

# OMAP-L138/C6748 LC Dev Kit

VER/REV #	DESCRIPTION	PREPARED BY	RELEASE DATE	APPROVED BY
A	Initial Release	CCO	17-Oct-2011	TI
A1	BOOT PIN PULLUPS CHNAGED TO 5.6K. DNI PARTS UPDATED	CCO	15-NOV-2011	TI
A2	Issue with U27 resolved. Added D8 in place of R269. Added a 10K pullup to U2-3.	CCO	04-DEC-2011	TI
A3	JTAG circuit changed	CCO	14-DEC-2011	TI
A4	LAN8710A symbol corrected. Added pullups.	CCO	16-DEC-2011	TI

PAGE #	PAGE TITLE	PAGE DESCRIPTION
1	TITLE	TITLE OF THE SCHEMATICS
2	TABLE OF CONTENTS	TABLE OF CONTENTS
3	BLOCK DIAGRAM	TOP LEVEL BLOCK DIAGRAM OF THE SCHEMATICS
4	POWER & RESET	COMPLETE POWER SUPPLY CIRCUITRY ON BOARD AND REST CKT
5	DSP POWER AND RS232 IF	DSP POWER PART AND RS232 INTERFACE
6	DSP MEMORY IF & JTAG	DDR-2, FLASH INTERFACE TO THE DSP & JTAG CIRCUITARY
7	DSP PHERIPHERALS & VIDO DAC	DSP PHERIPHERALS & VIDO DAC CIRCUITARY
8	DDR-2 & FLASH	DDR-2 & FLASH DEVICES FOR DSP
9	VIDEO DIGITAL DECODER	VIDEO DIGITAL DECODER CIRCUITARY
10	AUDIO	AUDIO INTERFACE CIRCUITARY
11	ETHERNET	ETHERNET MII INTERFACE
12	EXPANSION CONNECTORS	EXPANSION CONNECTORS FOR PROVIDING EXTERNAL INTERFACE

5

4

3

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1

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D

C

C

B

B

A

A

<b>Texas Instruments, Inc.</b>			
Title			
<b>OMAP-L138/C6748 LC Dev Kit</b>			
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C	<Doc>	A4	
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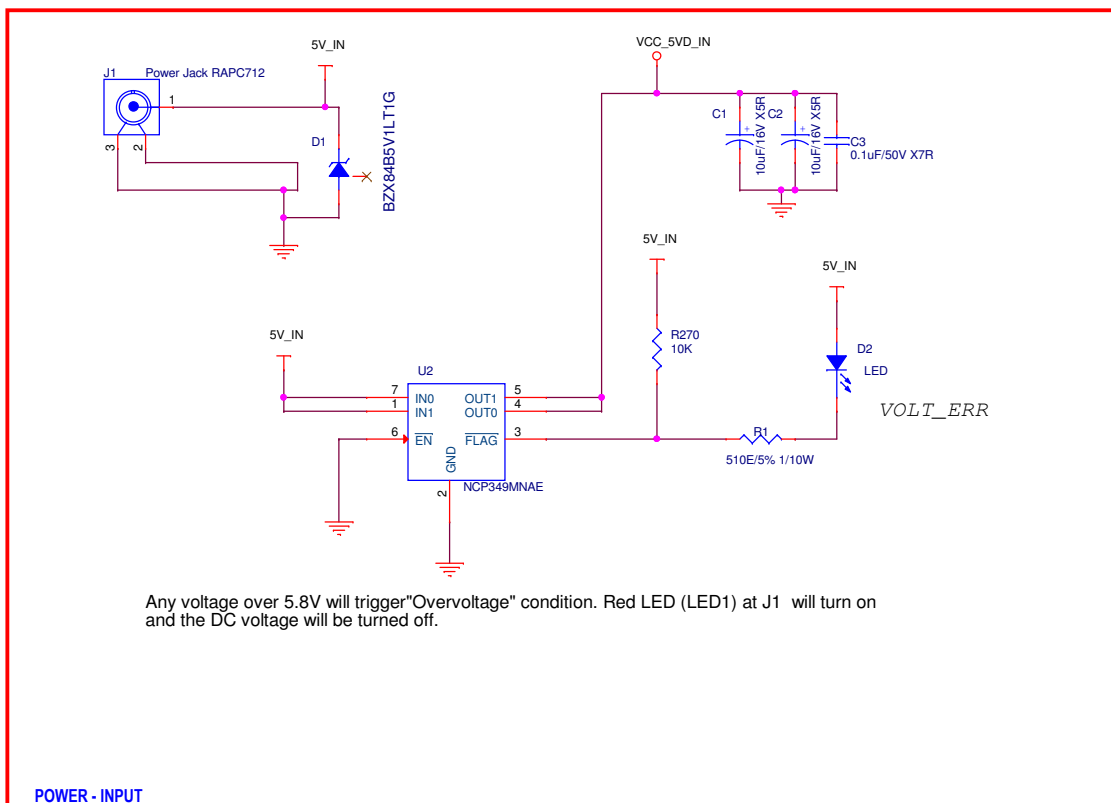
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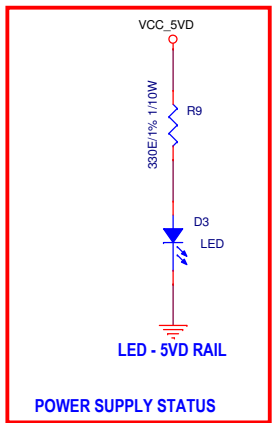
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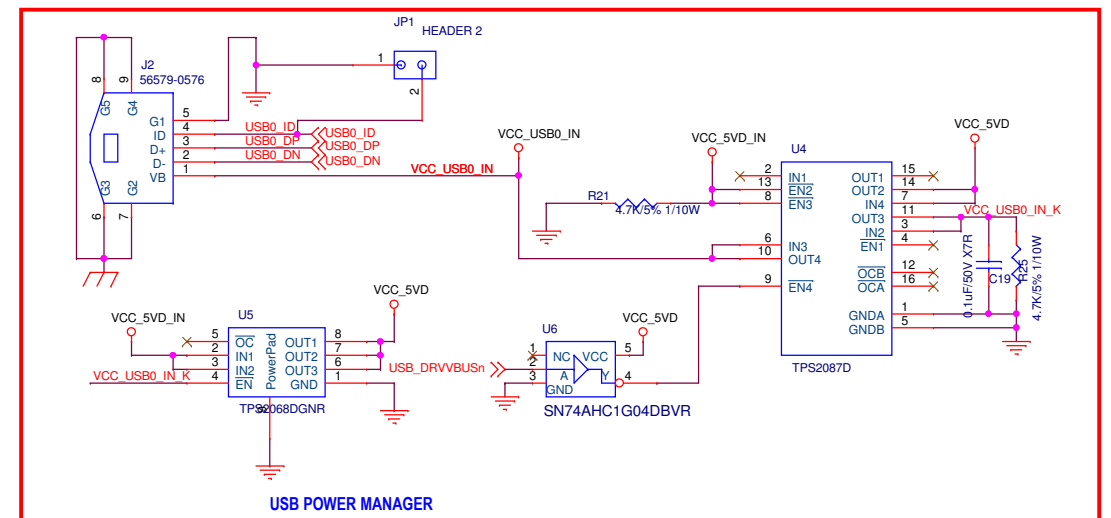


Any voltage over 5.8V will trigger "Overvoltage" condition. Red LED (LED1) at J1 will turn on and the DC voltage will be turned off.

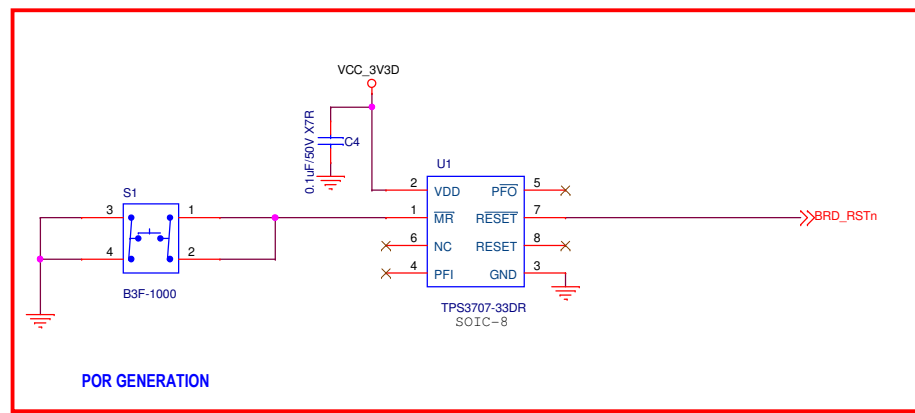
POWER - INPUT



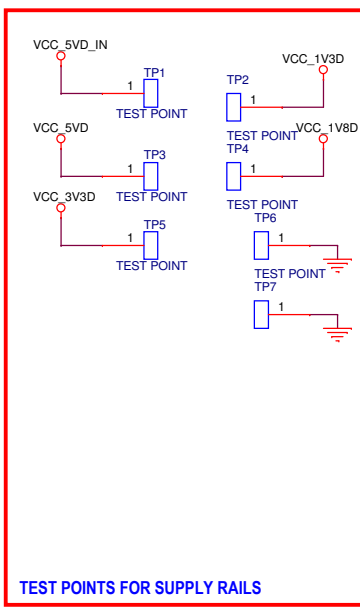
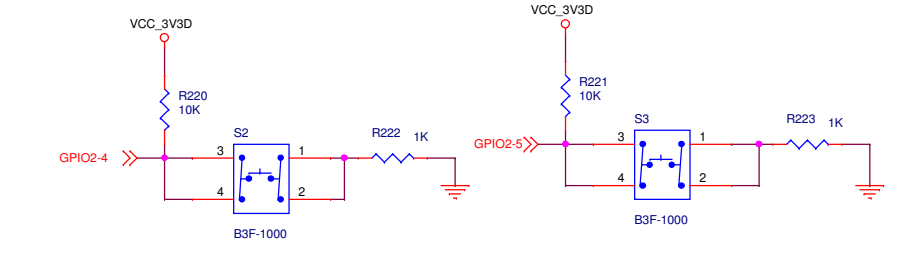
POWER SUPPLY STATUS



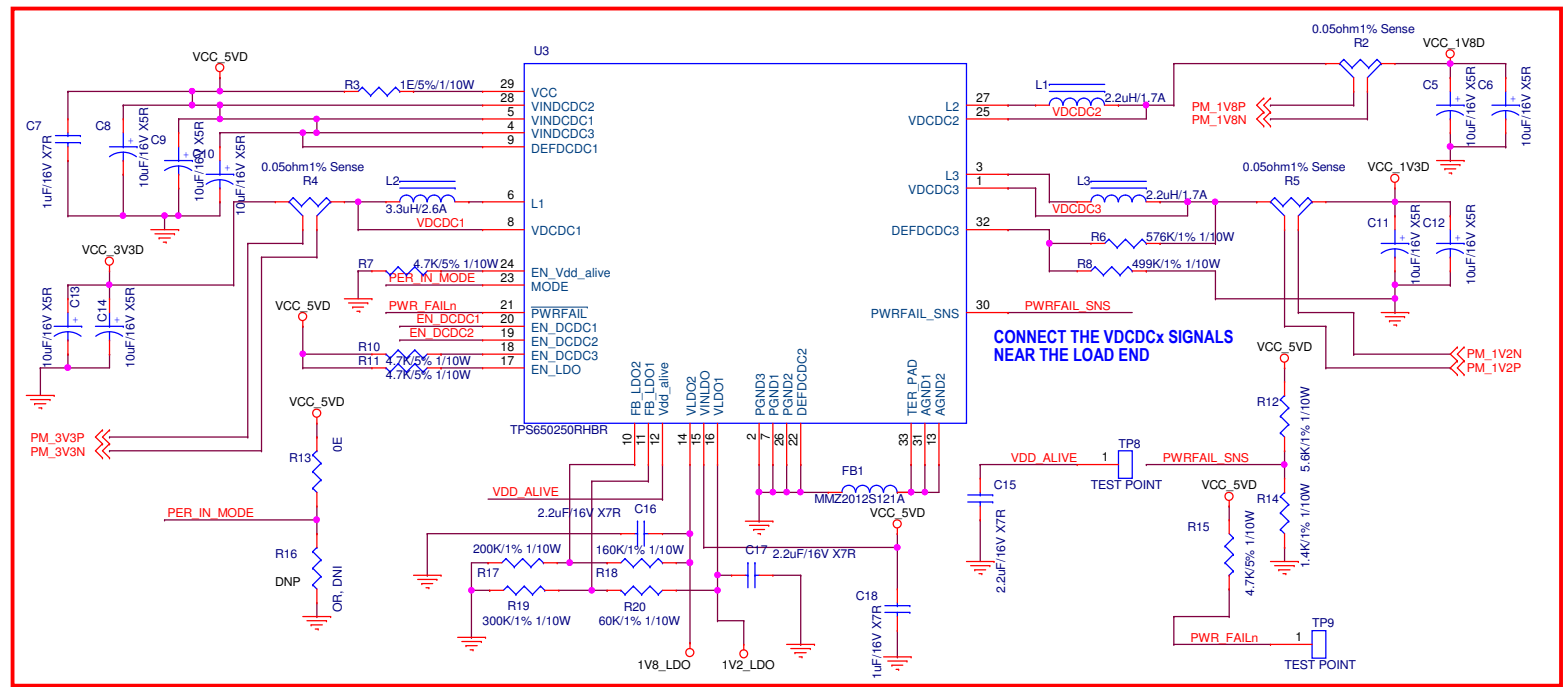
USB POWER MANAGER



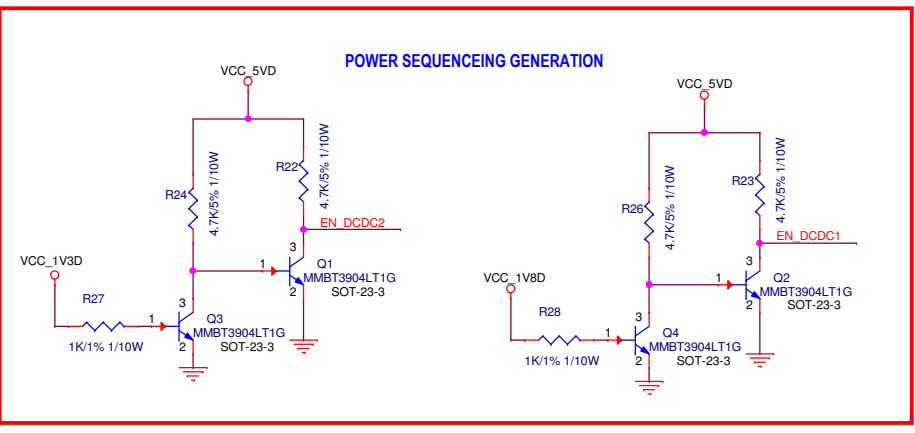
POR GENERATION



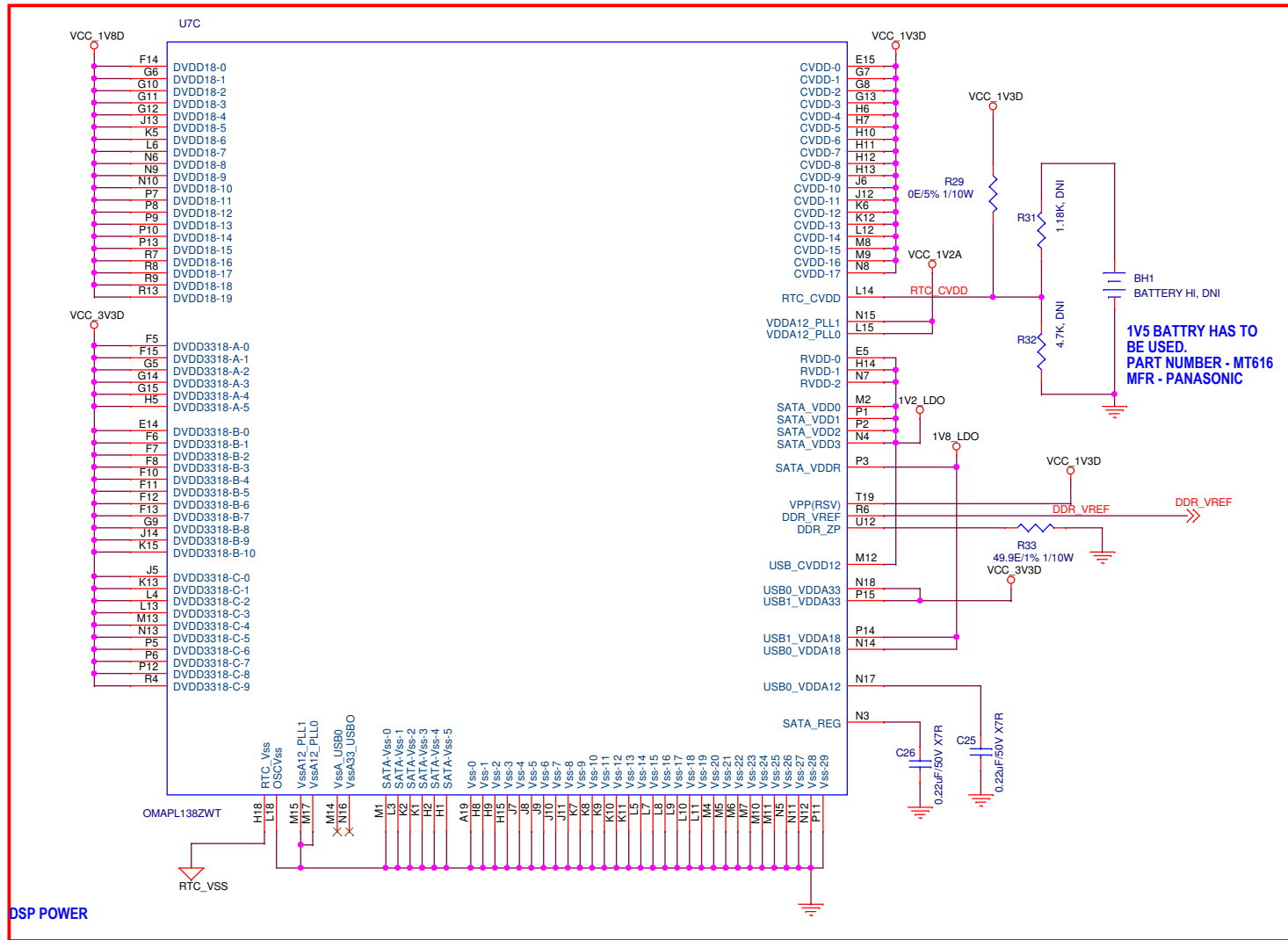
TEST POINTS FOR SUPPLY RAILS



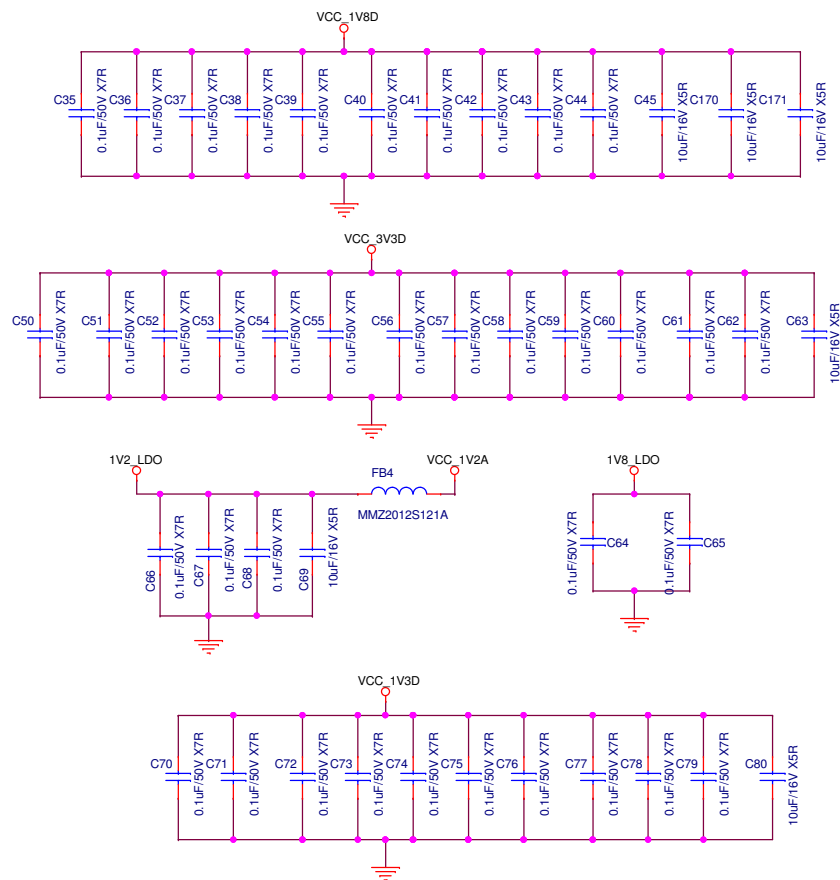
CONNECT THE VDCDCx SIGNALS NEAR THE LOAD END



POWER SEQUENCING GENERATION

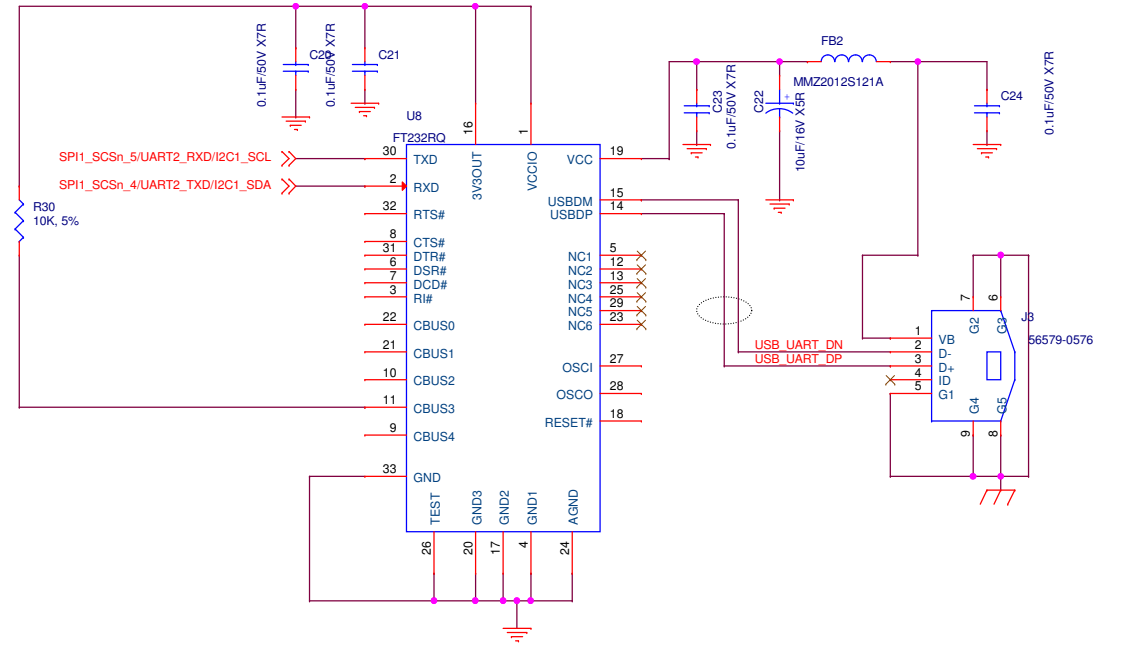


DSP POWER

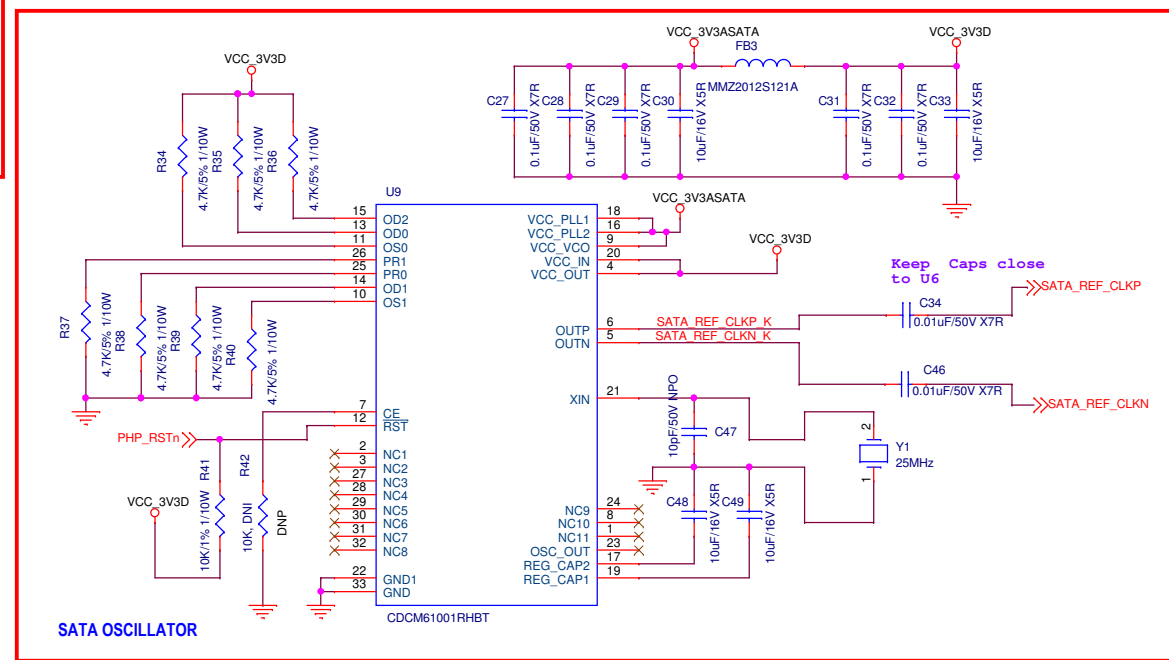


NOTE - 001

DSP DECOUPLING CAPACITORS  
Keep closer to respective pins  
of the processor

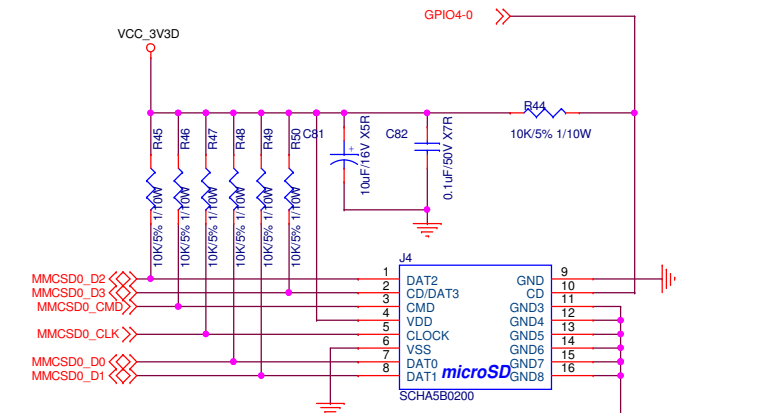
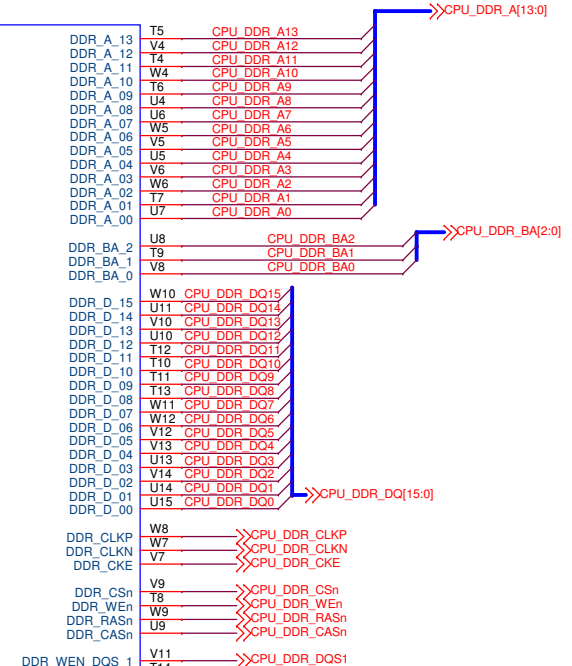
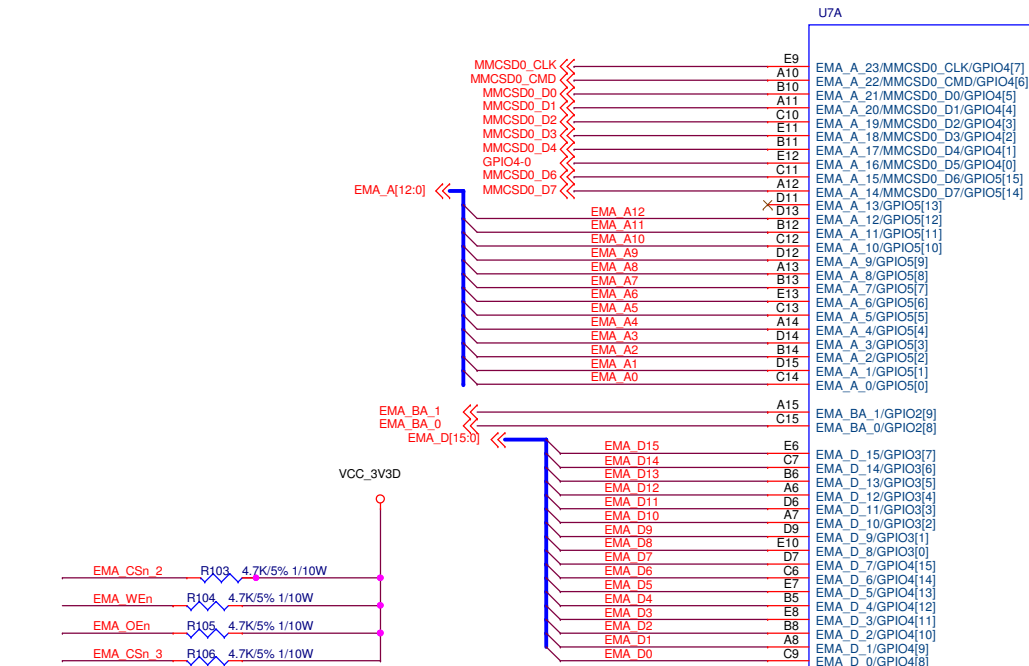


UART TRANCIEVER

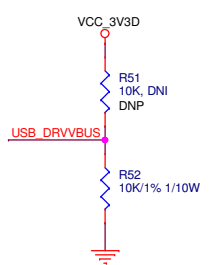
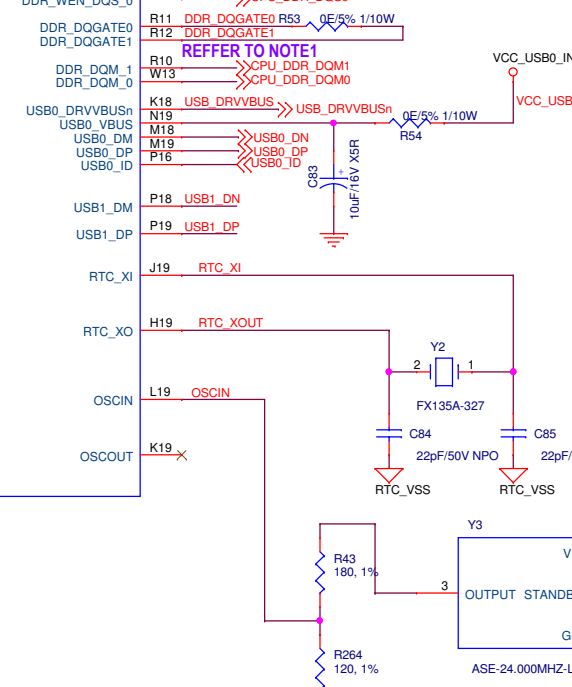
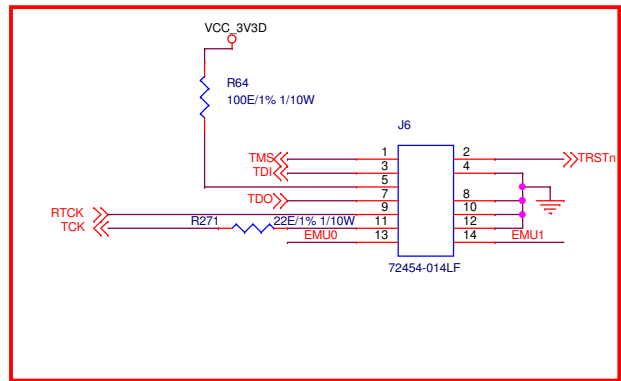
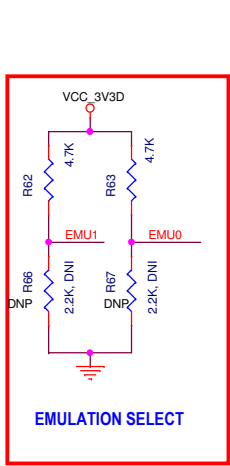
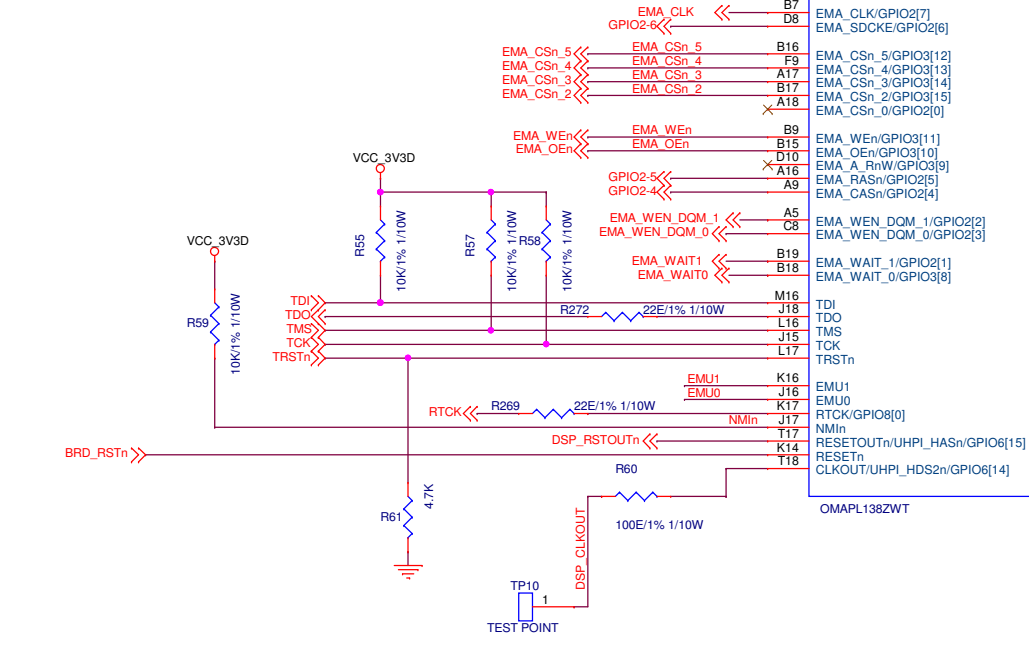


SATA OSCILLATOR

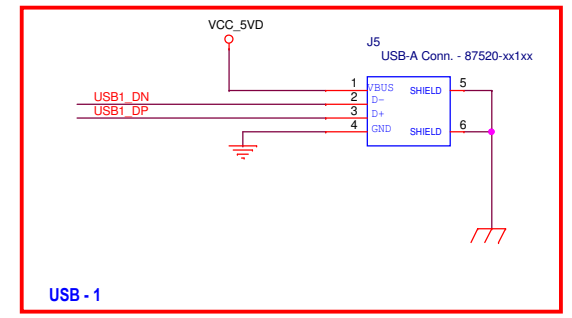
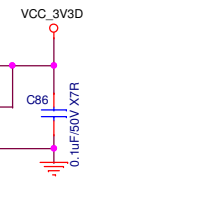
NOTE - 001 ALL DECAPS SHOULD BE PLACE WITHIN 1cm FROM EACH PIN



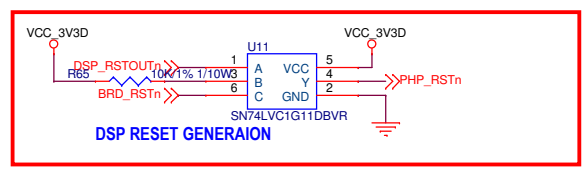
uSD Connector  
MMC/SD CONNECTOR



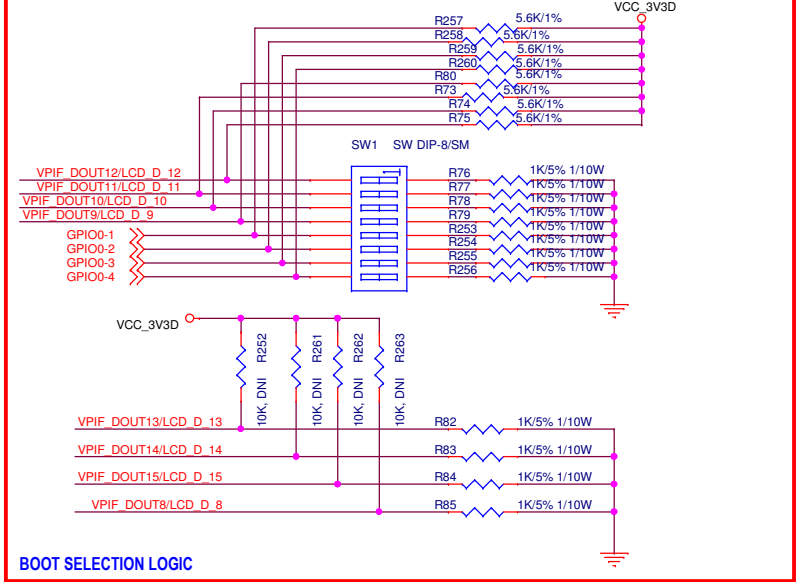
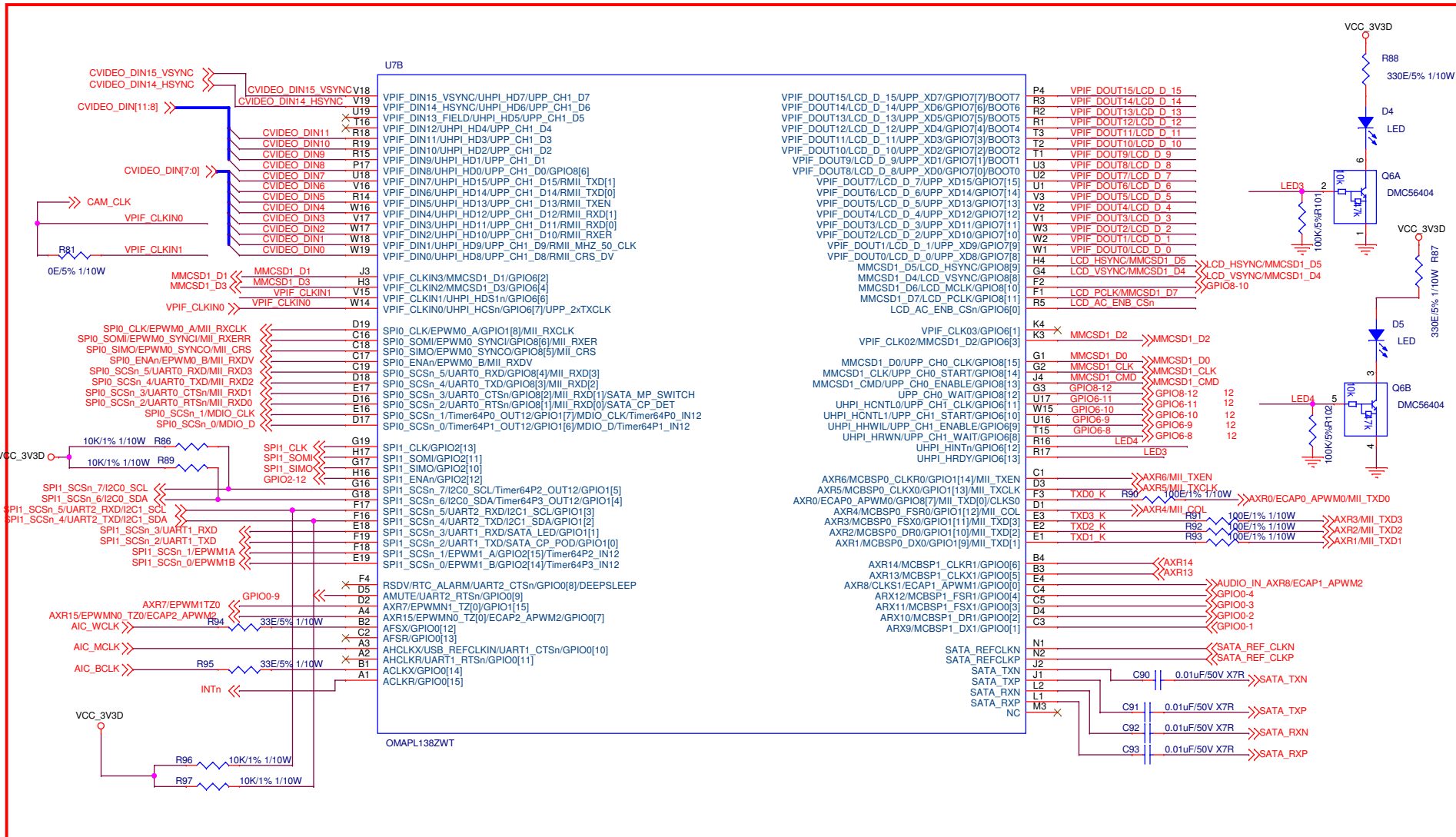
**NOTE1**  
LAYOUT NOTE: ROUTE THIS PAIR OF SIGNALS PHYSICALLY CLOSE TO THE DATA BUS. KEEP BOTH SIGNALS CLOSE TO EACH OTHER. THERE IS NO IMPEDANCE REQUIREMENT FOR THESE SIGNALS.



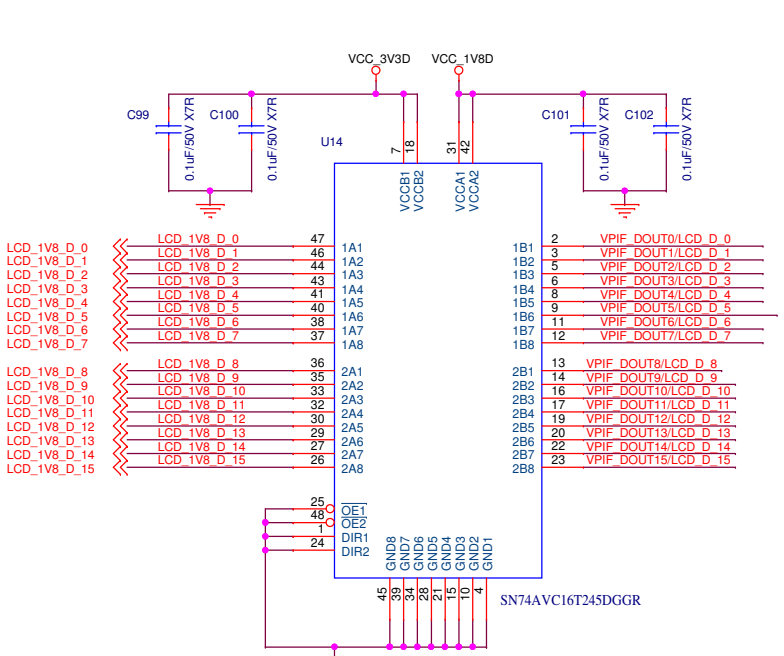
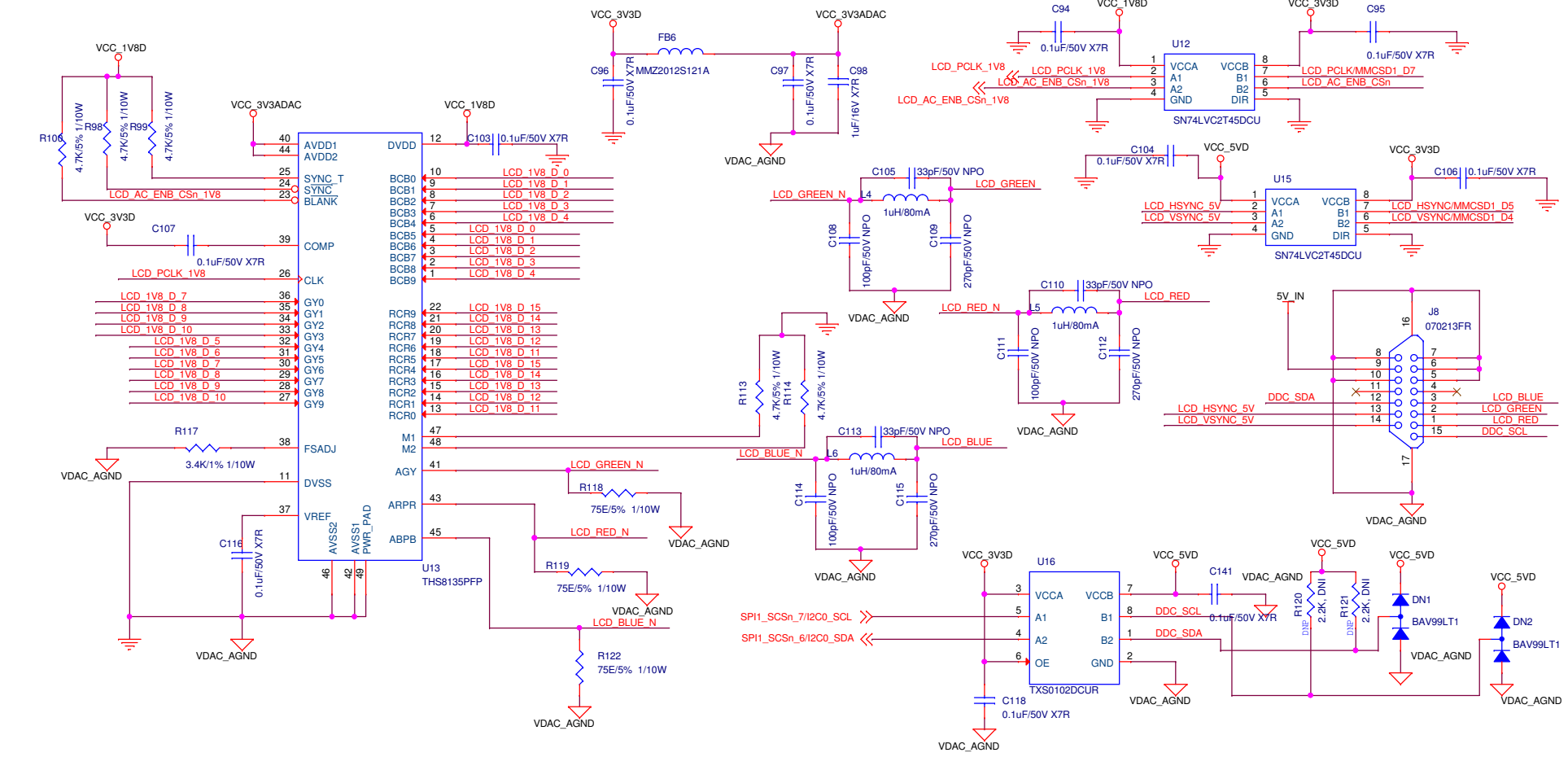
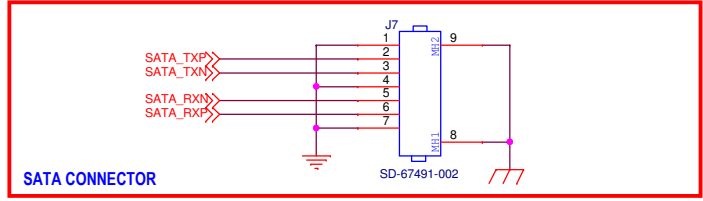
USB - 1



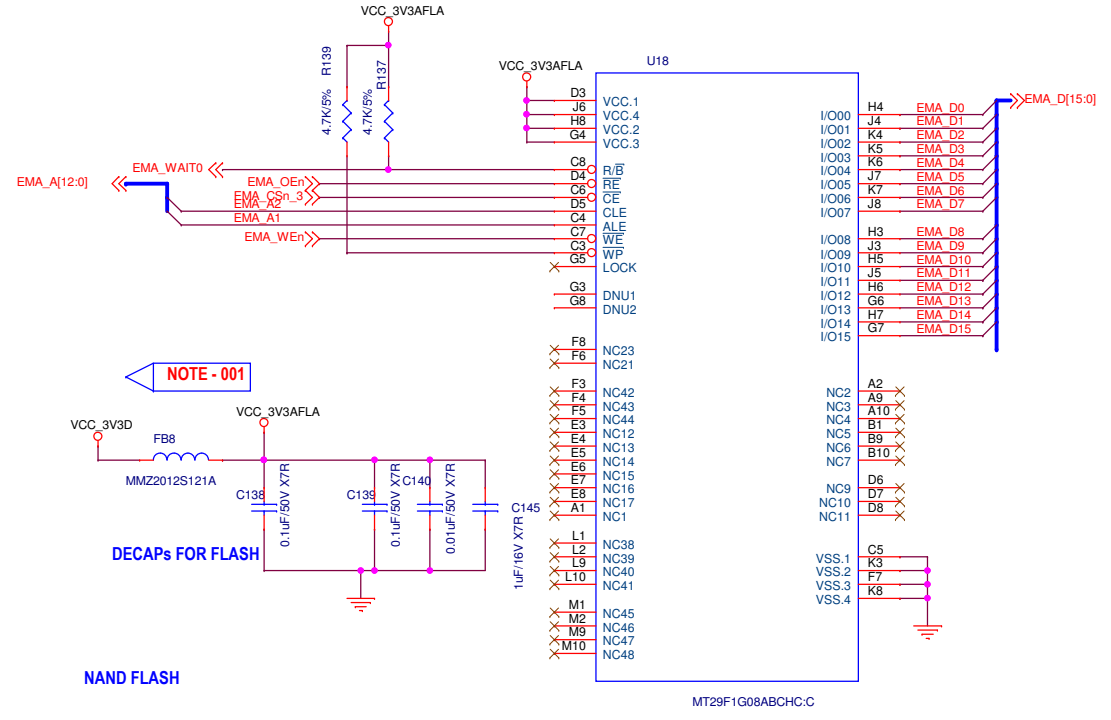
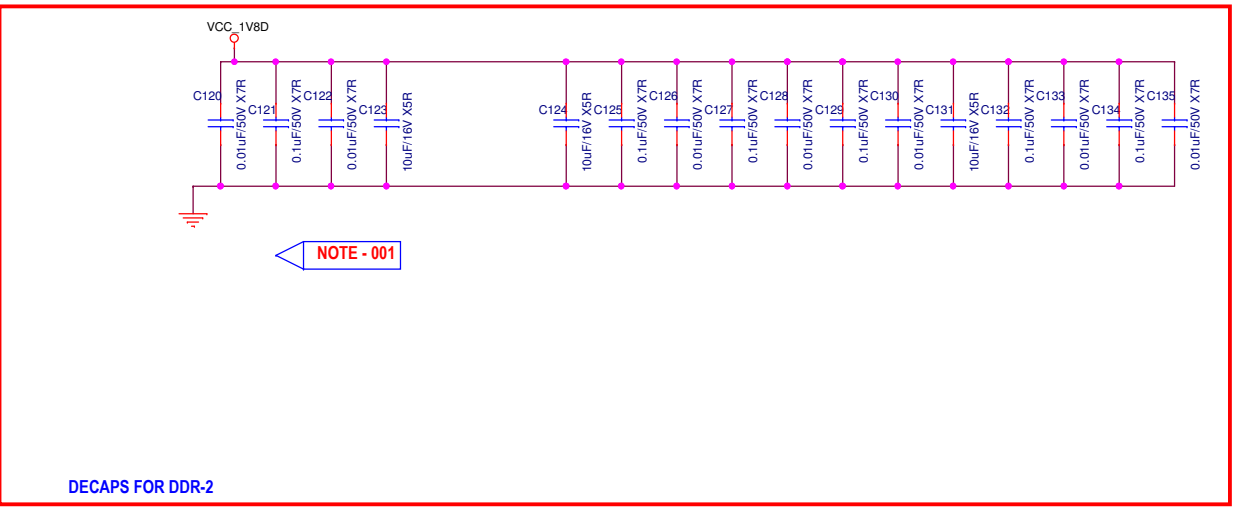
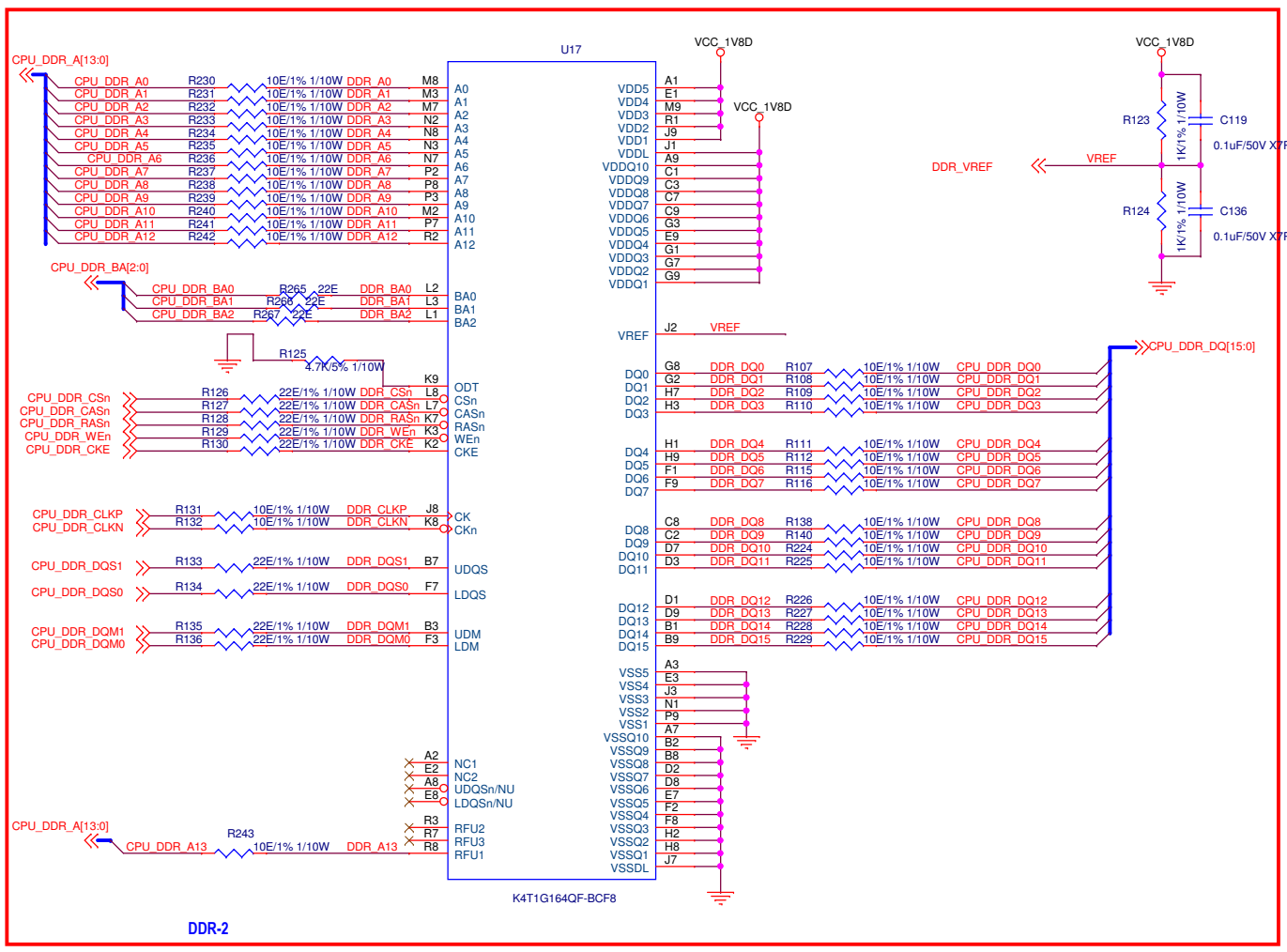
DSP RESET GENERATION



BOOT DEVICE	BOOT BITS [4:1]
NAND FLASH	0111
UART2	1010

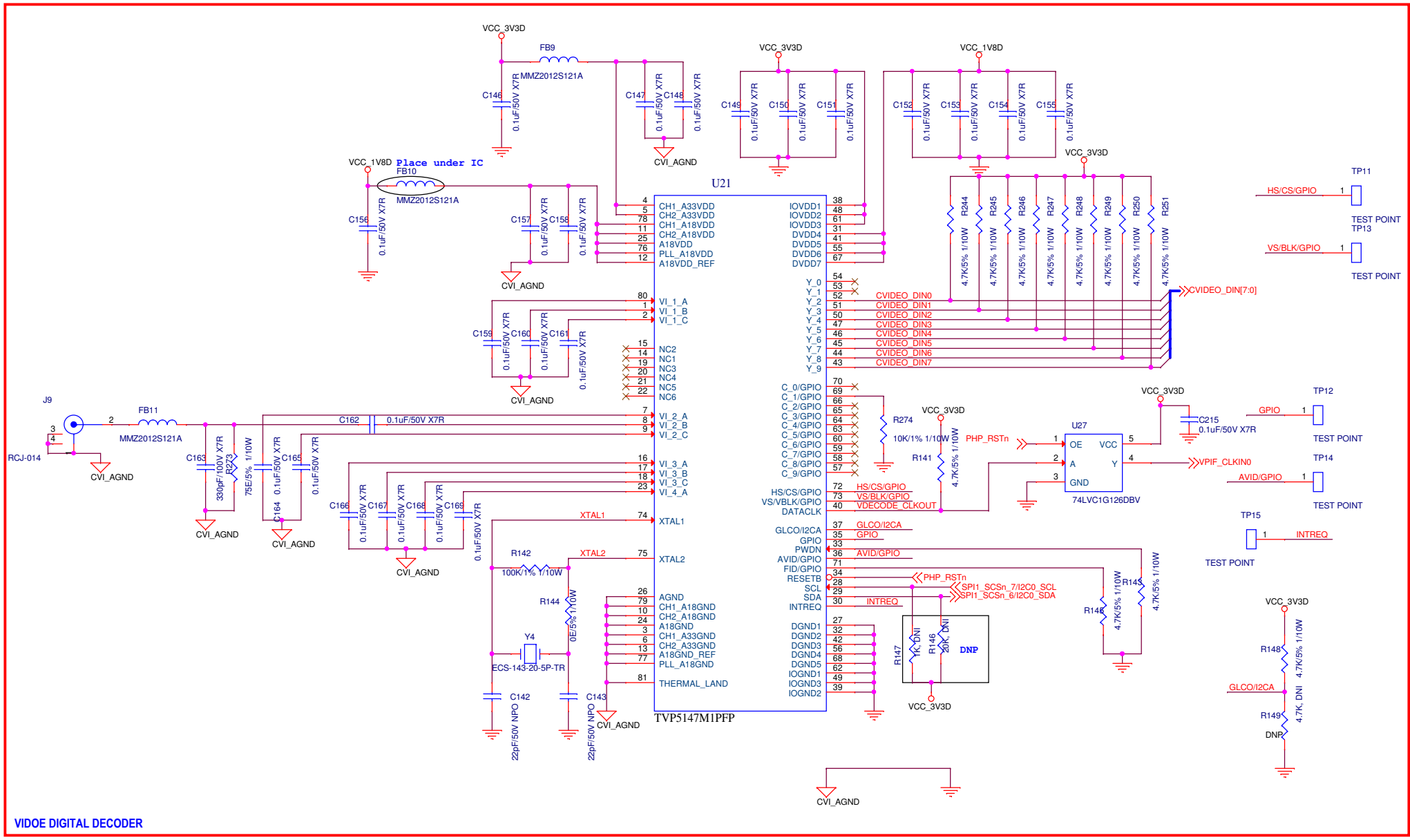


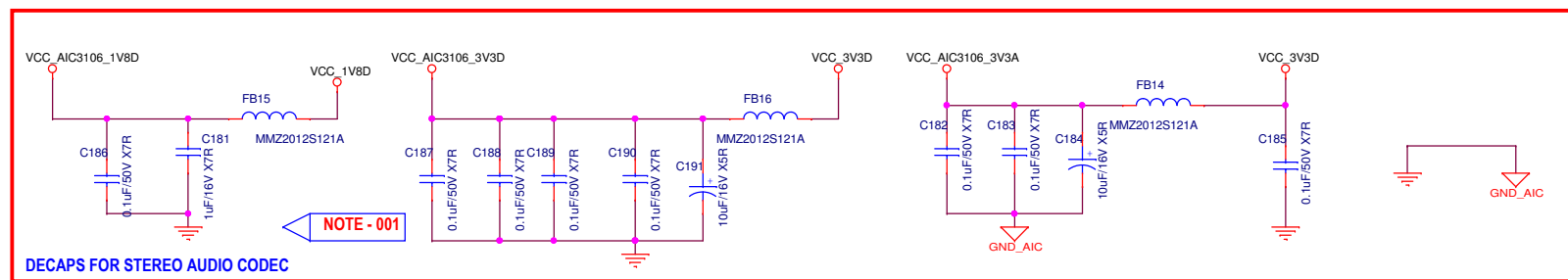
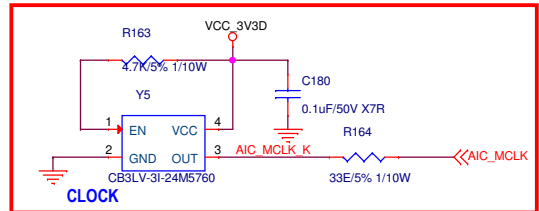
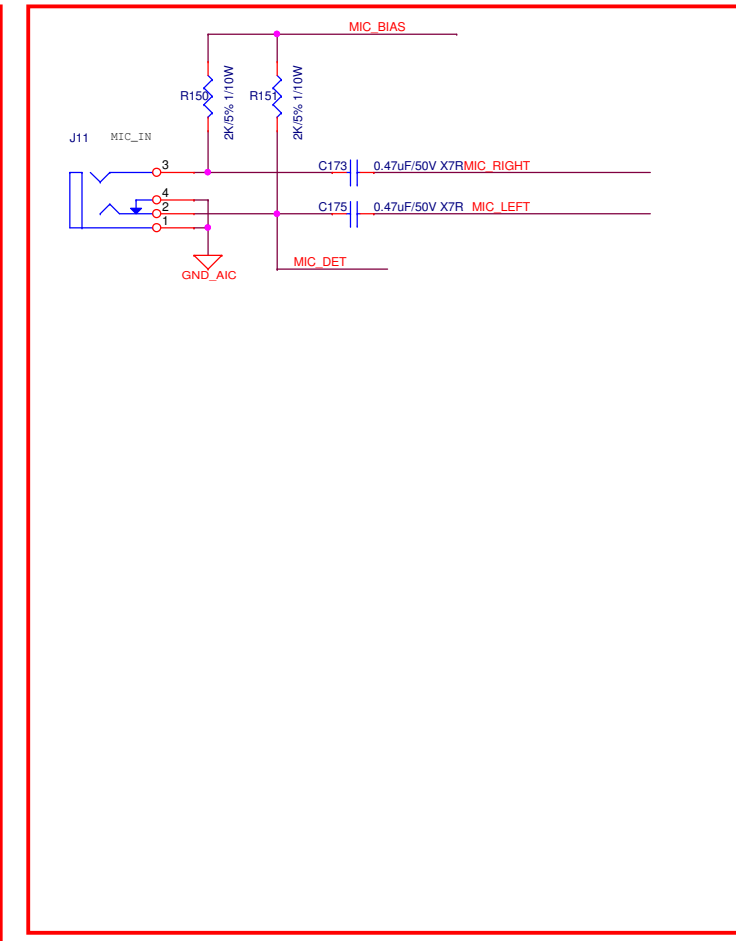
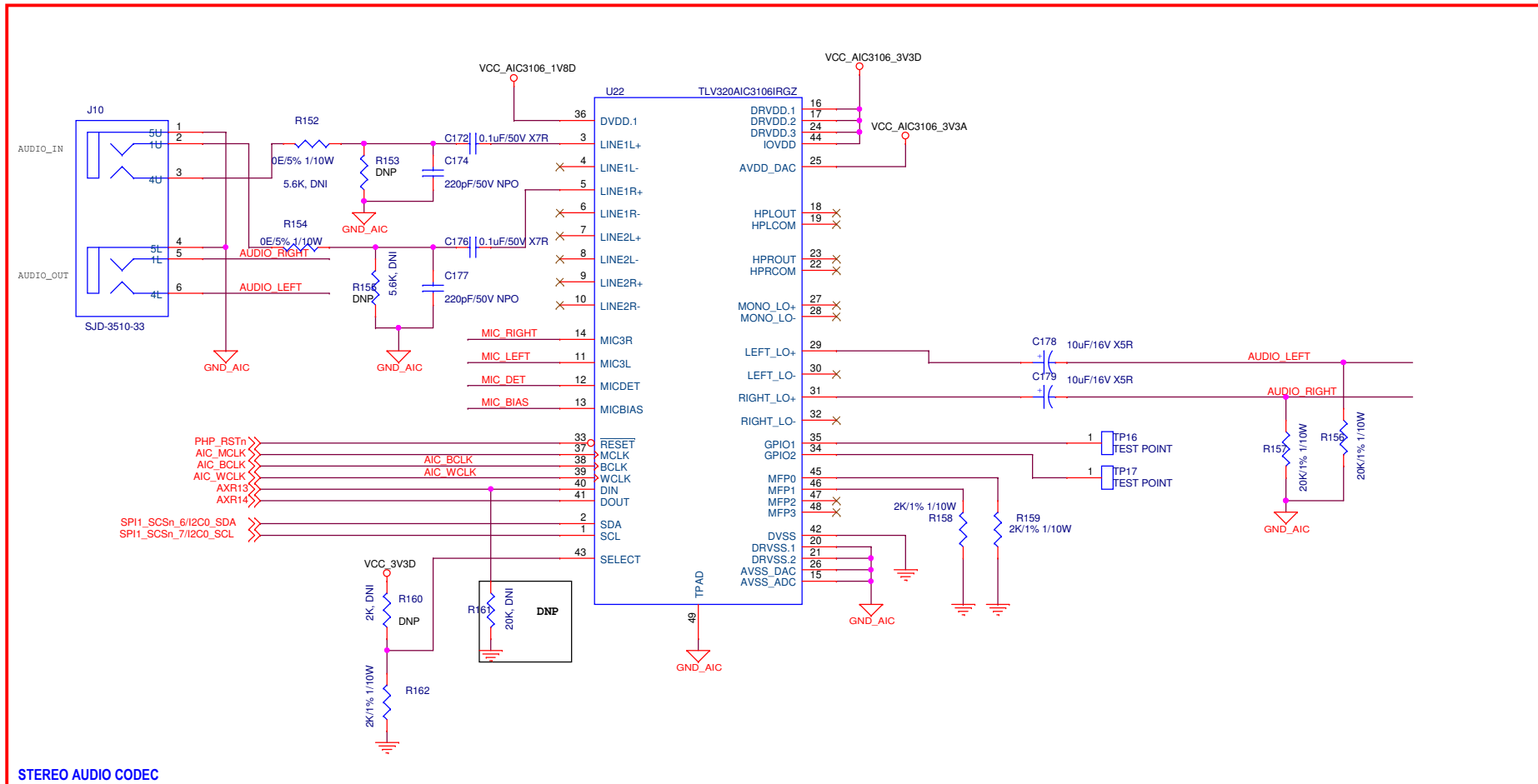




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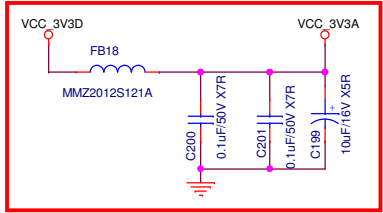
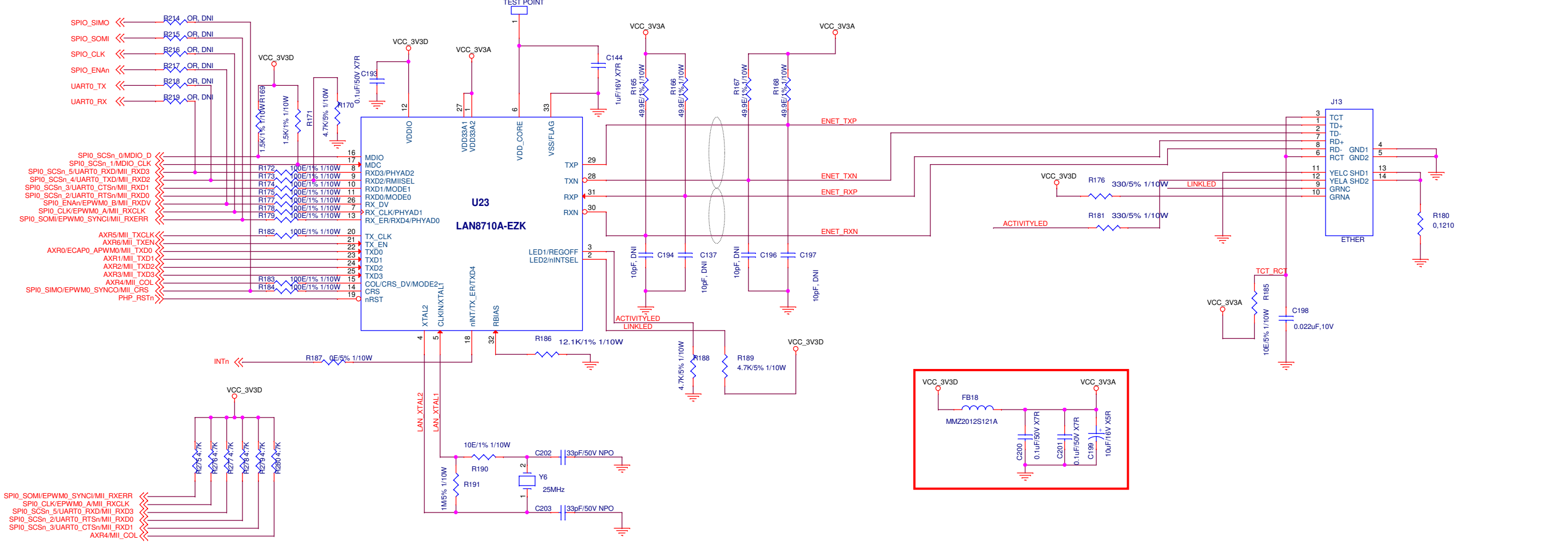


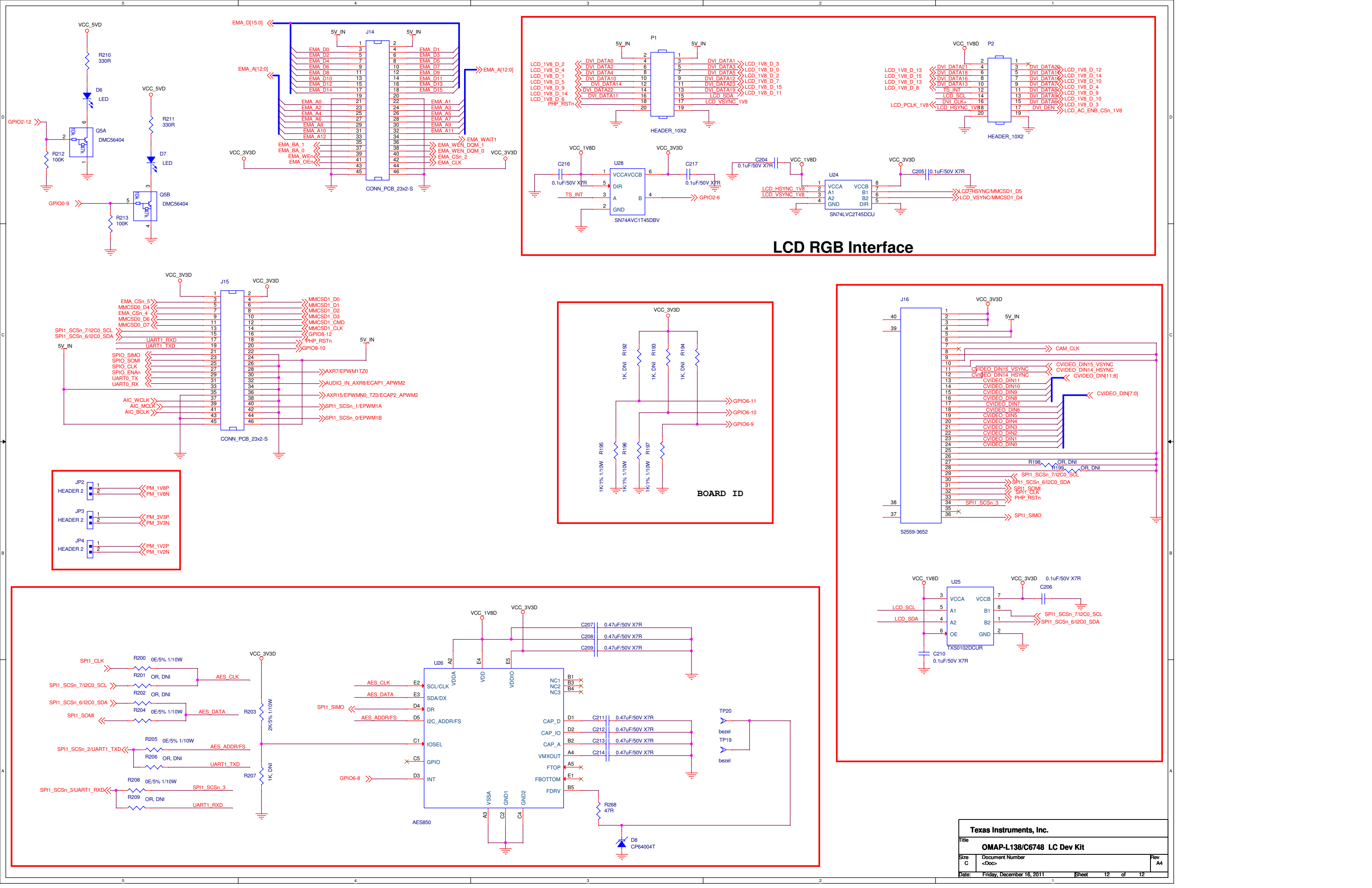




**NOTE - 001** ALL DECAPS SHOULD BE PLACE WITHIN 1cm FROM EACH PIN

Differential Signals 100 Ohms





**LCD RGB Interface**

**BOARD ID**

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Title			
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C	<Doc>	A4	
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