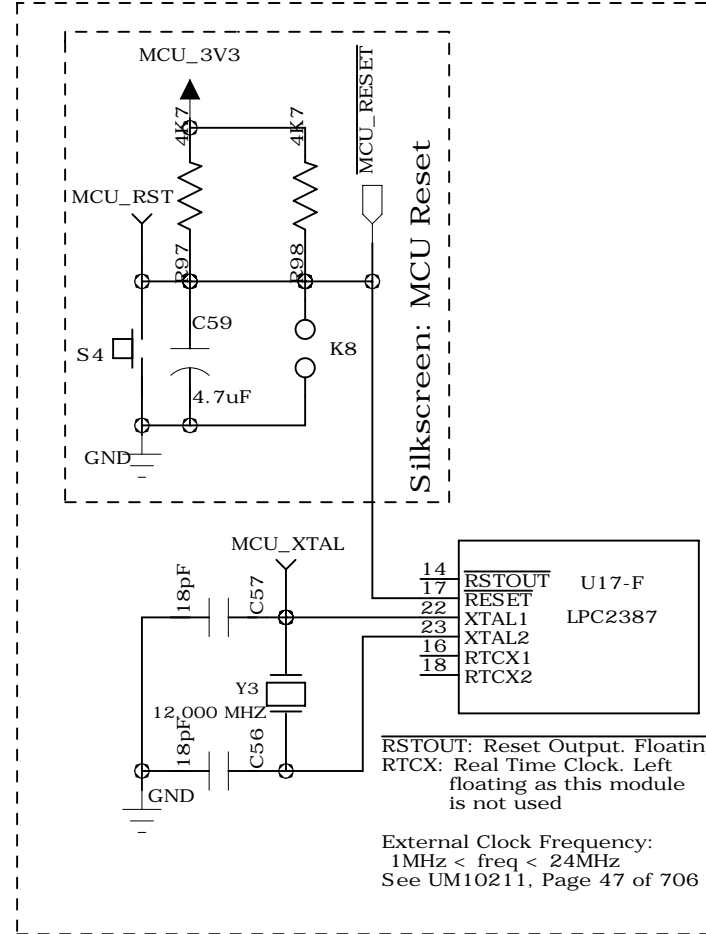
2

1

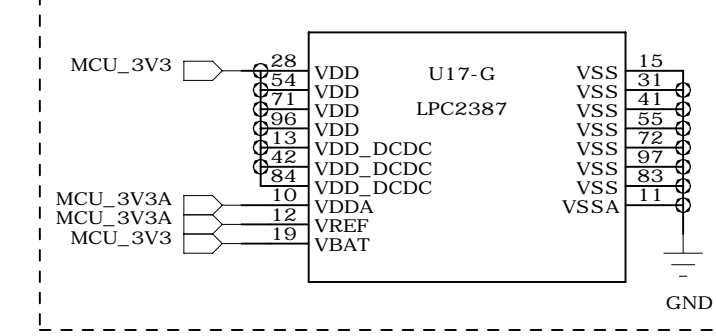
SW Enable Switch



MCU - XTAL + RESET

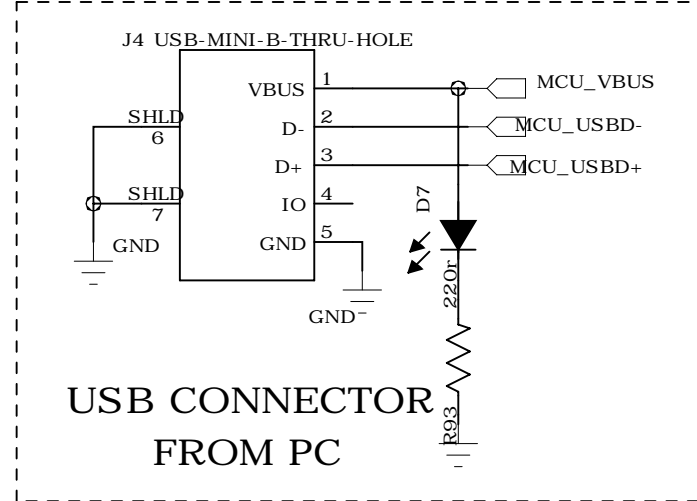


MCU - Power

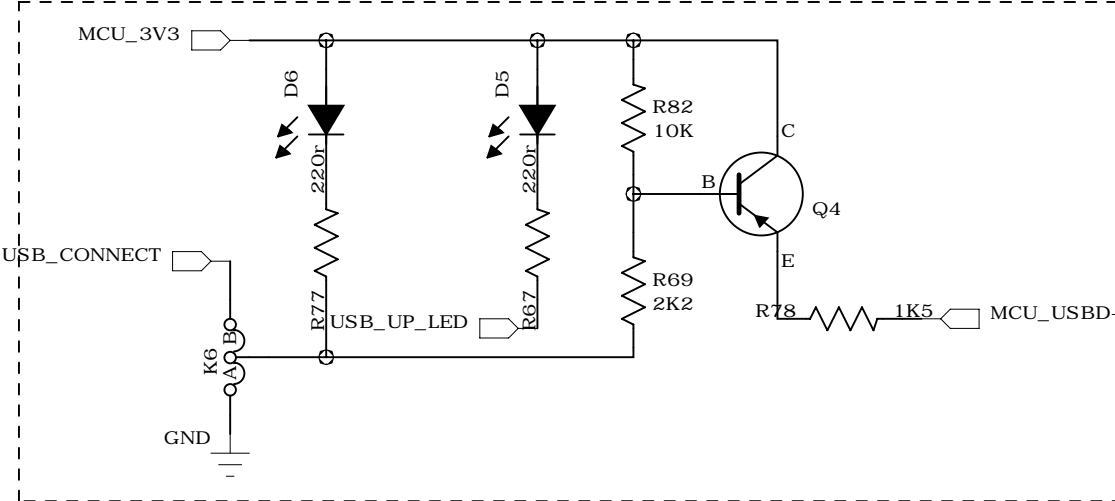


REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

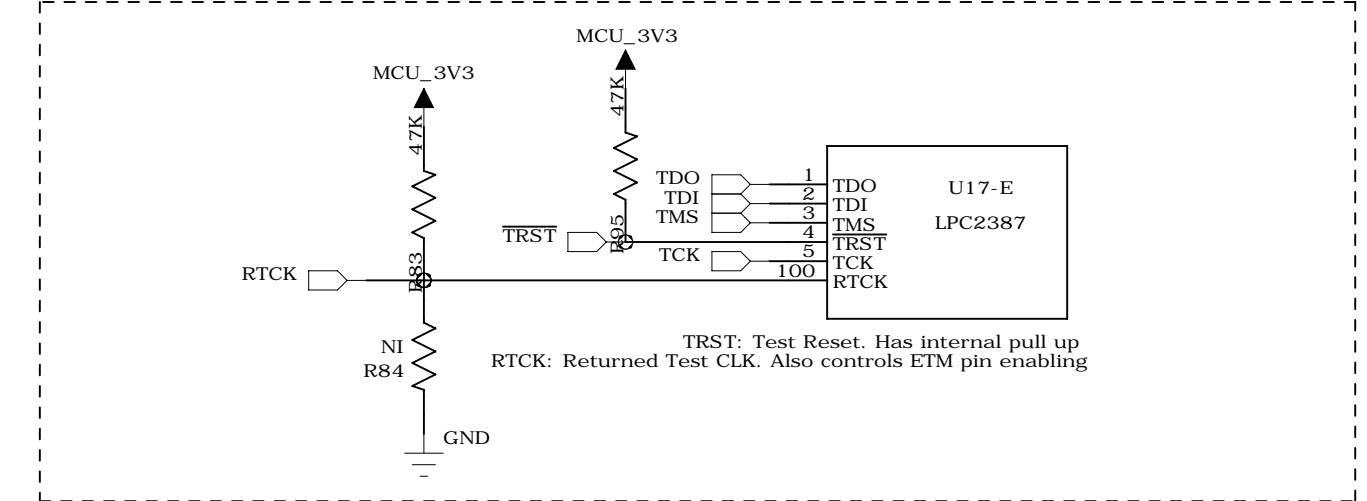
ARM7 USB Interface



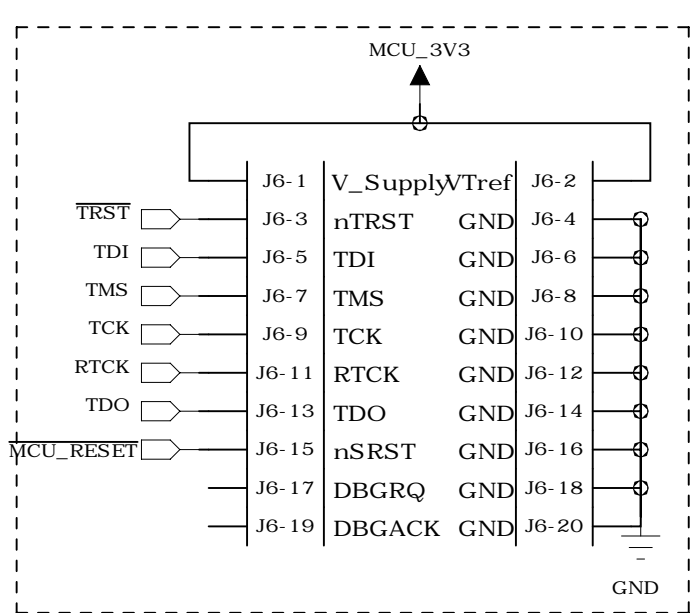
Soft Connect Circuitry



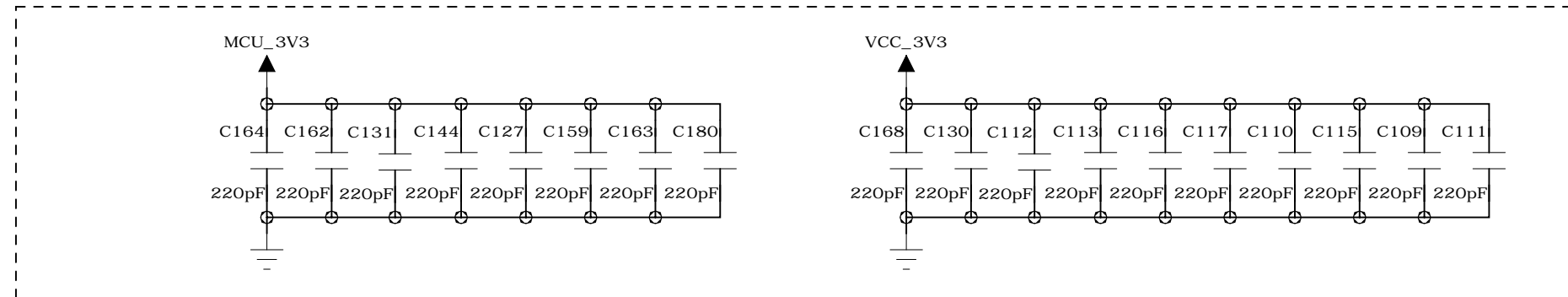
MCU - JTAG



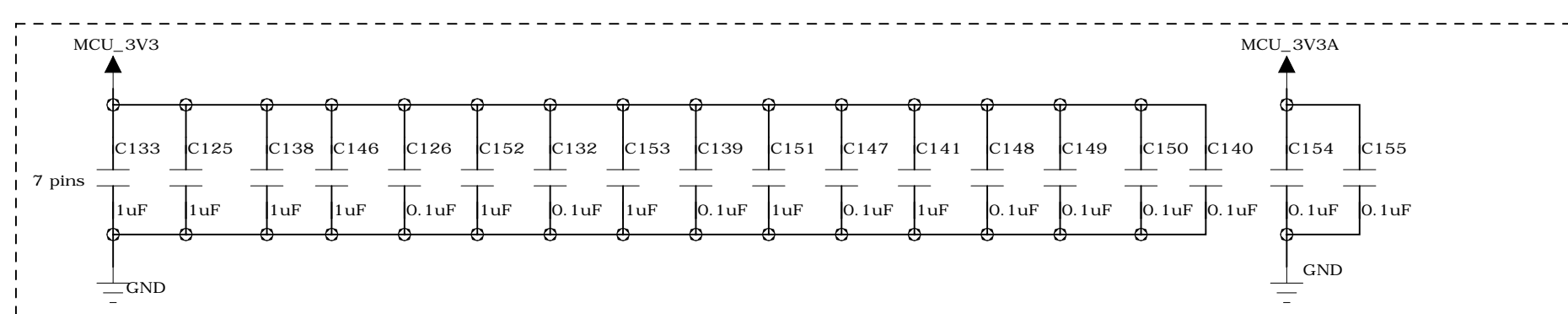
JTAG Interface - 20 Pin Interface



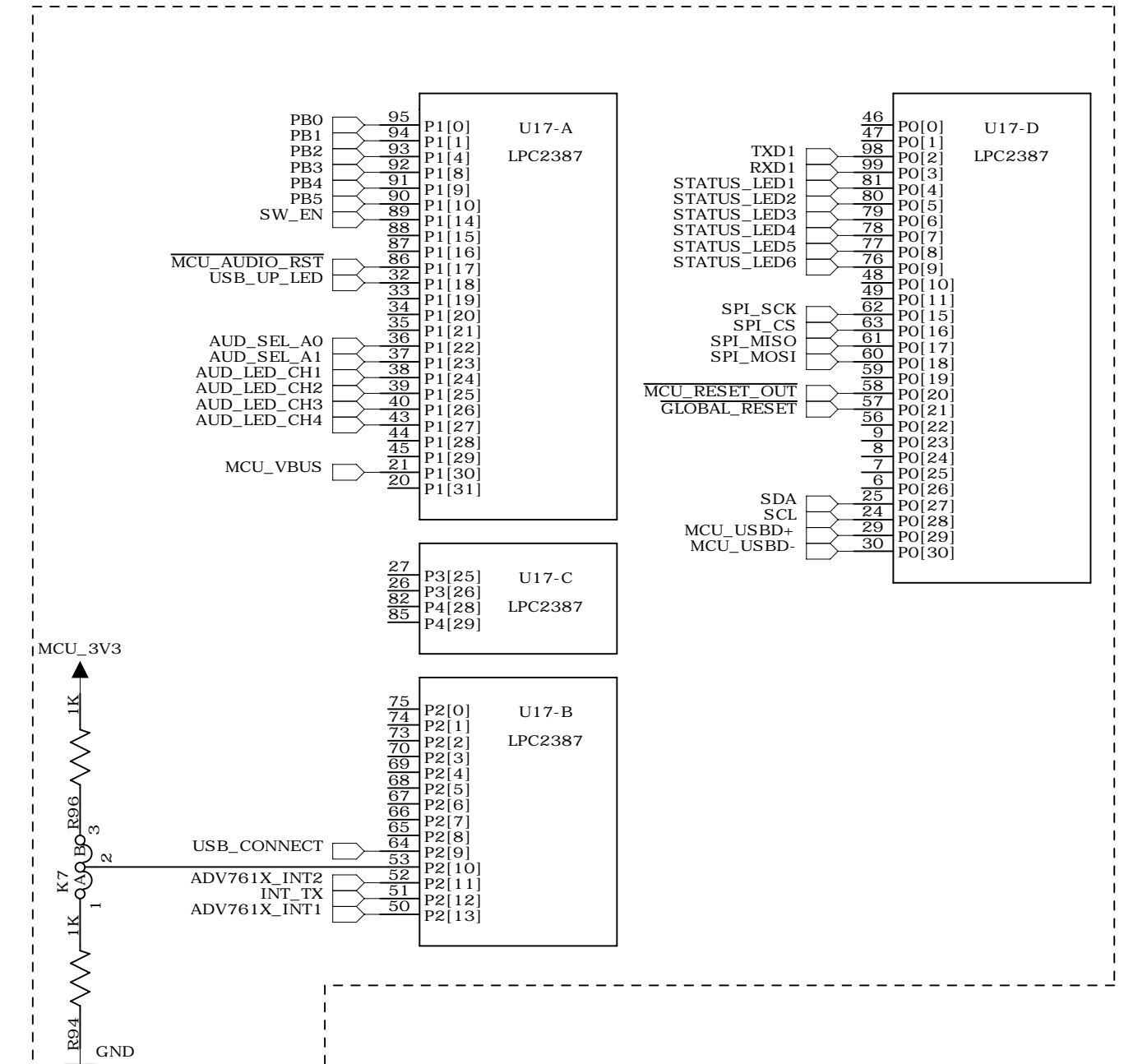
Planar Caps



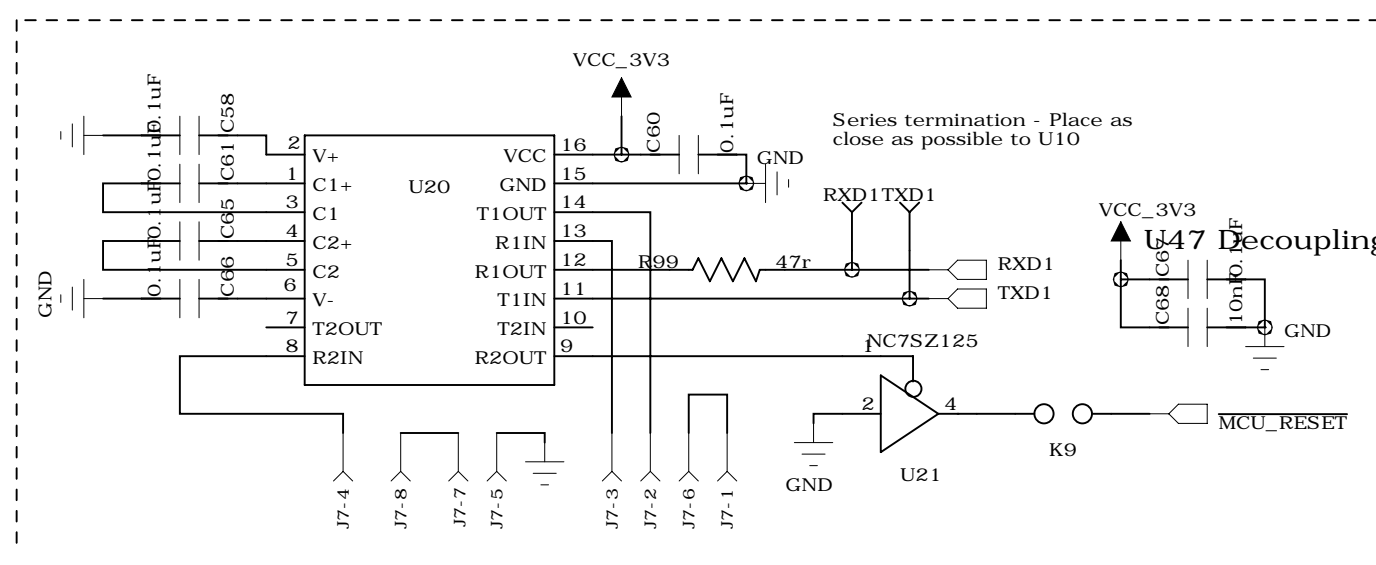
MCU Decoupling



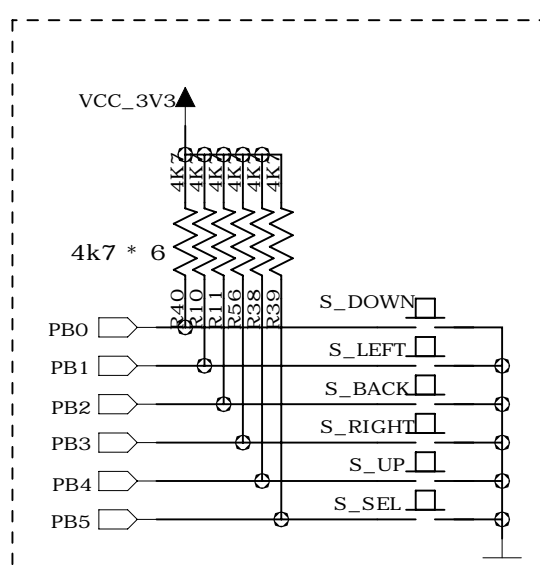
MCU - GPIOs + TRACE



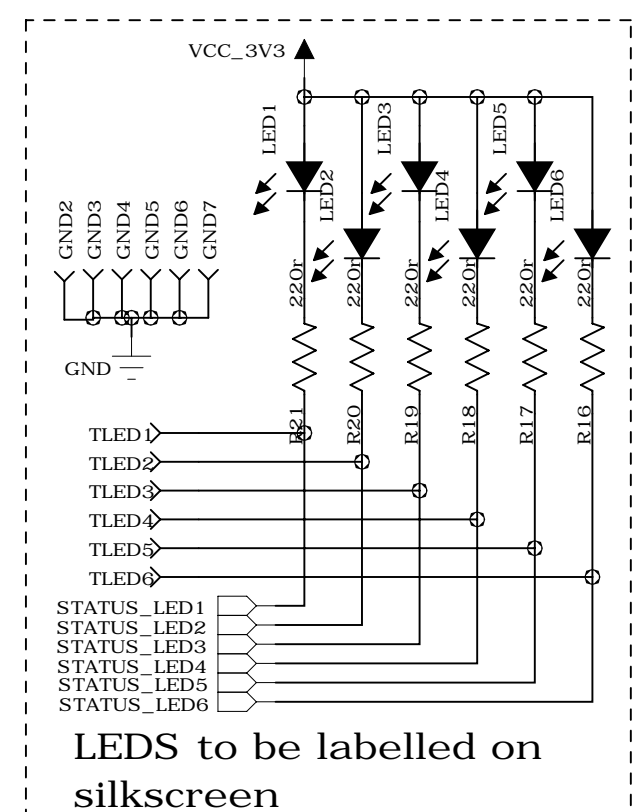
UART Interface



Push Buttons



LEDs



DRAWN:	DATED:
CHECKED:	DATED:
QUALITY CONTROL:	DATED:
RELEASED:	DATED:

COMPANY: Analog Devices			
TITLE: ATV Group			
ADV7610 Eval Board:			
ARM7 Sheet			
CODE:	SIZE:	DRAWING NO:	REV:
SCALE:	SHEET: 6 OF 9		

6

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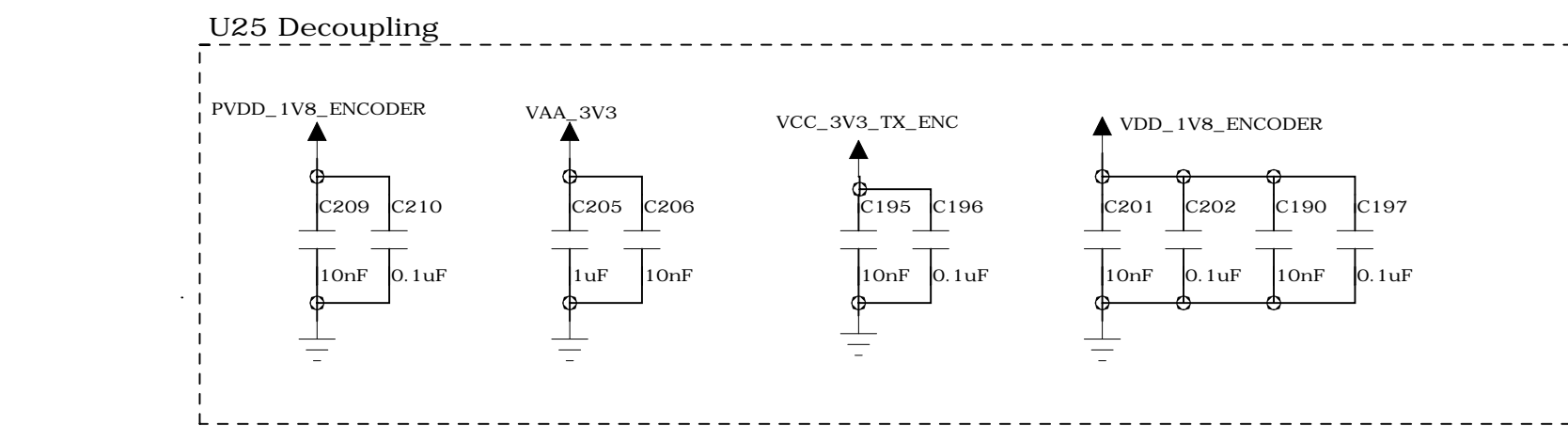
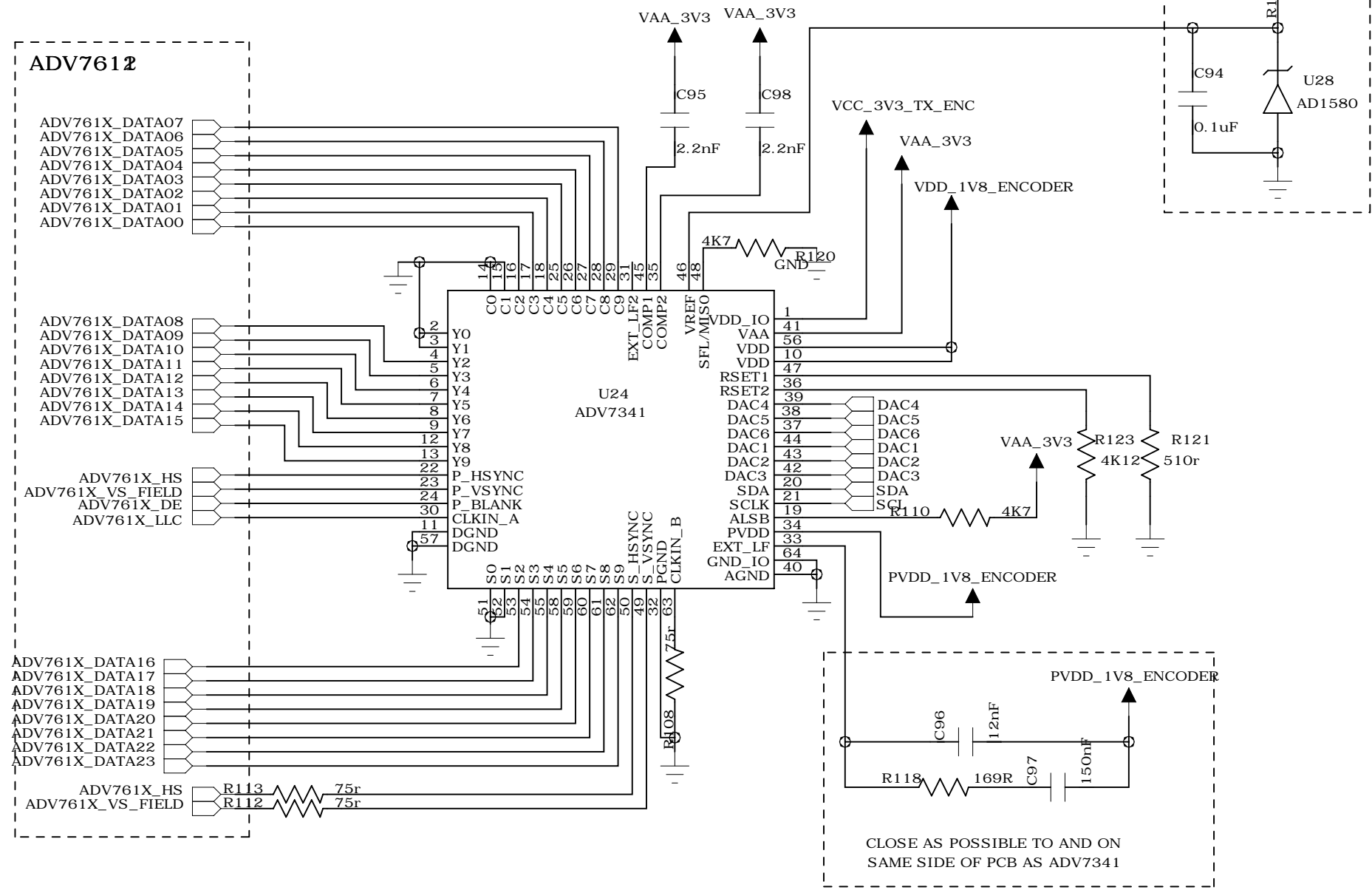
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REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

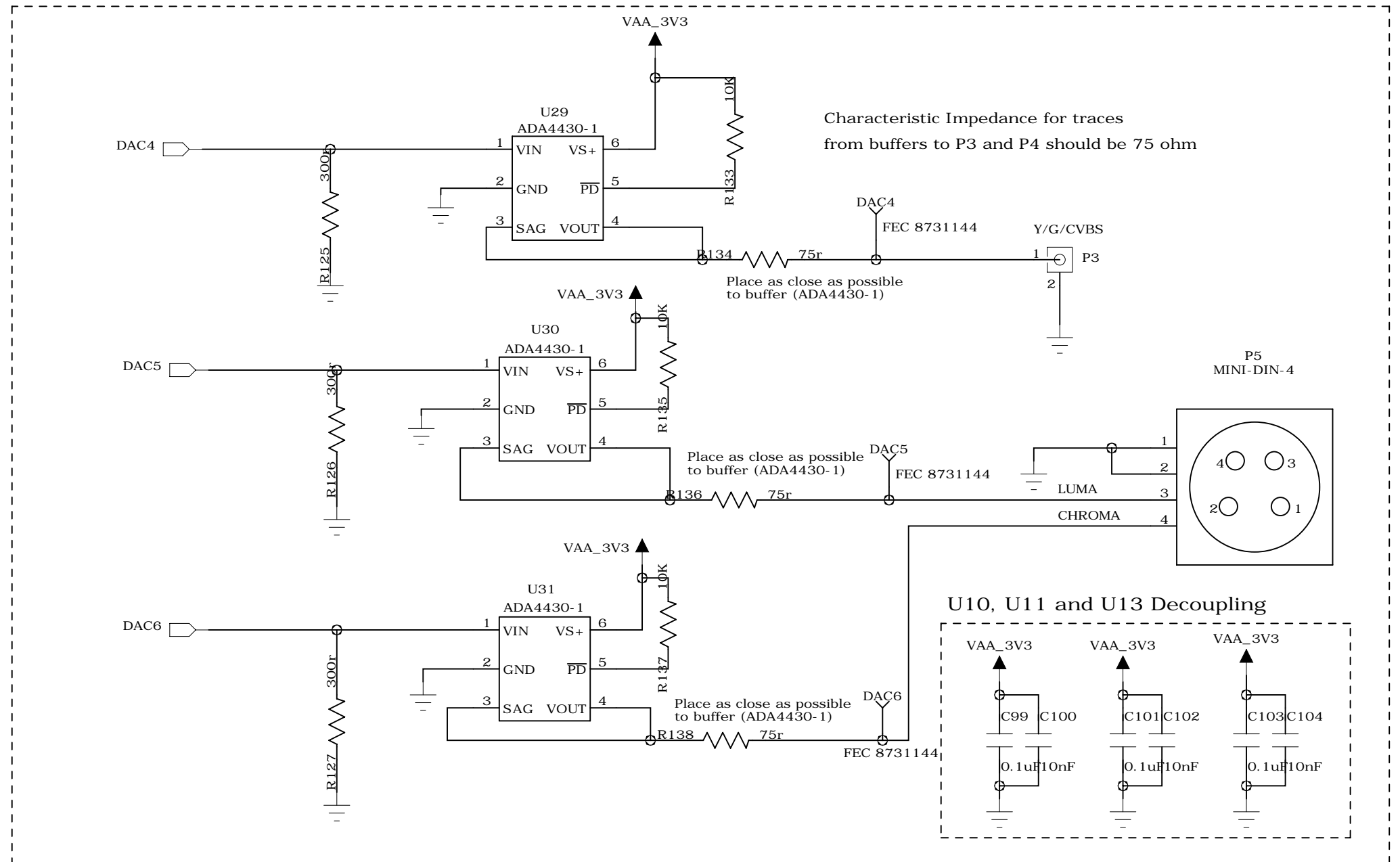
NORMAL MODE:

RGB | ADV7341 YPrPb ADV7341
 R[9:0] = S[9:0] Cr[9:0] = S[9:0]
 G[9:0] = Y[9:0] Y[9:0] = Y[9:0]
 B[9:0] = C[9:0] Cb[9:0] = C[9:0]

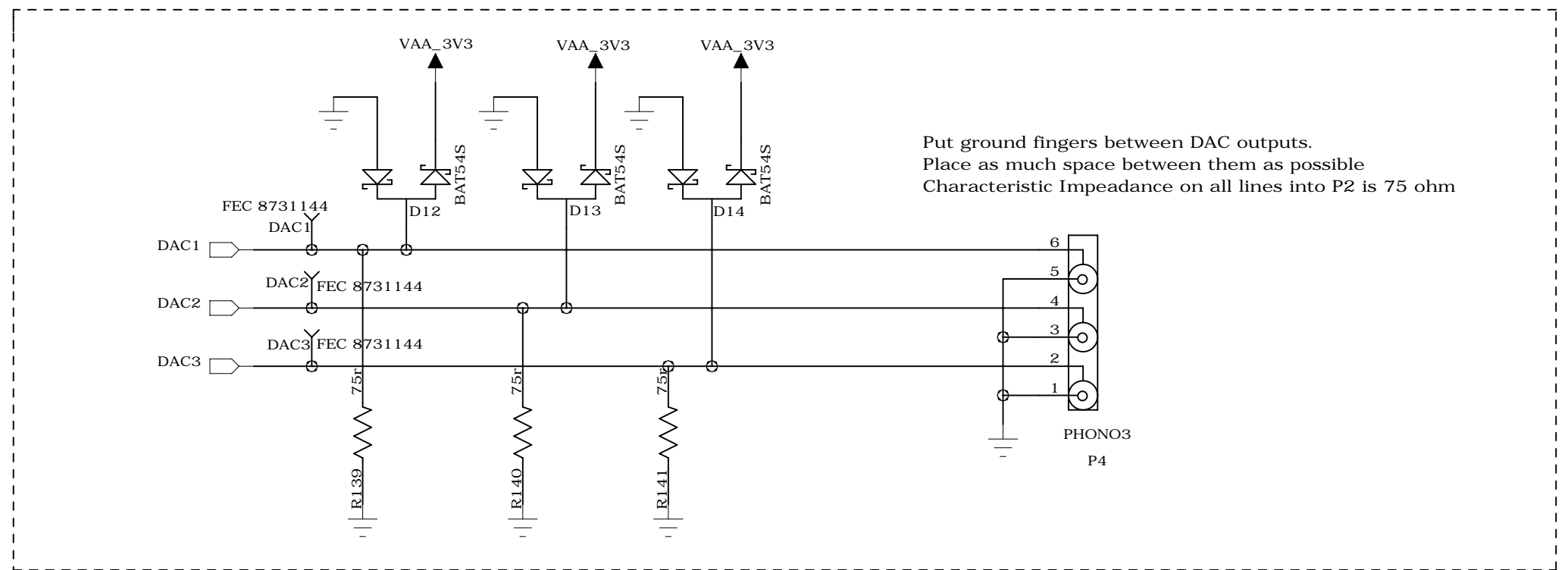
RGB | ADV7611 YPrPb ADV7611
 R[7:0] = P[23:16] Cr[7:0] = P[23:16]
 G[7:0] = P[15:8] Y[7:0] = P[15:8]
 B[7:0] = P[7:0] Cb[7:0] = P[7:0]



SD_FILTERS



HD_FILTERS



COMPANY: Analog Devices			
TITLE: ATV Group ADV7610 Eval Board: Encoder Sheet			
CODE:	SIZE:	DRAWING NO:	REV:
			O
SCALE:			SHEET: 7 OF 9

DRAWN:	DATED: 05/30/12
CHECKED:	DATED:
QUALITY CONTROL:	DATED:
RELEASED:	DATED:

6

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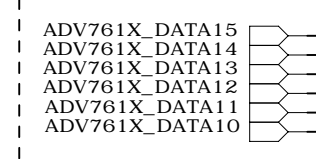
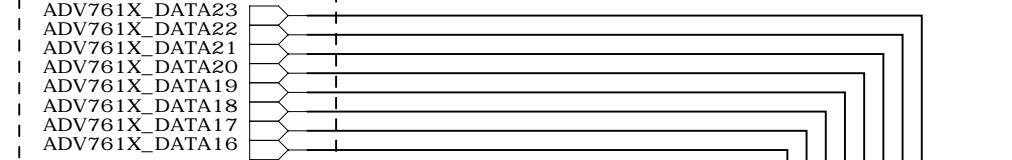
3

2

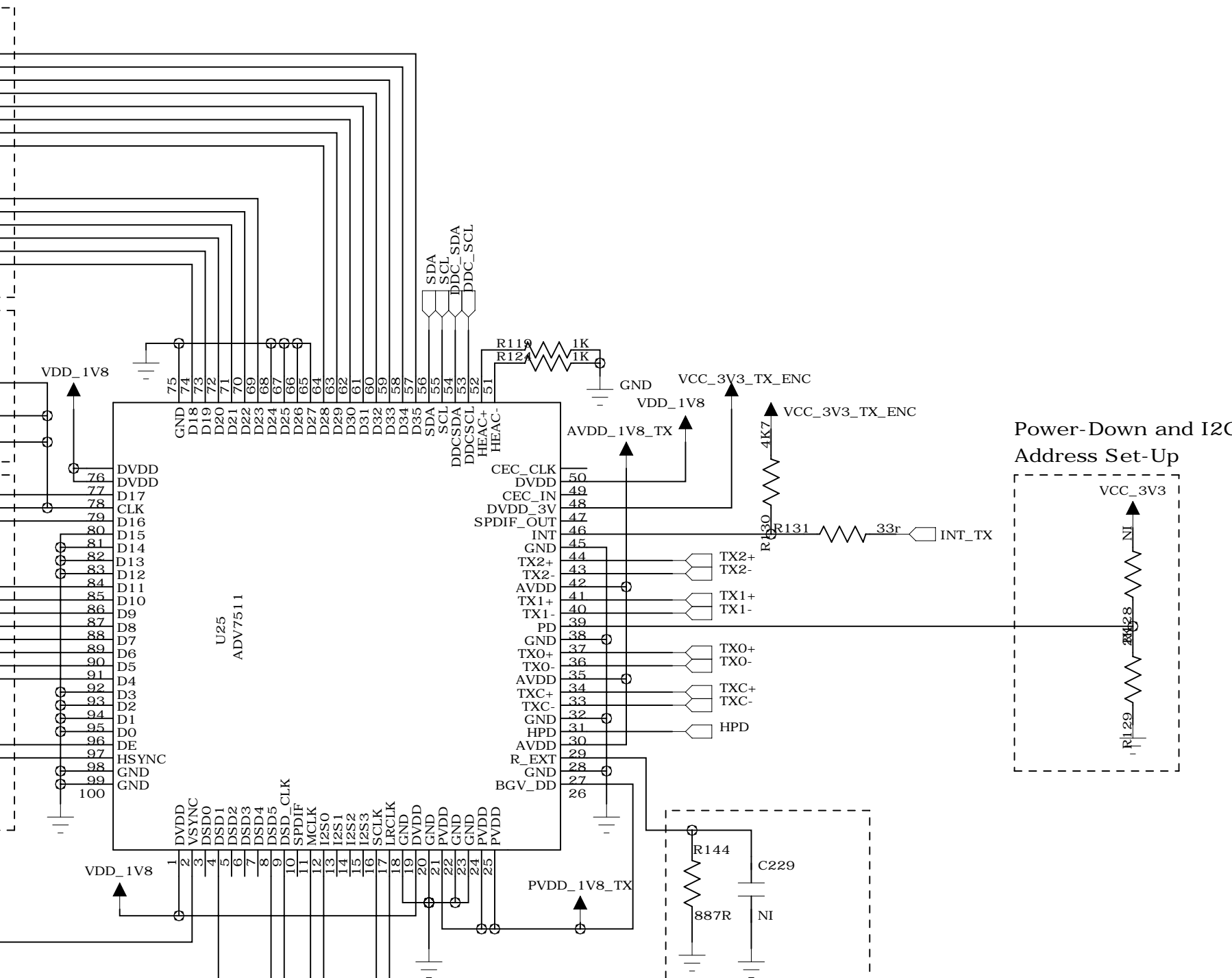
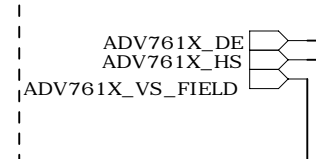
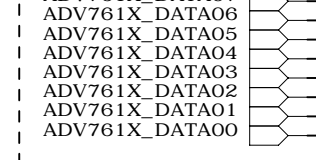
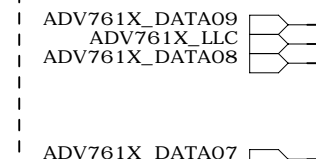
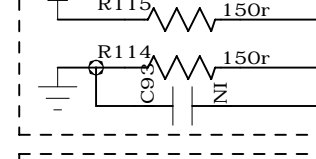
1

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

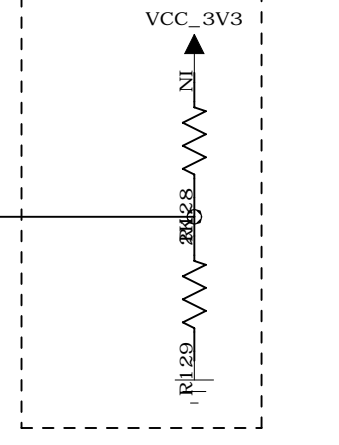
ADV761x PAGE



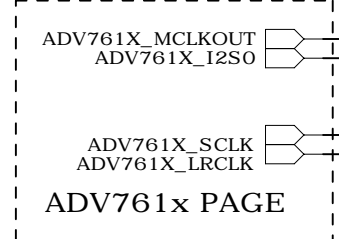
At the end of the track
VCC_3V3



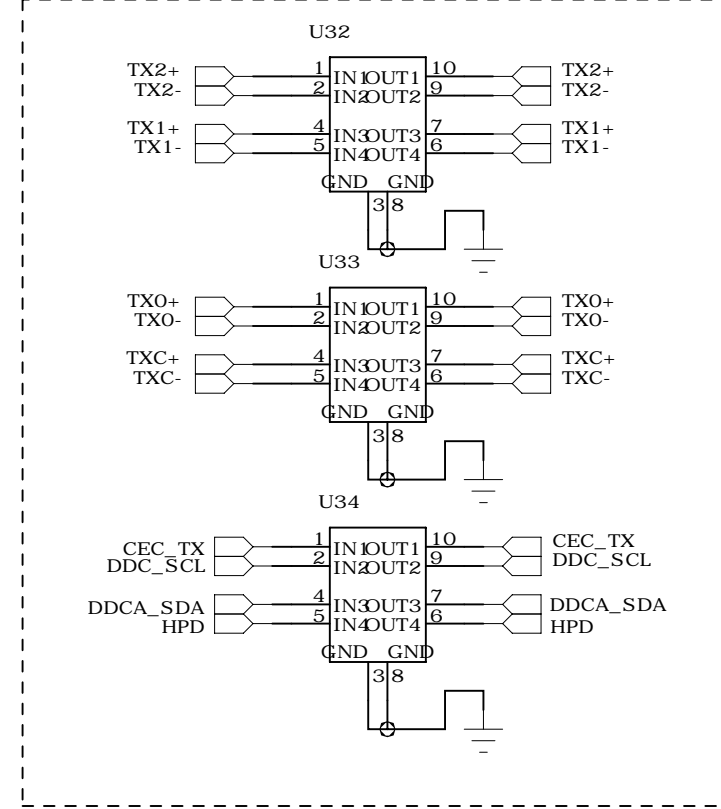
Power-Down and I2C Address Set-Up



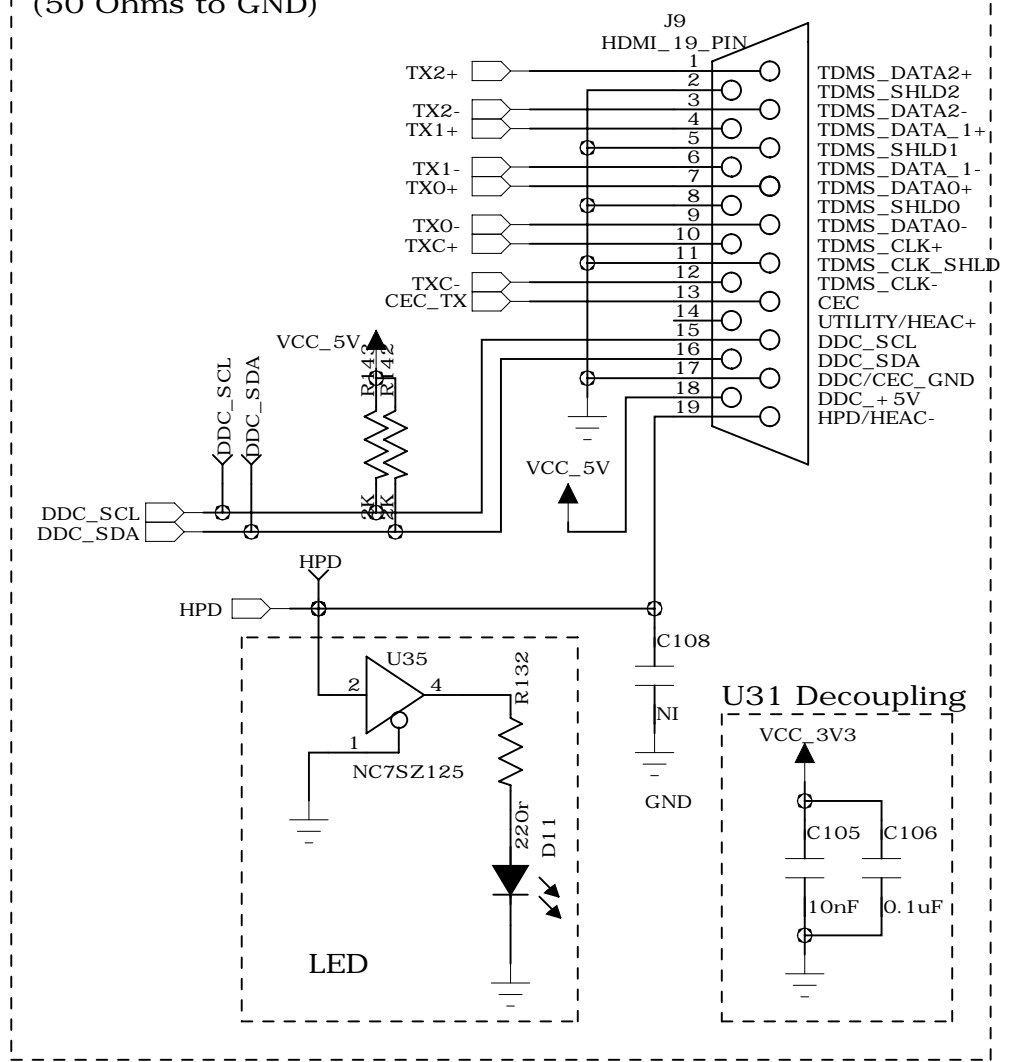
Place R42 and C71 as close as possible to Pin 28 on the underside of PCB. Keep this away from any switching signals.



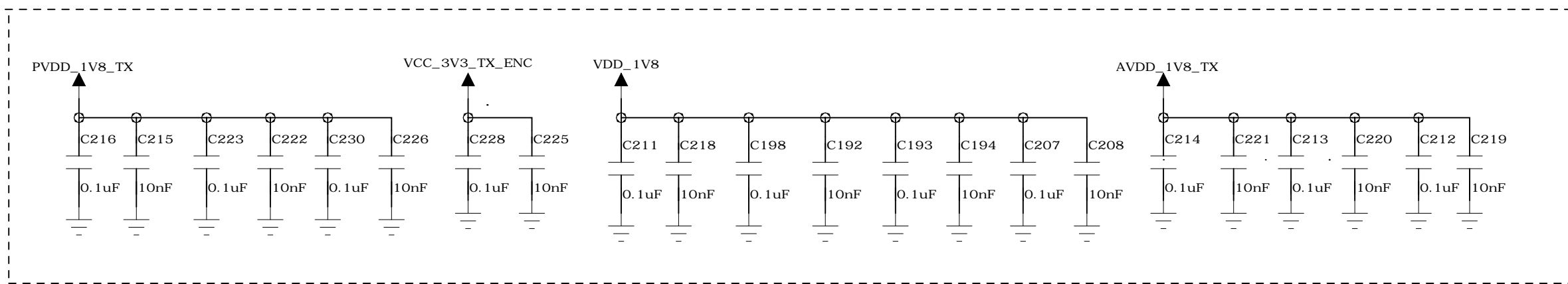
ESD Suppression



TXC, TX0, TX1 and TX2 pairs should be routed as 100 Ohms differential pairs (50 Ohms to GND)



U30 Decoupling



COMPANY: Analog Devices			
TITLE: ATV Group			
ADV7610 Eval Board: ADV7511 Sheet			
CODE:	SIZE:	DRAWING NO:	REV: O
SCALE:			SHEET: 8 OF 9

DRAWN:	DATED: 05/30/12
CHECKED:	DATED:
QUALITY CONTROL:	DATED:
RELEASED:	DATED:

6

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1

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

D

D

C

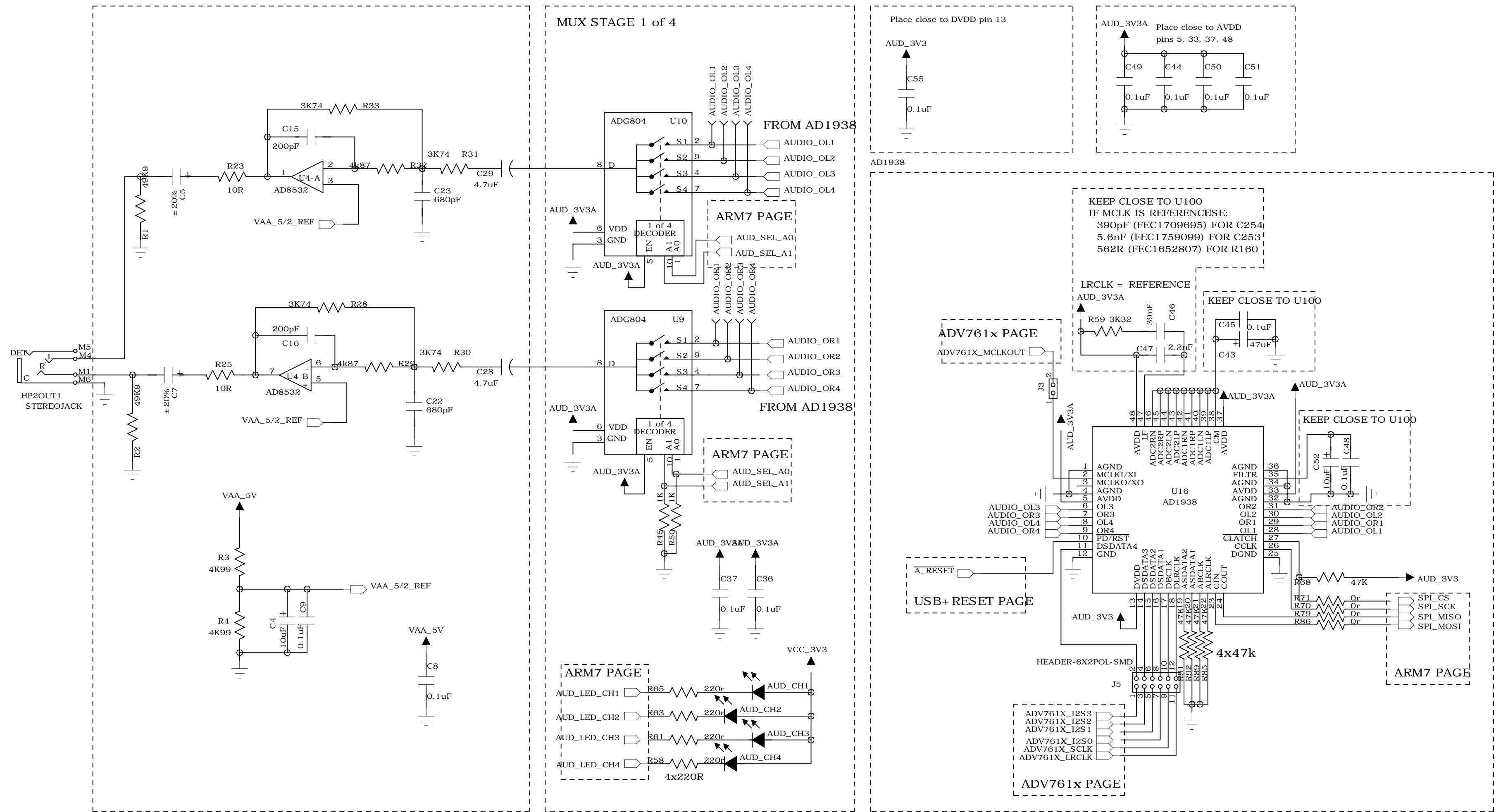
C

B

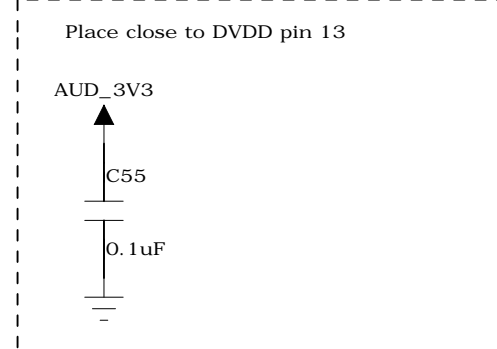
B

A

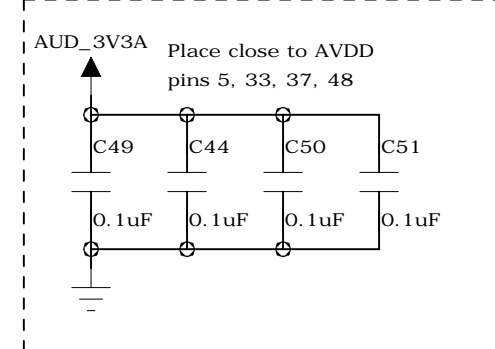
A



Decoupling caps



Decoupling caps



KEEP CLOSE TO U100
IF MCLK IS REFERENCE:
390pF (FEC1709695) FOR C254
5.6nF (FEC1759099) FOR C253
562R (FEC1652807) FOR R160

LRCLK = REFERENCE

KEEP CLOSE TO U100

ADV761x PAGE

ADV761X_MCLKOUT

USB+ RESET PAGE

ADV761x PAGE

COMPANY: Analog Devices

TITLE: ATV Group
ADV7610 Eval Board:
Audio Sheet

DRAWN:	DATED: 05/30/12
CHECKED:	DATED:
QUALITY CONTROL:	DATED:
RELEASED:	DATED:

CODE:	SIZE:	DRAWING NO:	REV: O
SCALE:			SHEET: 9 OF 9