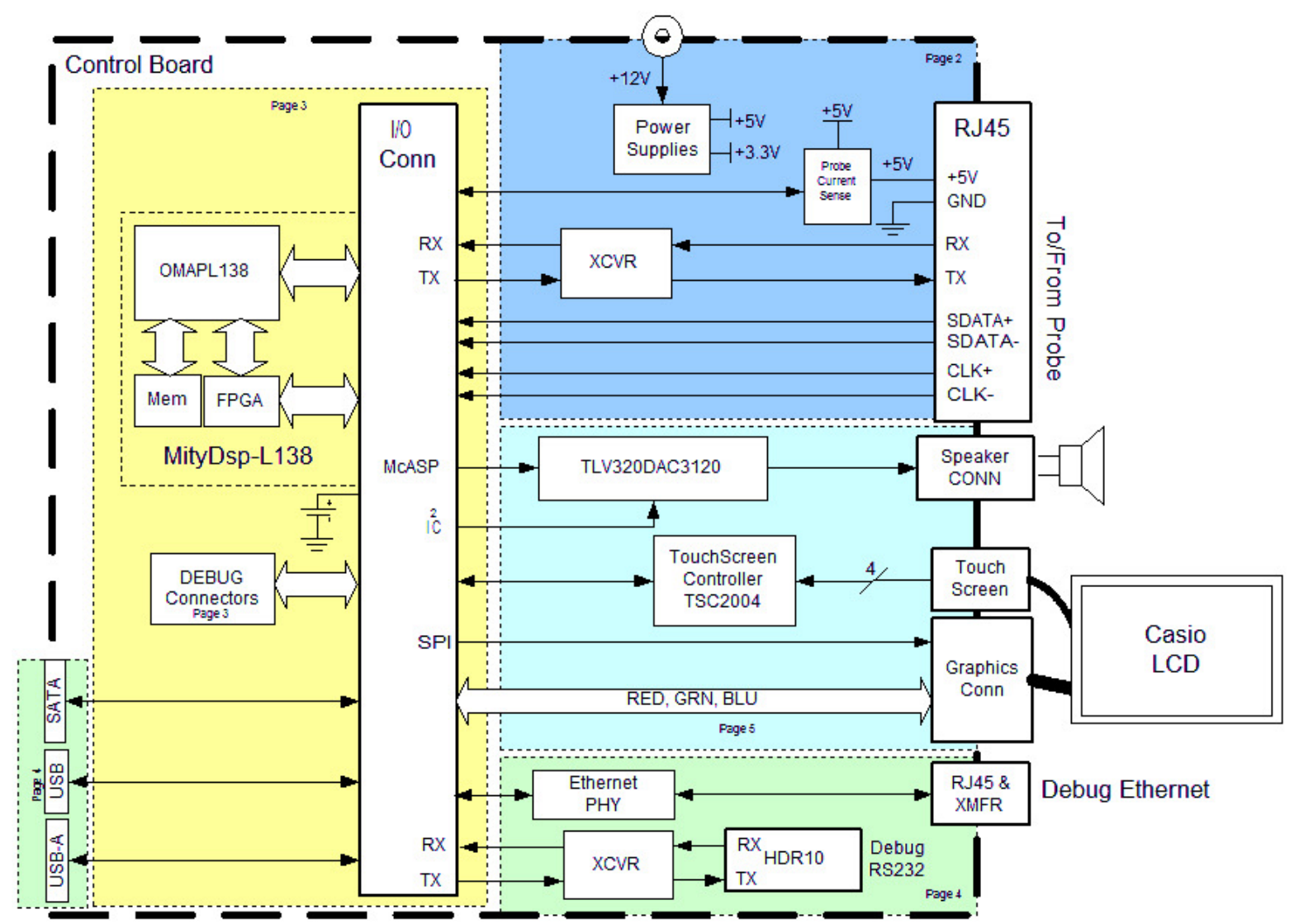
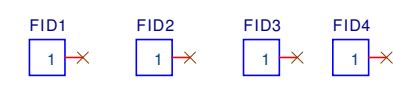


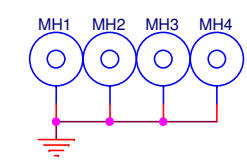
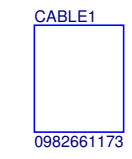
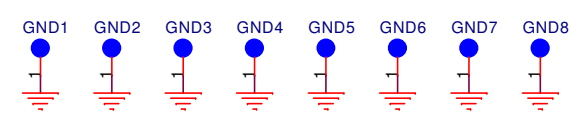
01 Table of Contents/Block Diagram  
 02 Mity DSP & Debug Connectors  
 03 Power & Probe Interface  
 04 Ethernet and IO  
 05 Audio & LCD Interface



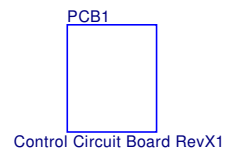
**Board Fiducials**



*Layout Note:*  
 Distribute ground testpoints evenly around board



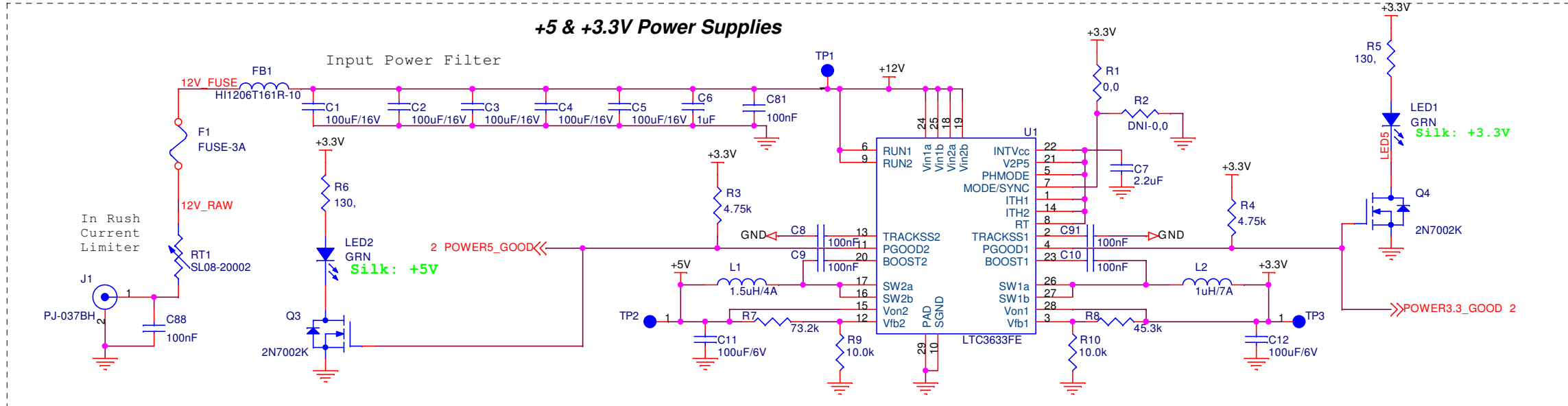
**BOARD STACKUP**  
 Layer\_1 = TOP Signal -Controlled Impedance  
 Layer\_2 = GND  
 Layer\_3 = Signal - Controlled Impedance  
 Layer\_4 = Signal - Controlled Impedance  
 Layer\_5 = Power  
 Layer\_6 = Bottom Signal - Controlled Impedance



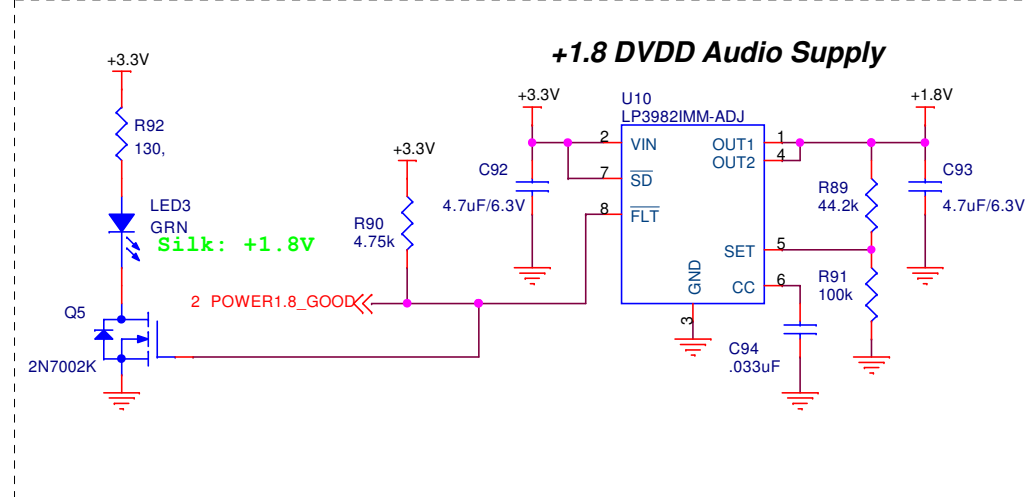
		6 Journey, Suite 125 Aliso Viejo, CA 92656
Title: Schematics, Cianna Control Board		
Size:	Document Number: 325-7000-001	Rev: X1
Date: Wednesday, September 22, 2010 Sheet 1 of 5		



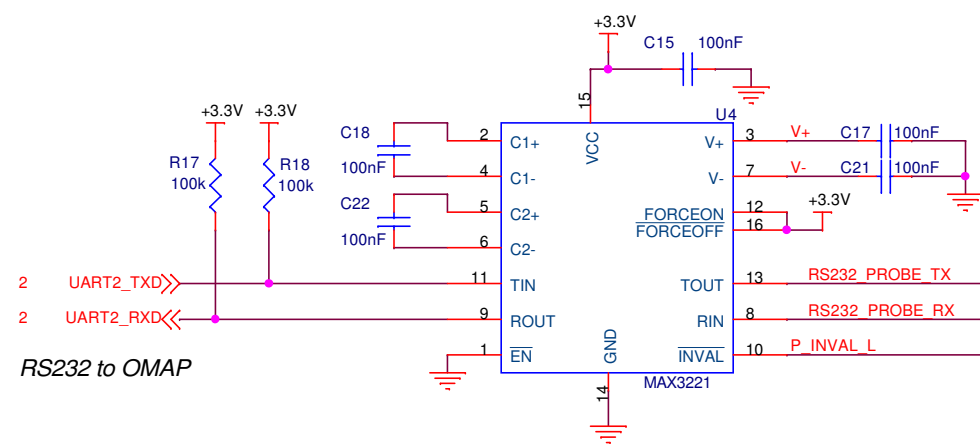
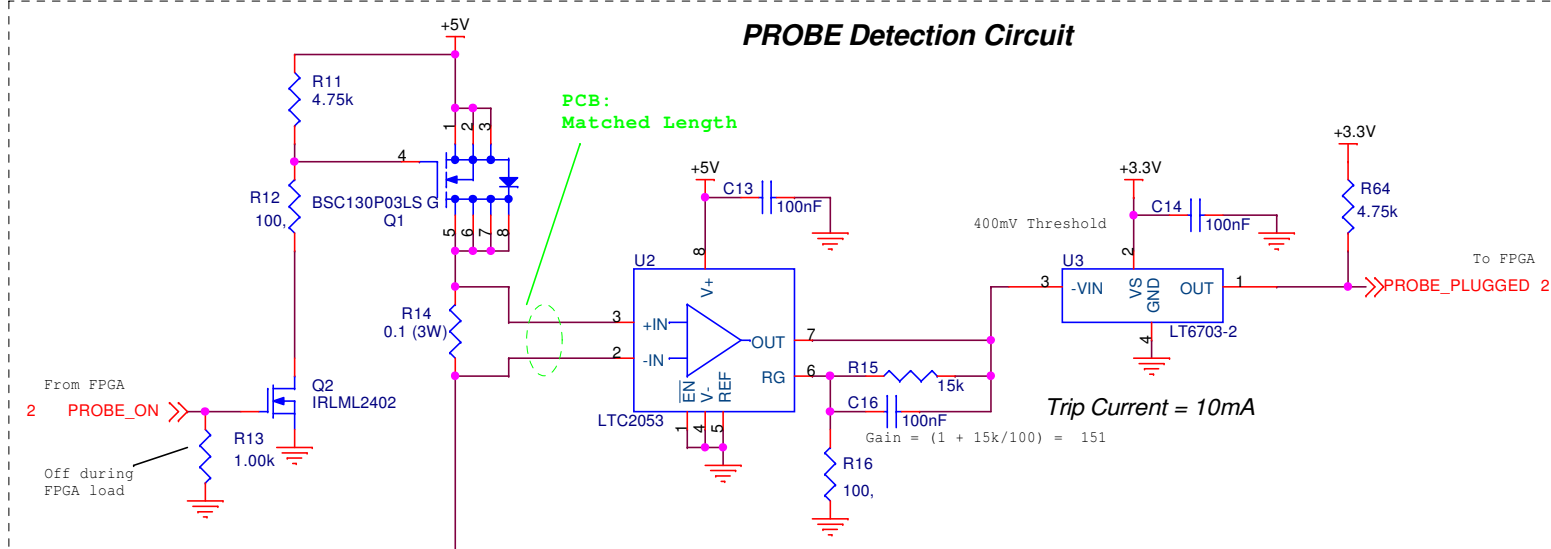
### +5 & +3.3V Power Supplies



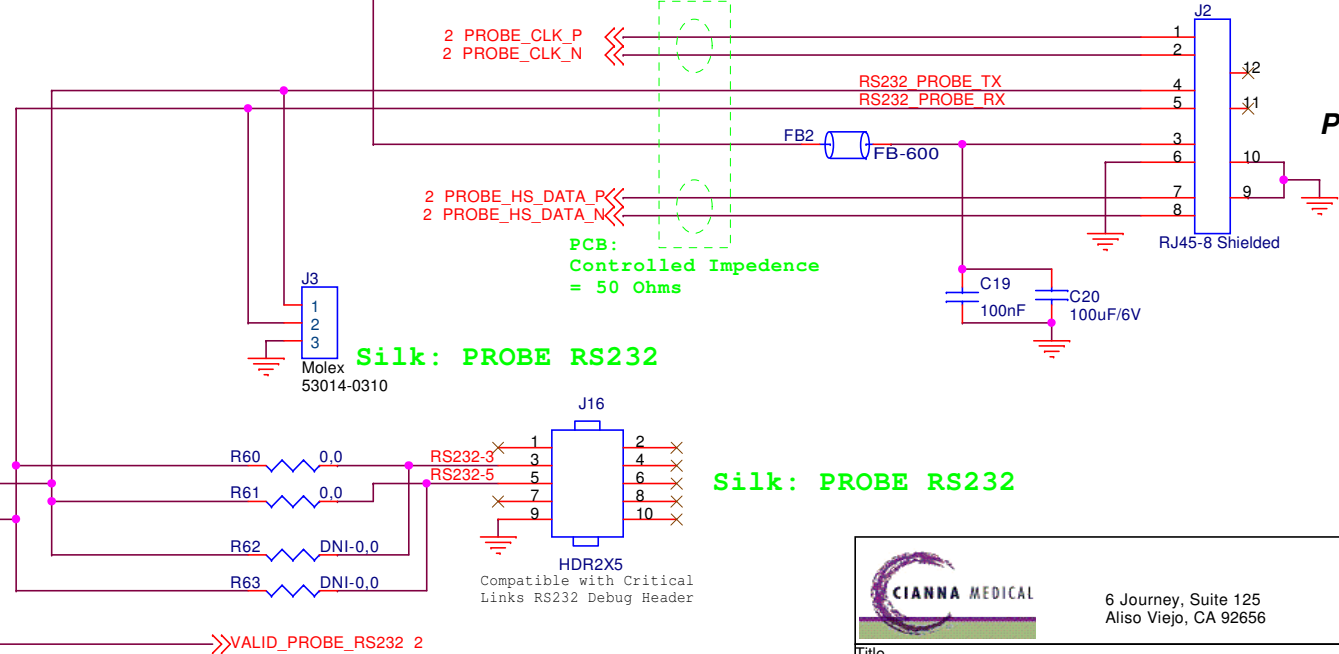
### +1.8V DVDD Audio Supply



### PROBE Detection Circuit



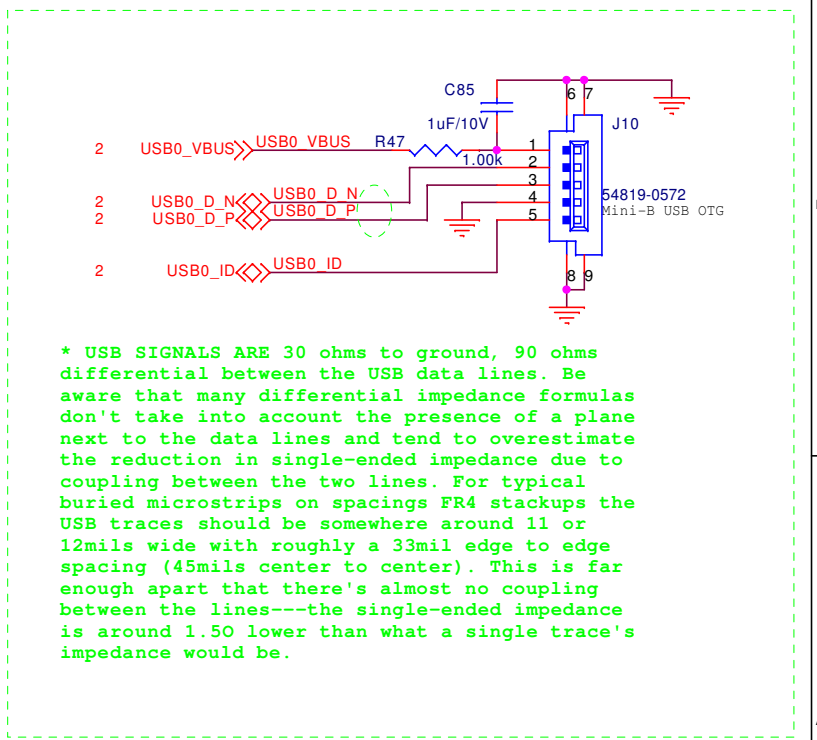
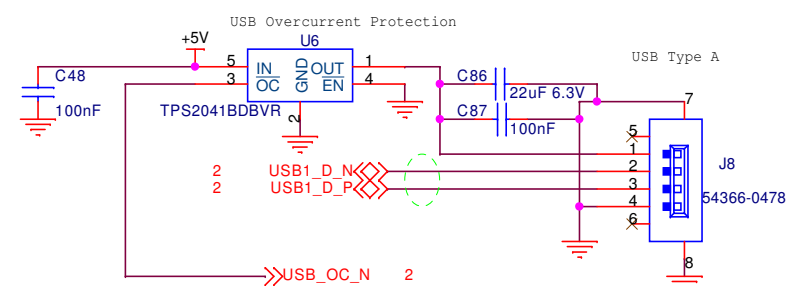
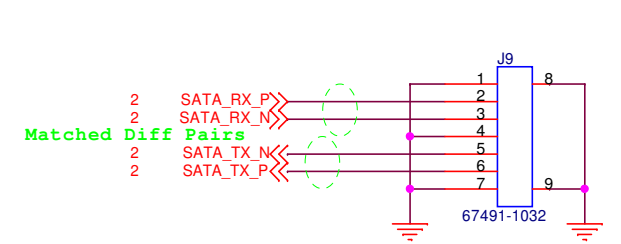
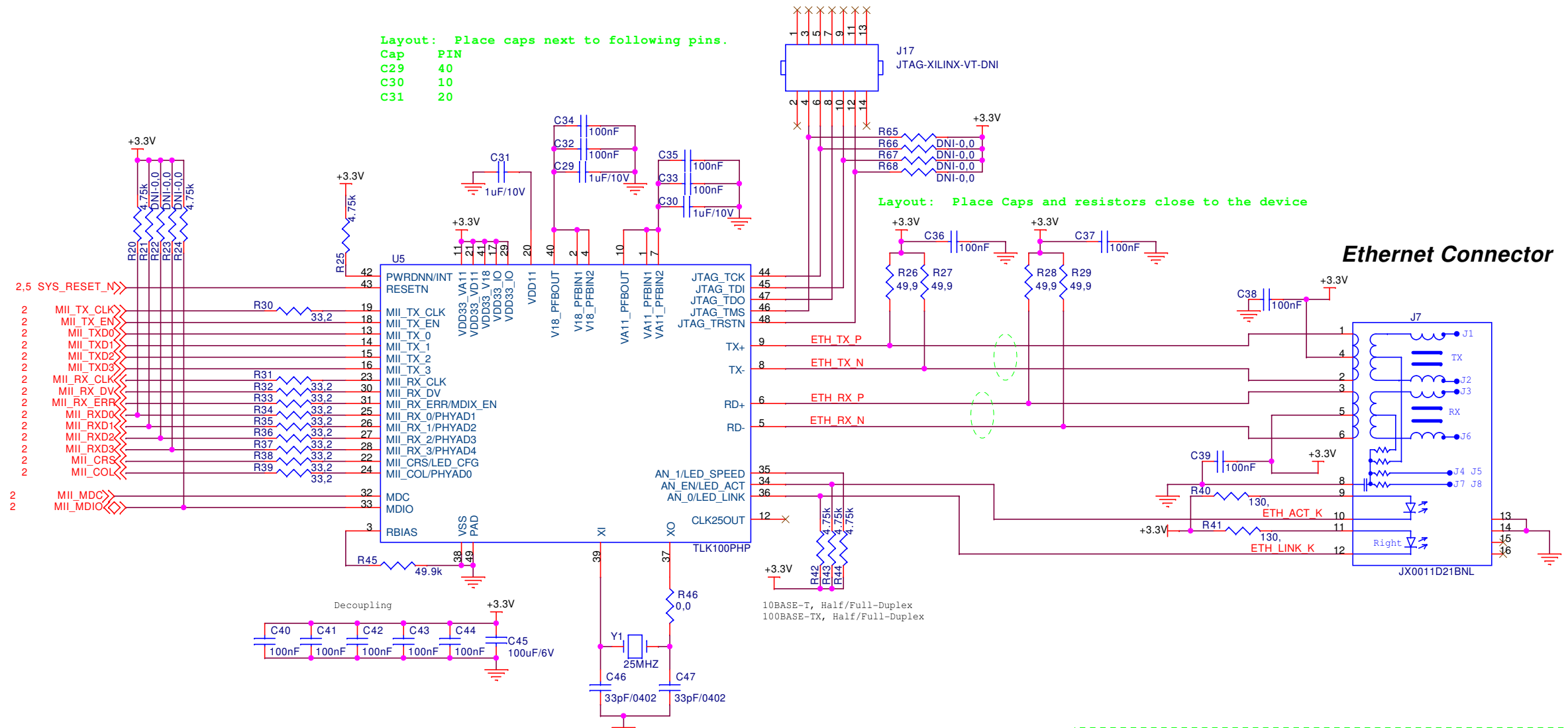
### PROBE RS232



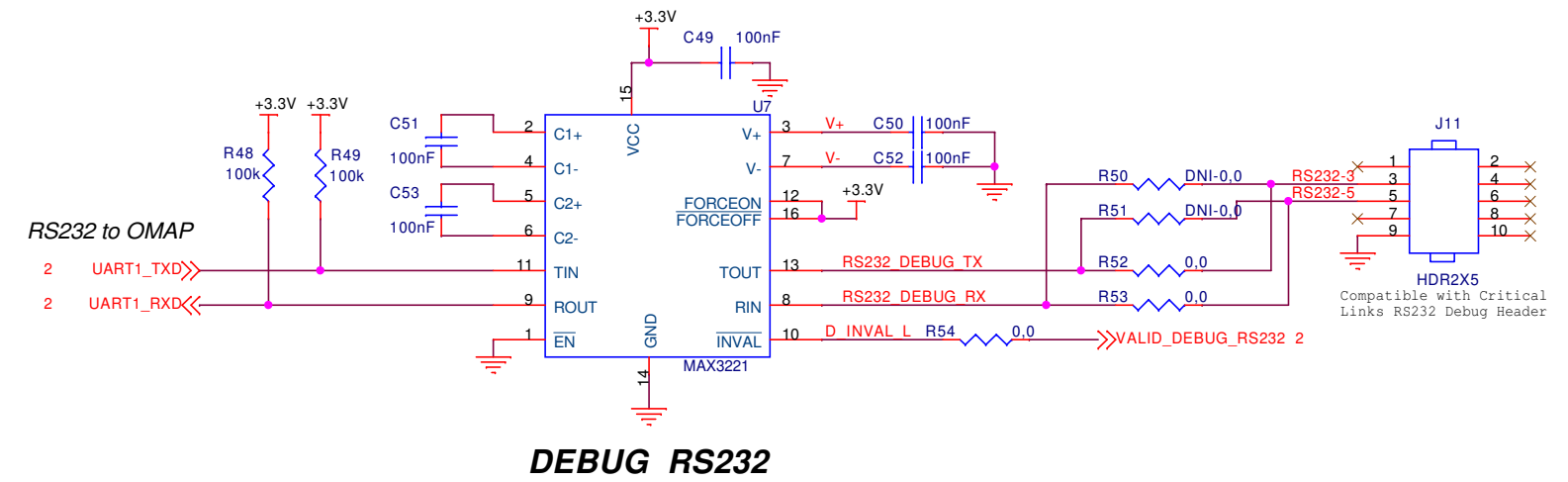
**CIANNA MEDICAL**  
6 Journey, Suite 125  
Aliso Viejo, CA 92656

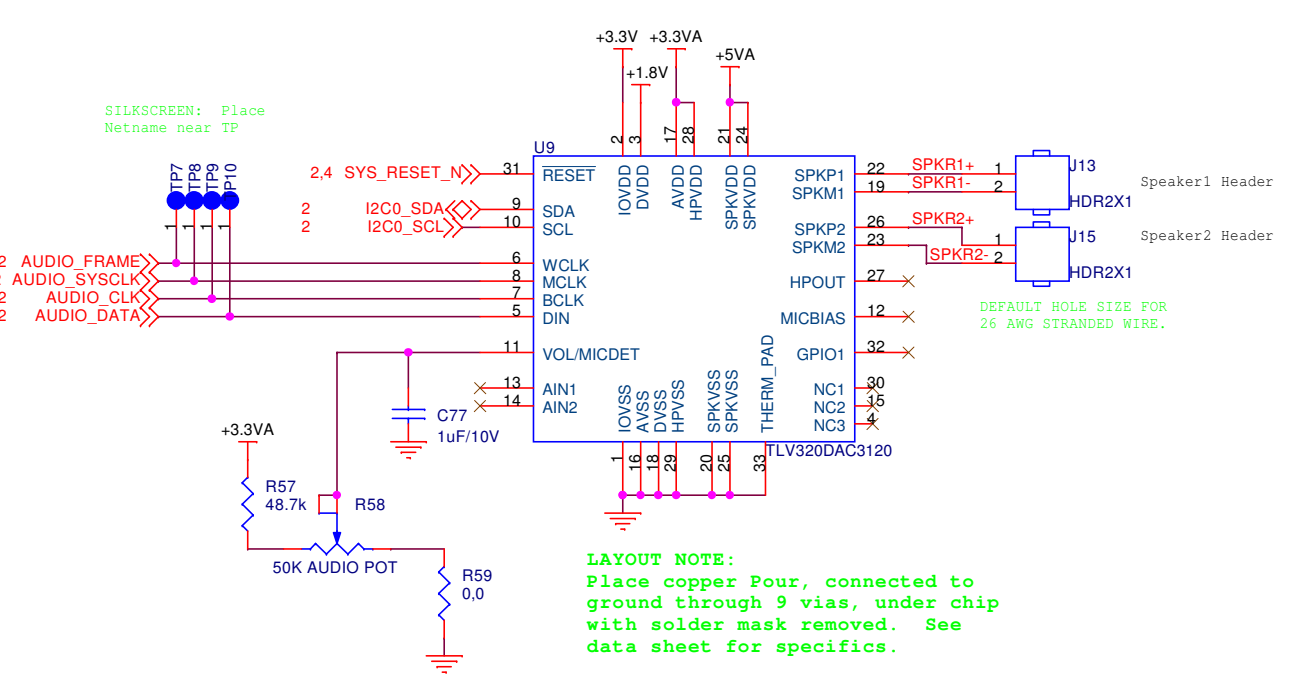
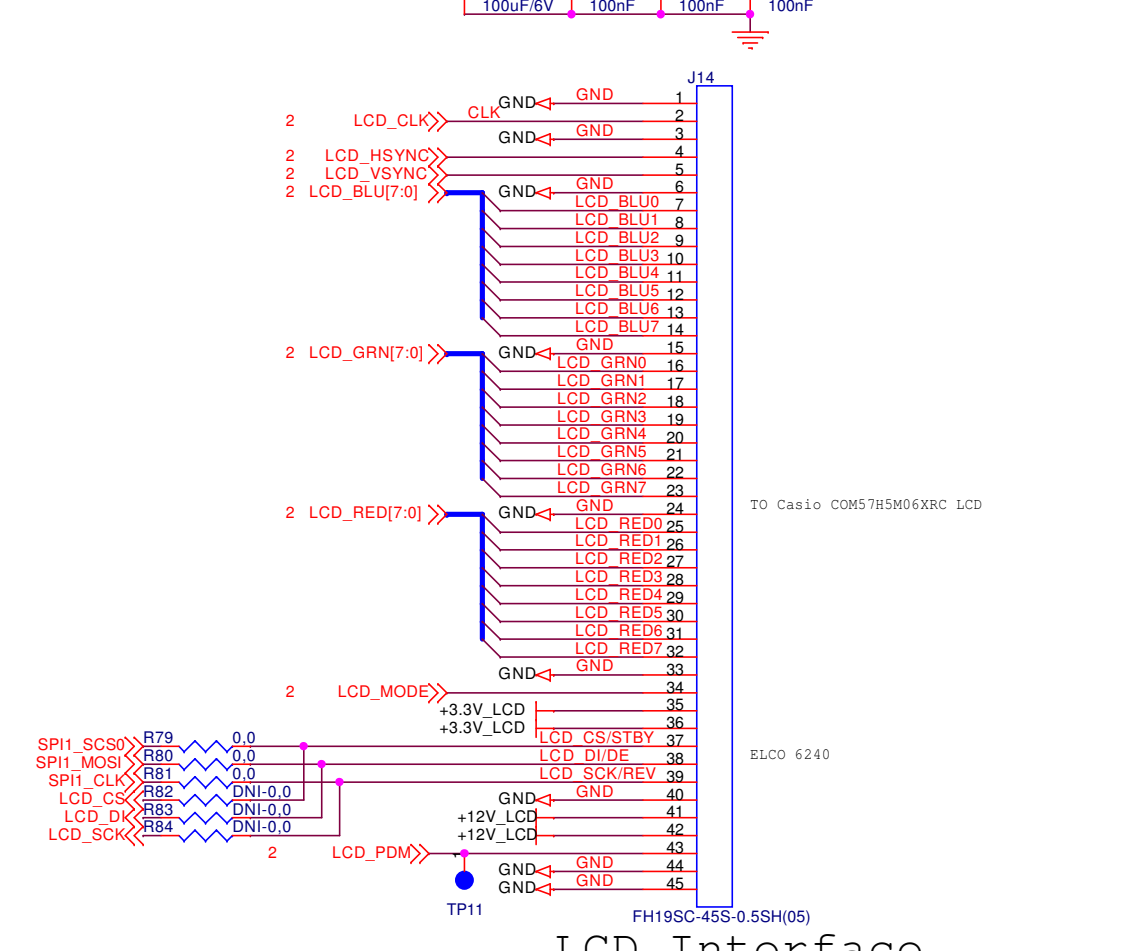
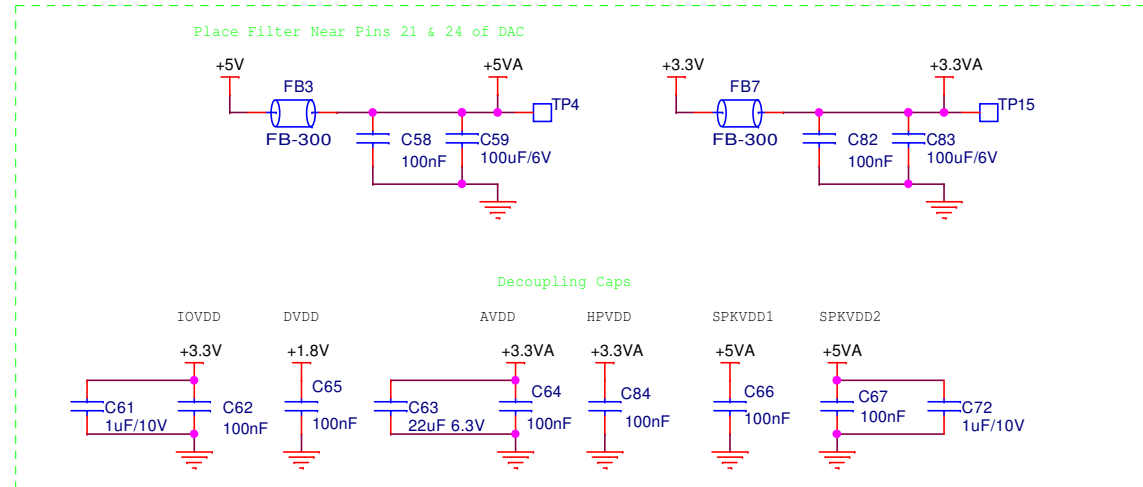
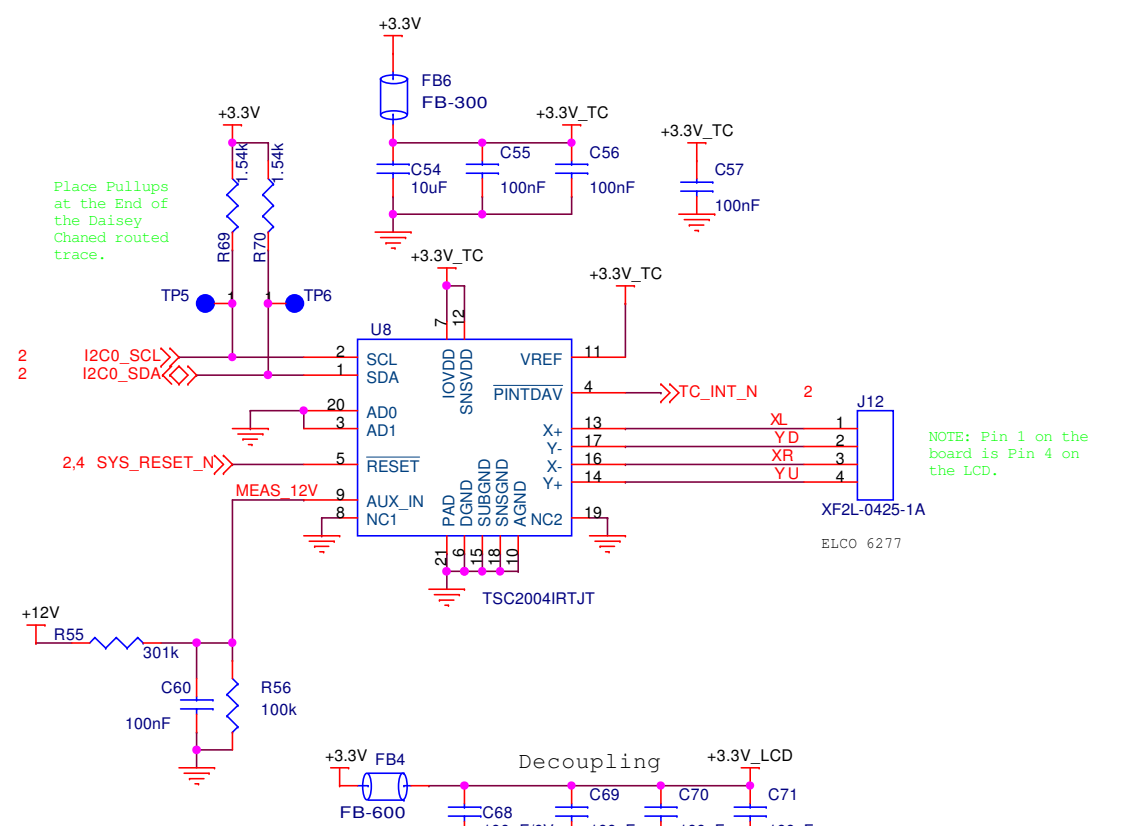
Title Schematics, Cianna Control Board		
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Layout: Place caps next to following pins.  
 Cap PIN  
 C29 40  
 C30 10  
 C31 20



\* USB SIGNALS ARE 30 ohms to ground, 90 ohms differential between the USB data lines. Be aware that many differential impedance formulas don't take into account the presence of a plane next to the data lines and tend to overestimate the reduction in single-ended impedance due to coupling between the two lines. For typical buried microstrips on spacings FR4 stackups the USB traces should be somewhere around 11 or 12mils wide with roughly a 33mil edge to edge spacing (45mils center to center). This is far enough apart that there's almost no coupling between the lines---the single-ended impedance is around 1.50 lower than what a single trace's impedance would be.





### LCD Interface

### AUDIO Circuitry

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