

REVISION HISTORY	
1/27/10	1 INITIAL RELEASE
5/7/10	1.1 MOVE SPEAKER OUTPUT, ADD CAP, REMOVE SUPERCAP
7/14/10	2 RECONFIGURE BOARD INFO APPROX AND CHANGE ACCELEROMETERS, CHANGE PWR LED TO STATUS, DNL D5, ENLARGE MTU HOLDER, MICROPHONE AND MOVE SPEAKER OUTPUT
4/01/11	3 MODIFICATIONS TO SUPPORT LPC1114 & TO MORE CLOSELY MATCH THE UEG201
3/08/2012	4 TRF4 RESET OFF, ADD PCB & PWR/CORR, CHANGE BL DEFAULT TO DISABLED
5/31/2012	5 CHANGE LCD INTERFACE TO SUPPORT 'UEG21' MODULE
12/14/2012	6 ADD BEEP FUNCTION TO RESET SIGNALS
07/24/2013	7 ADD D-OEM FD 31/PS 1 OPTIONS FOR LCD, ADD A24 TO MFR FLASH, ADD BEEP SEPARATE TO SPEAK

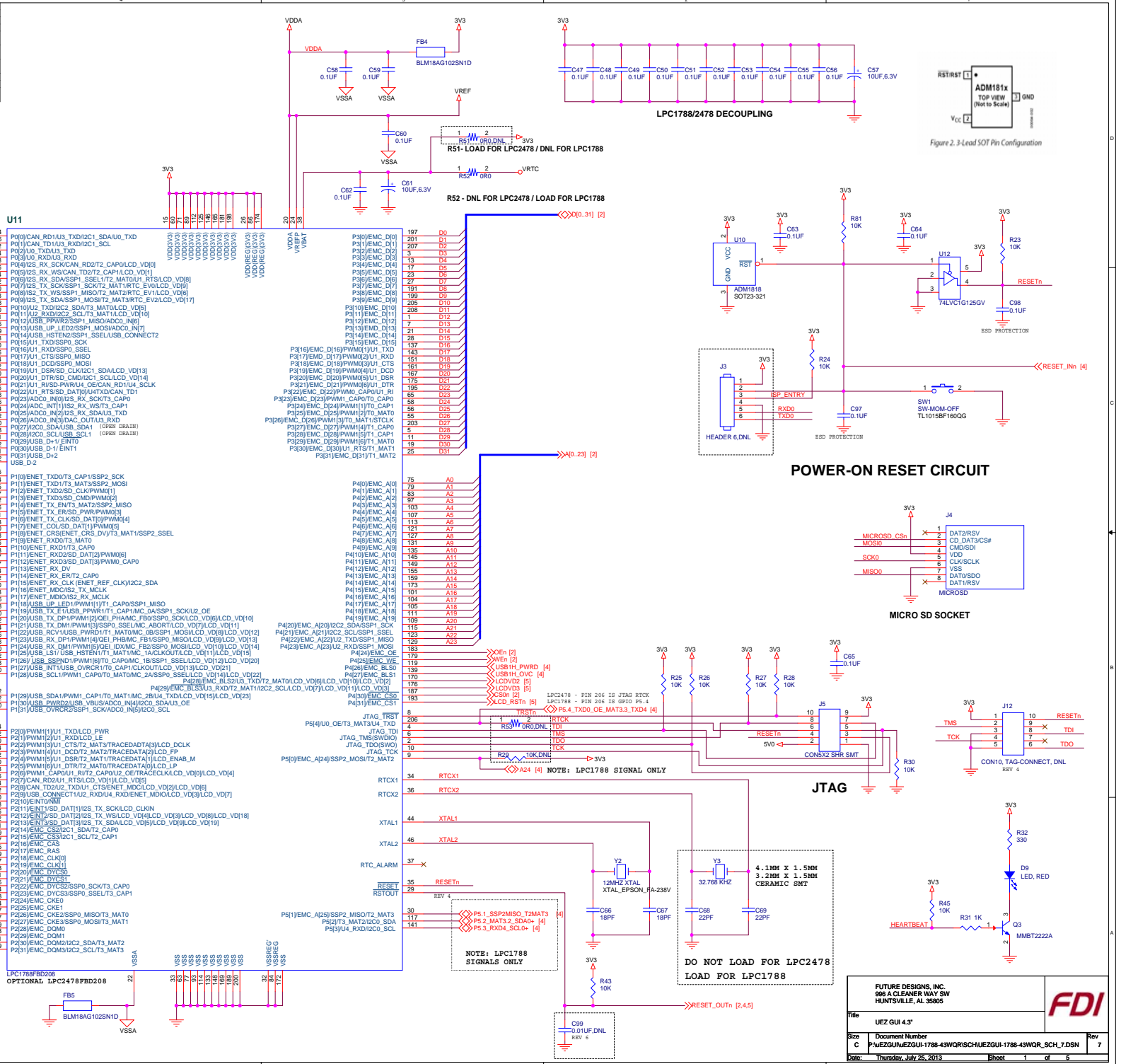
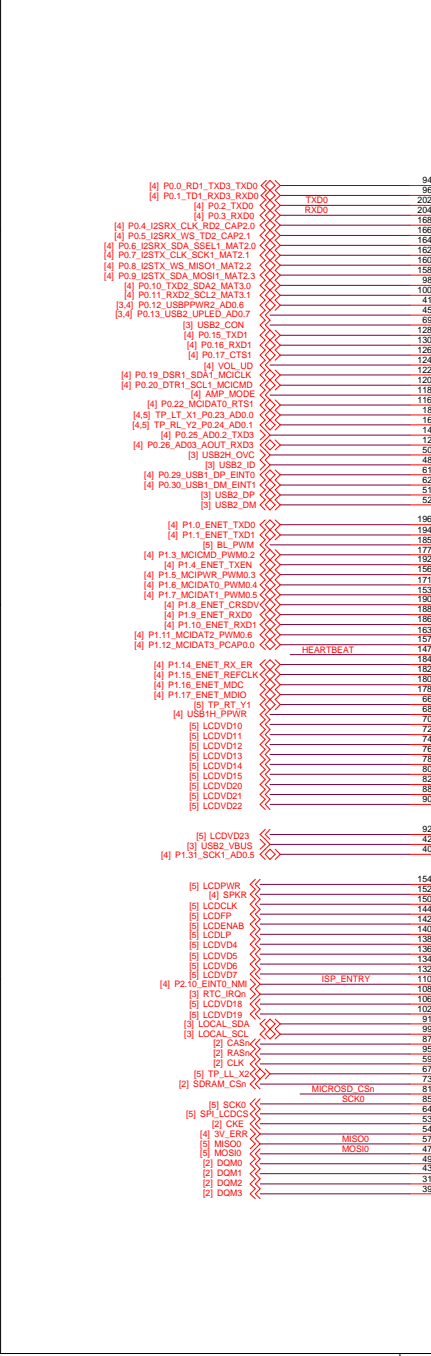
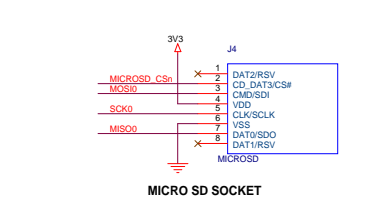
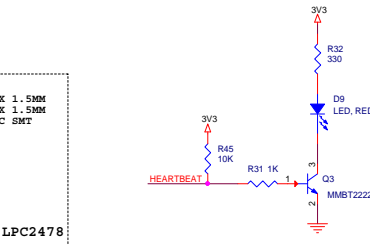


Figure 2. 3-Lead SOT Pin Configuration

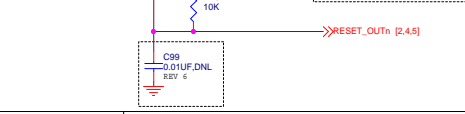
POWER-ON RESET CIRCUIT



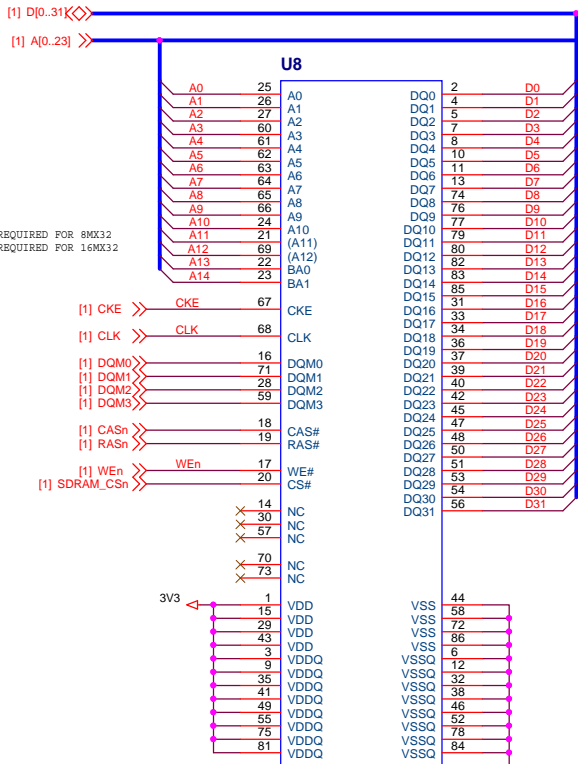
JTAG



DO NOT LOAD FOR LPC2478 LOAD FOR LPC1188



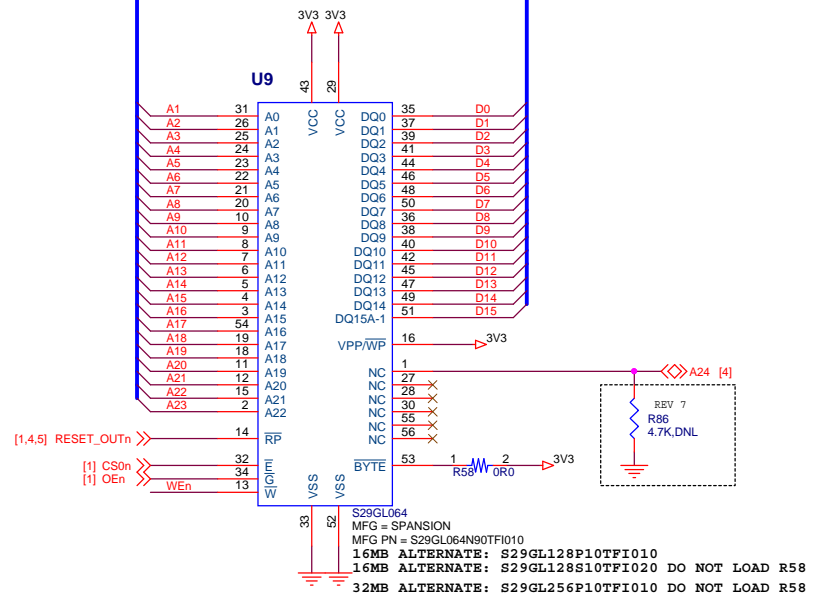
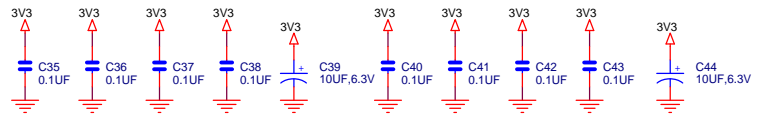
FUTURE DESIGNS, INC. 986 A CLEANER WAY SW HUNTSVILLE, AL 35896		<b>FDI</b>
Title: UEG GUI 4.3*		
Size: 4	Document Number: PAUEZGUJUEZGUH-1788-43WQR-SCHU-1788-43WQR_SCH_7_DS9	Rev: 7
Date: Thursday, July 25, 2013	Sheet: 1	of 5



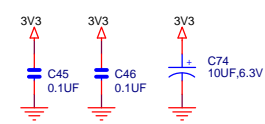
A11 REQUIRED FOR 8MX32  
A12 REQUIRED FOR 16MX32

MT48LC2M32B2P  
MT48LC4M32B2P ALTERNATE (16MB)  
IS42S32800D-7TL ALTERNATE (32MB)

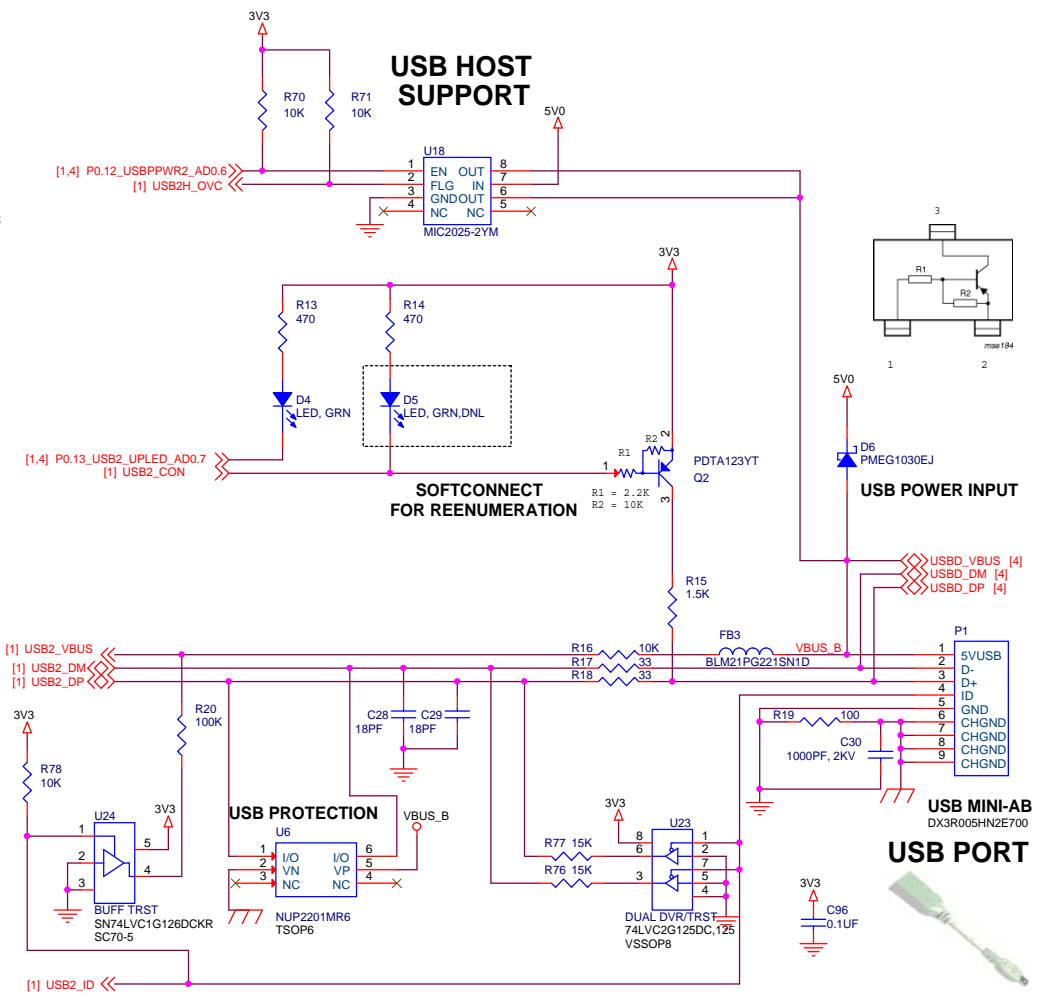
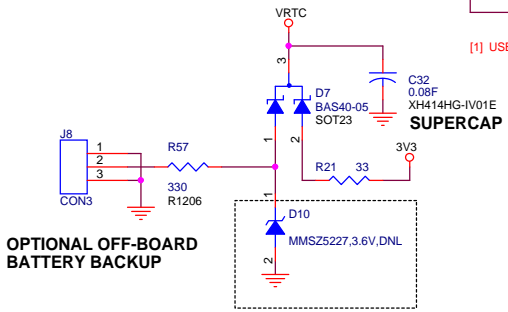
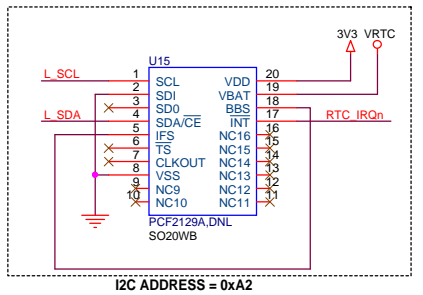
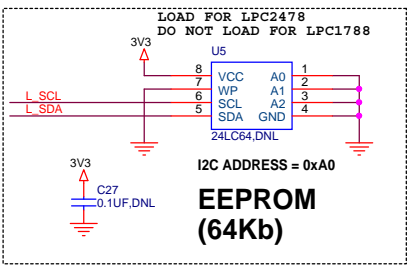
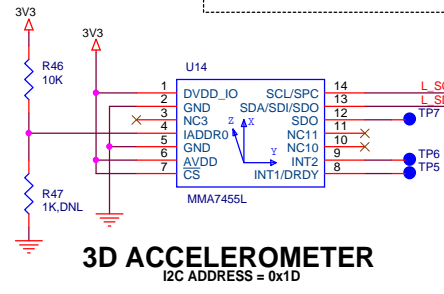
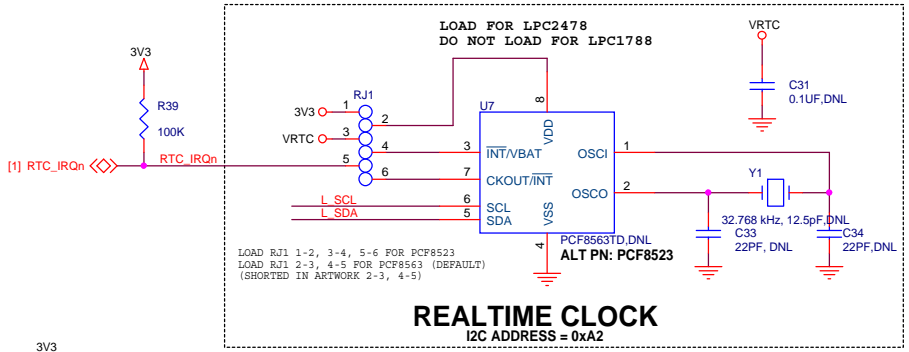
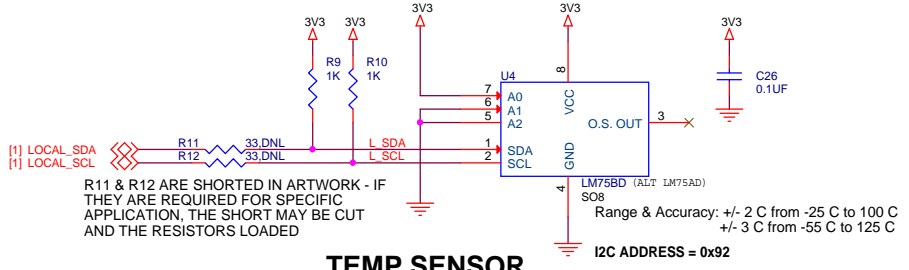
### SDRAM (8MB TO 32MB)



### NOR FLASH (8MB TO 32MB)

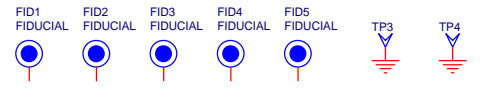
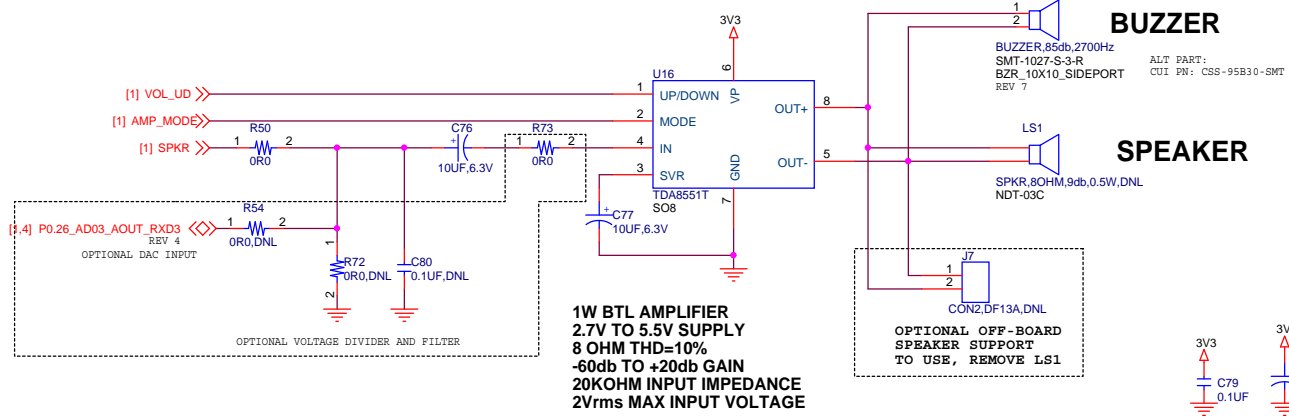
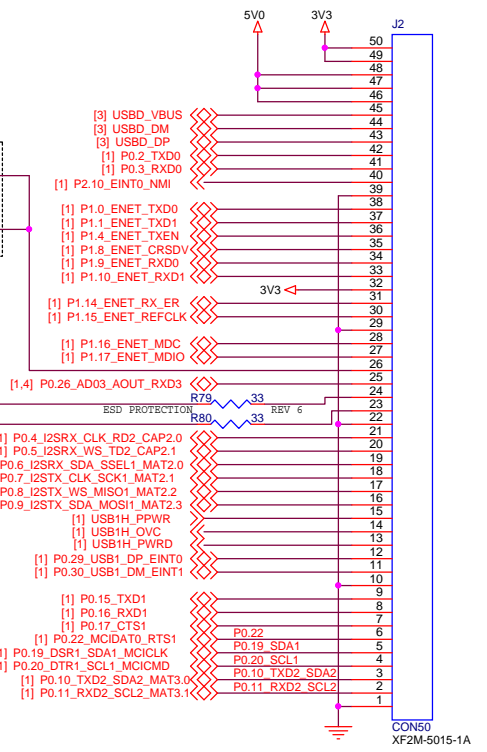
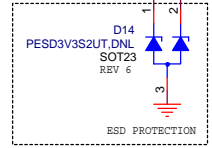
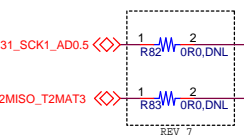
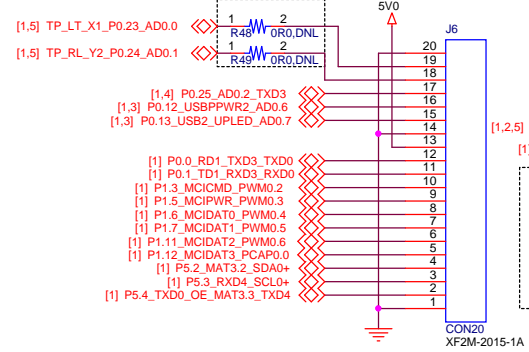
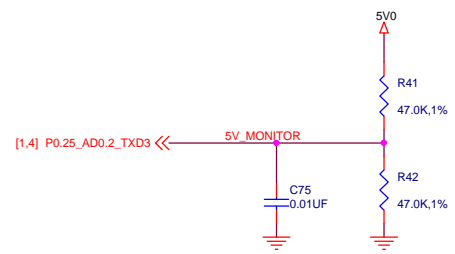
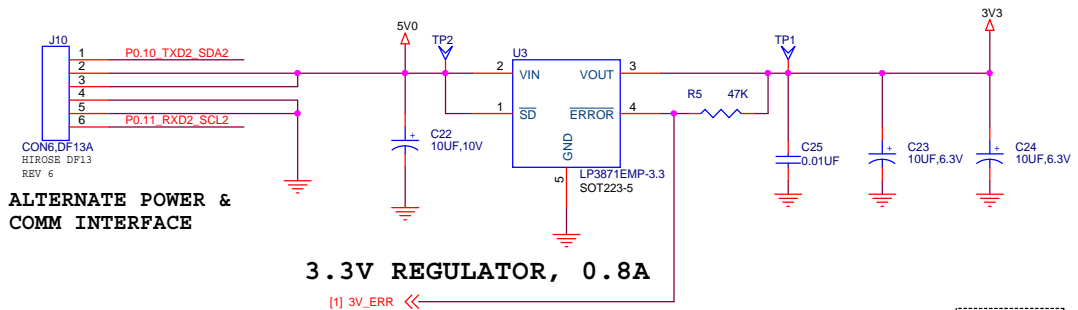


FUTURE DESIGNS, INC. 996 A CLEANER WAY SW HUNTSVILLE, AL 35805		
Title UEZ GUI 4.3*		
Size B	Document Number P:\uEZGUI\ueZGUI-1788-43WQR\SCH\UEZGUI-1788-43WQR_SCH_7.DSN	Rev 7
Date: Wednesday, July 24, 2013	Sheet 2	of 5



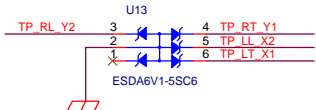
TO CONVERT FROM USB MINI-AB TO USB A UTILIZE CABLE SHOWN BELOW, AVAILABLE FROM DIGI-KEY, PN: 10-00003-ND

FUTURE DESIGNS, INC. 996 A CLEANER WAY SW HUNTSVILLE, AL 35805		<b>FDI</b>
Title	UEZ GUI 4.3*	
Size	Document Number	Rev
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Date:	Wednesday, July 24, 2013	Sheet 3 of 5



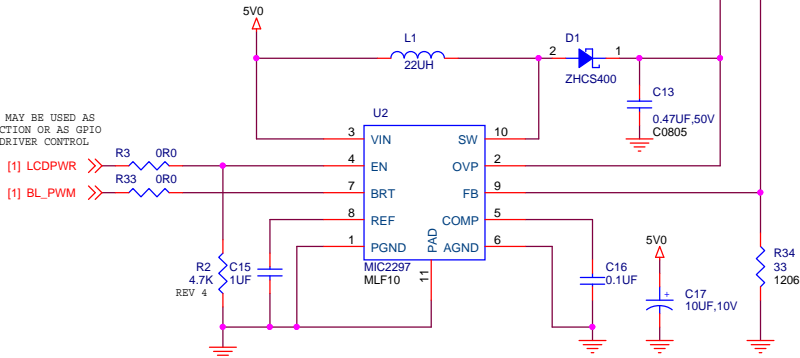
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Date:	Thursday, July 25, 2013	Sheet 4 of 5

# SHARP LCD (DG28)



**TP ESD PROTECTION**

LCDPWR MAY BE USED AS HW FUNCTION OR AS GPIO UNDER DRIVER CONTROL

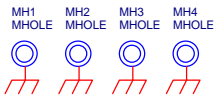


**BACKLIGHT VOLTAGE GENERATOR**

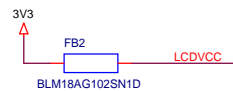
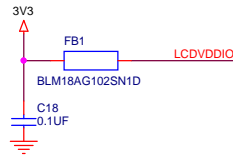
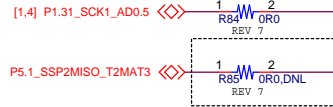
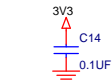
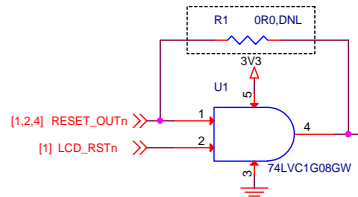
**BACKLIGHT CURRENT CALCULATION:**

$$I_{LED} = \frac{V_{peak} \cdot D}{5 \cdot R_{sense}}$$

I<sub>LED</sub> = 20mA FOR THE FOLLOWING;  
 R<sub>SENSE</sub> (R34) = 33OHM  
 V<sub>PEAK</sub> (BRT PIN) = 3.3V  
 D (BRT PIN) = 0% TO 100%

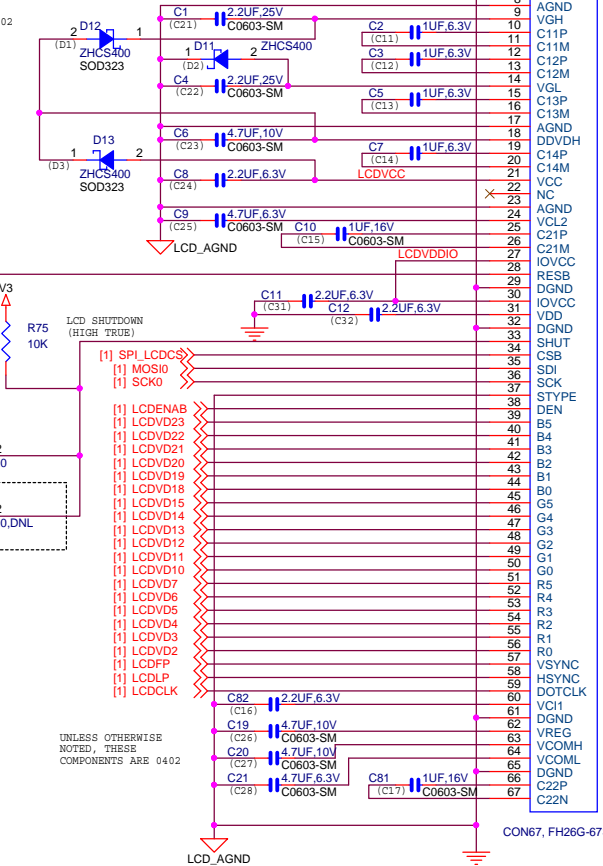


**SUPPORT FOR CPU RESET CONTROL OF LCD MODULE LOAD U1 AND DNL R1**



UNLESS OTHERWISE NOTED, THESE COMPONENTS ARE 0402

- [1,4] TP\_LT\_X1\_P0.23\_ADO.0
- [1,4] TP\_RT\_Y2\_P0.24\_ADO.1
- [1] TP\_LL\_X2
- [1] TP\_RT\_Y1



UNLESS OTHERWISE NOTED, THESE COMPONENTS ARE 0402

**NOTE: SHIELD LCD\_AGND AND CONNECT TO GND AT A SINGLE POINT**

FUTURE DESIGNS, INC. 996 A CLEANER WAY SW HUNTSVILLE, AL 35805		
Title: UEZ GUI 4.3*		
Size: B	Document Number: P:\uEZGUI\ueZGUI-1788-43WQR\SCH\UEZGUI-1788-43WQR_SCH_7.DSN	Rev: 7
Date: Wednesday, July 24, 2013	Sheet: 5	of: 5