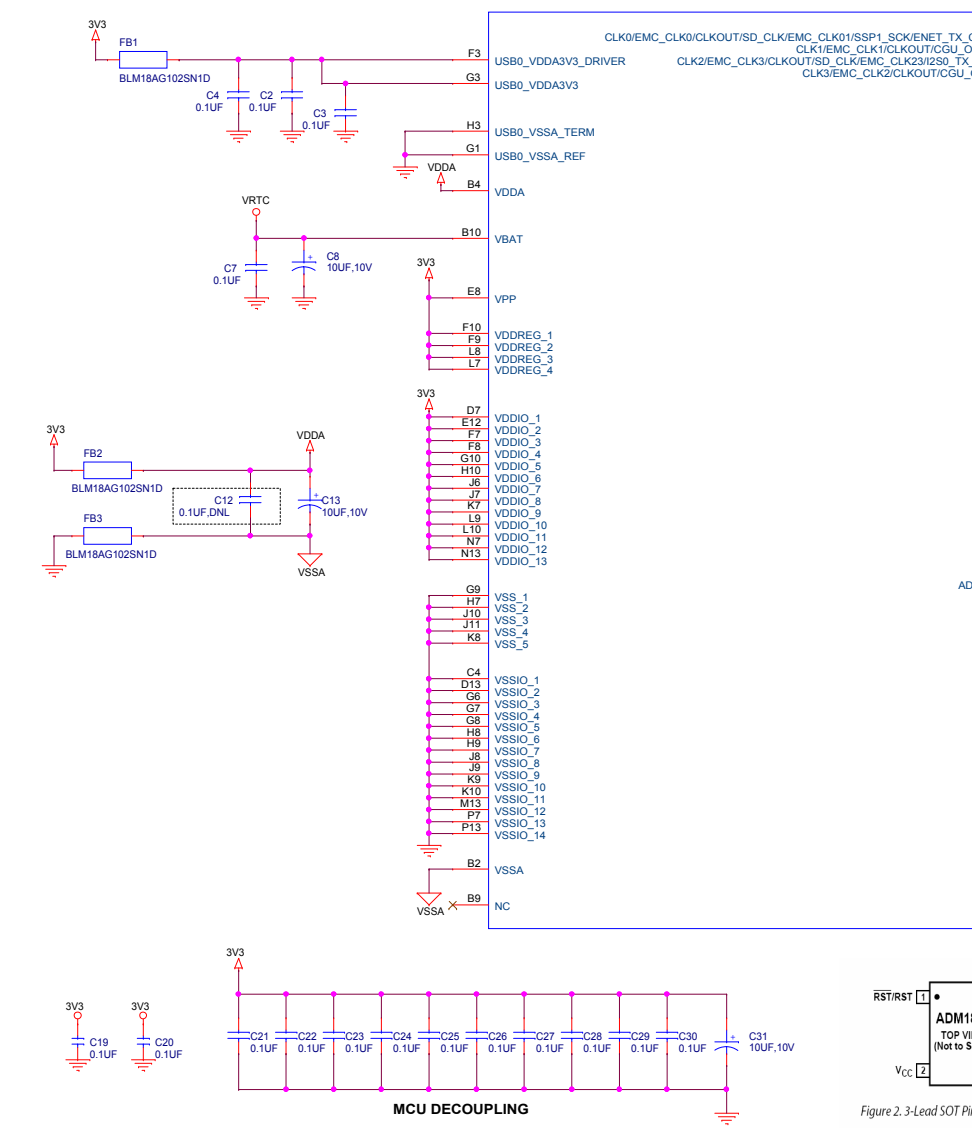


REVISION HISTORY	
11/03/2015	1.0 INT11144 RELEASE
12/01/2015	1.1 CHANGE C12 TO DNL
05/23/2016	1.2 Update USB circuitry and adjust values for use with LPC4357
06/24/2016	1.3 CHANGE D3 FROM B0540WS-7 TO PMG01030E3



U10
MCU,CRTX-M4,1MB,136K,204MHZ
LPC4357JET266

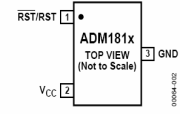
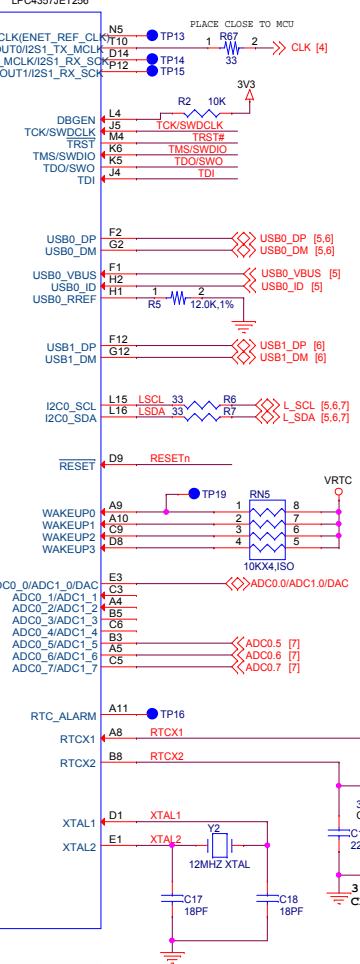
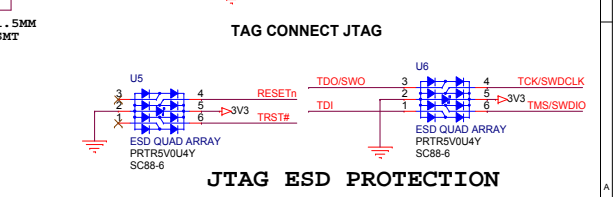
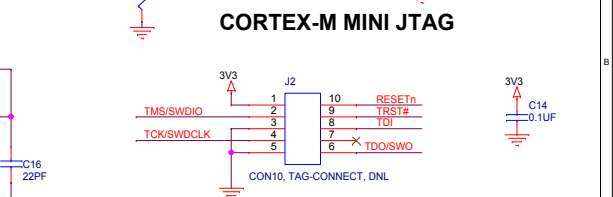
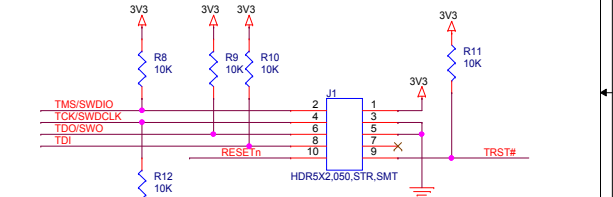
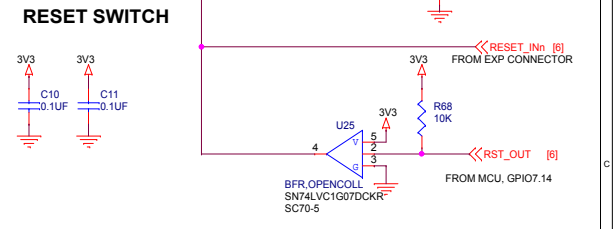
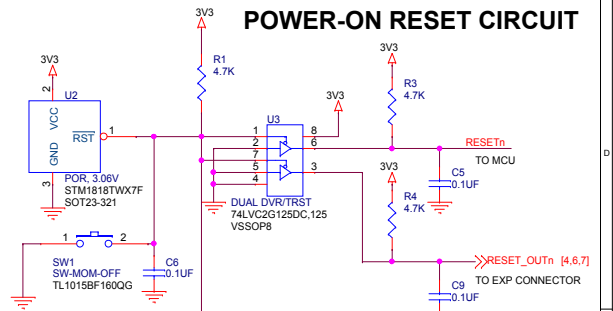


Figure 2.3-Lead SOT Pin Configuration

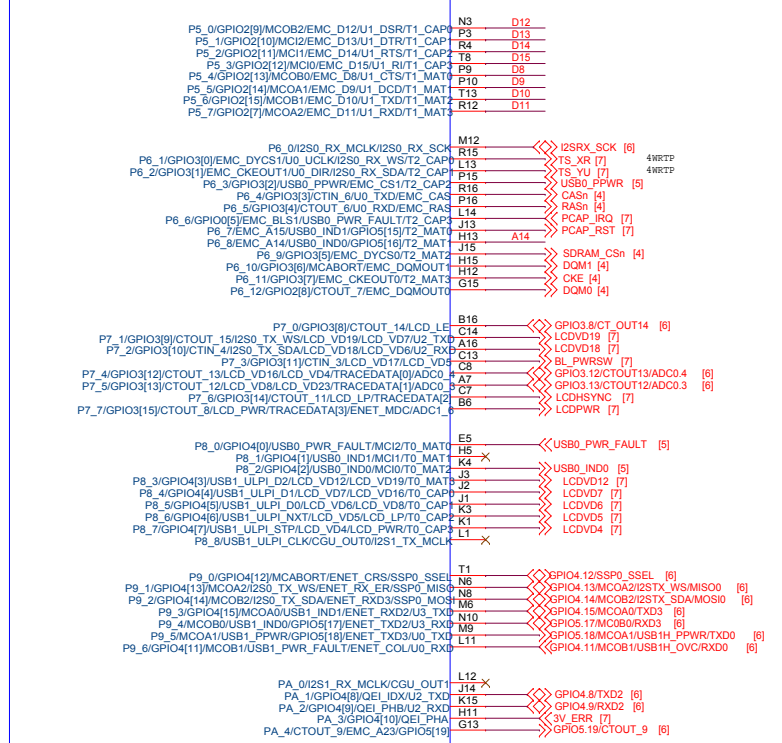
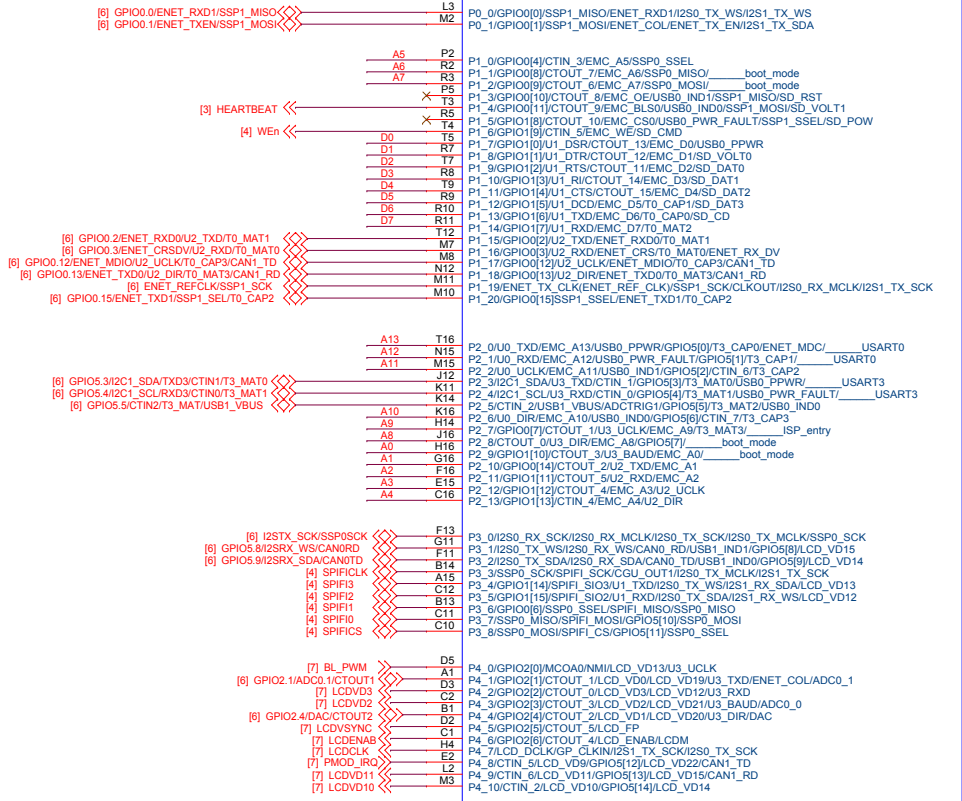


FUTURE DESIGNS, INC. 986 A CLEANER WAY HUNTSVILLE, AL 35805		FDI
Title	MICROPROCESSOR PWR	
Size	Document Number UEZUI-4357-50WVN	Rev 1.3
Date:	Friday, June 24, 2016	Sheet 1 of 7

0.31 [3,4]
0.14 [4]

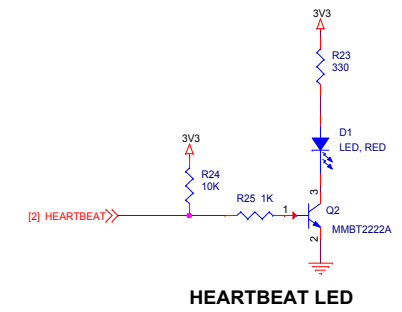
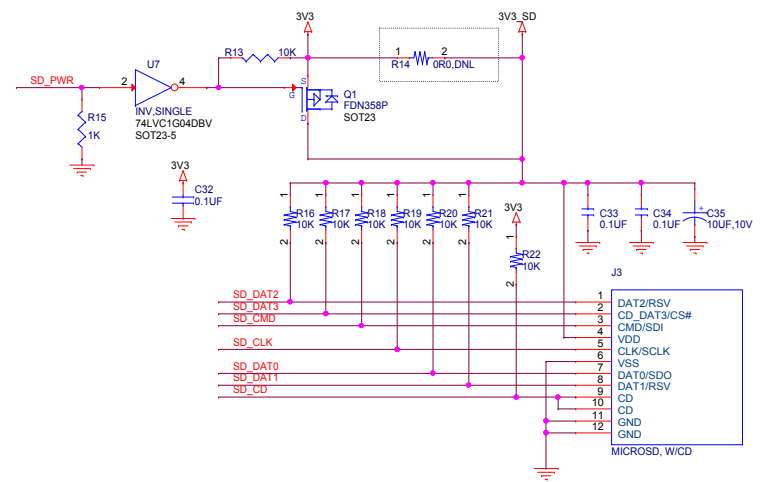
U1A
MCU,CRTX-M4,1MB,136K,204MHZ
LPC4357JET256

U1B
MCU,CRTX-M4,1MB,136K,204MHZ
LPC4357JET256

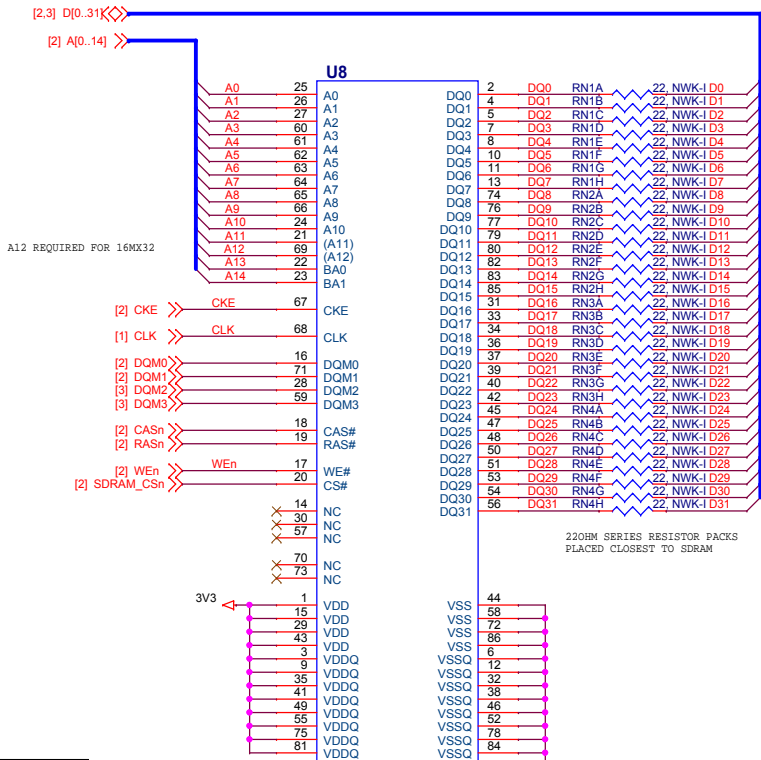


FUTURE DESIGNS, INC. 986 A CLEANER WAY HUNTSVILLE, AL 35805		
Title: MICROPROCESSOR IO1		
Size:	Document Number: UEZGUI-4357-50WVN	Rev: 1.3
Date:	Friday, June 24, 2016	Sheet: 2 of 7

U1C
 MCU,CRTX-M4,1MB,136K,204MHZ
 LPC4357JET26



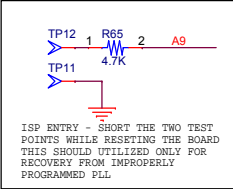
FUTURE DESIGNS, INC. 986 A CLEANER WAY HUNTSVILLE, AL 35805		FDI
Title: MICROPROCESSOR I02		
Size: UEZGUI-4357-50WVN	Document Number: UEZGUI-4357-50WVN	Rev: 1.3
Date: Friday, June 24, 2016	Sheet: 3 of 7	



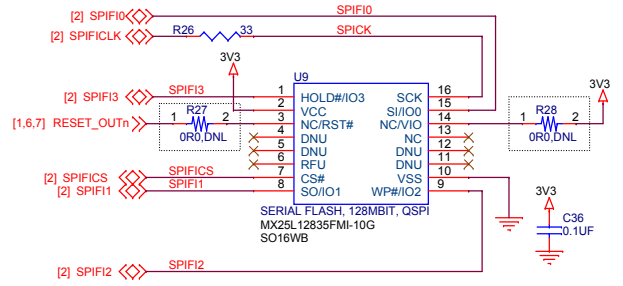
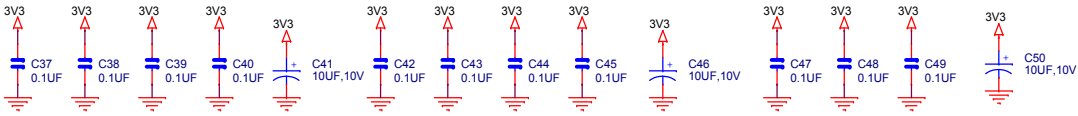
SDRAM, 128MBIT, 167MHZ
 MFG PN = MT48LC4M32B2P-6A IT:L TR
 PCB Footprint = TSOP86

IS42S32800D-6TL ALTERNATE (32MB)

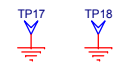
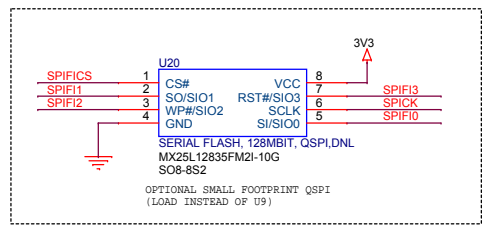
SDRAM (16MB TO 32MB)



ISP ENTRY - SHORT THE TWO TEST POINTS WHILE RESETING THE BOARD. THIS SHOULD UTILIZED ONLY FOR RECOVERY FROM IMPROPERLY PROGRAMMED PLL.

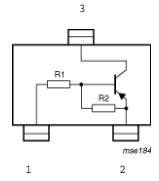
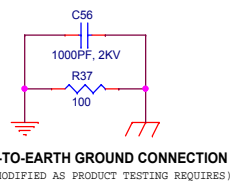
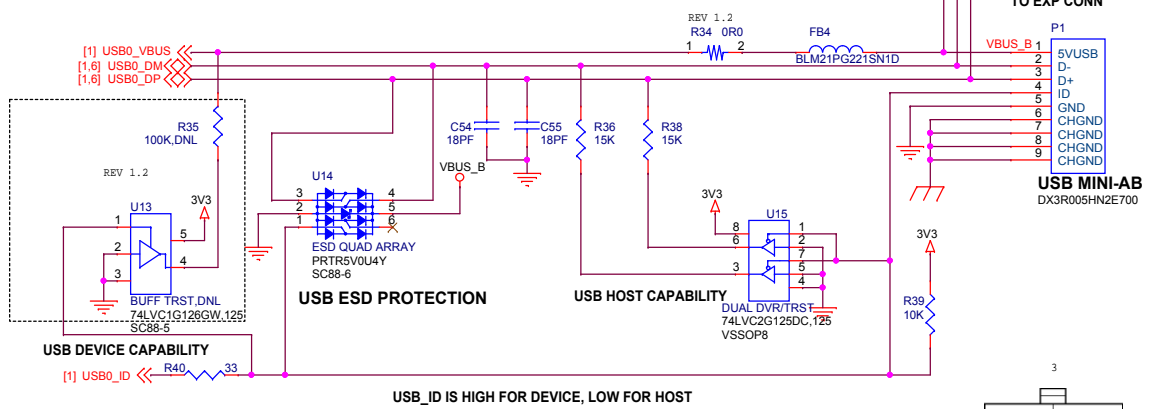
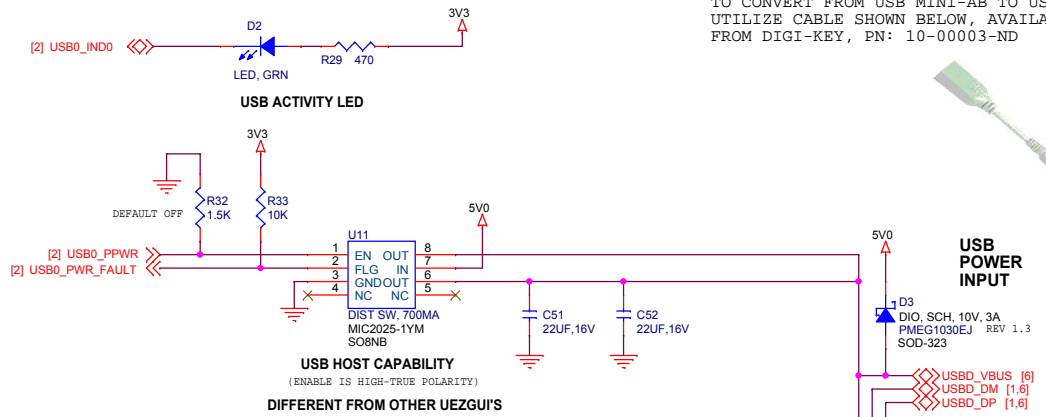
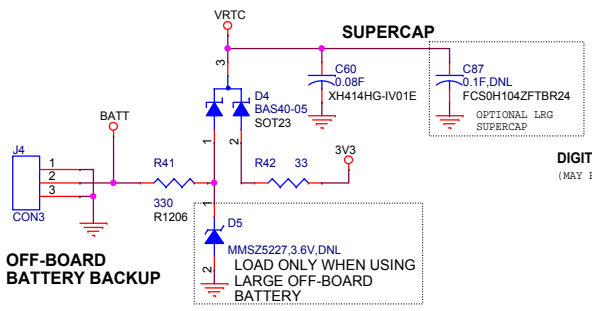
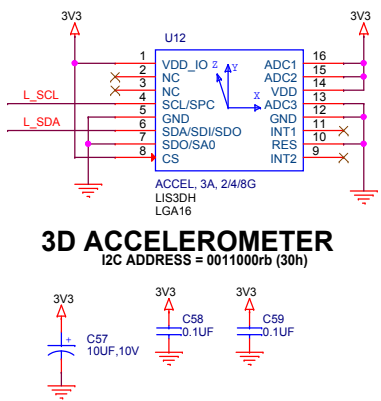
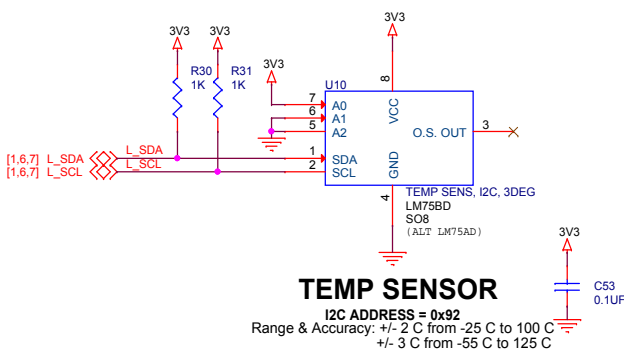


QUADSPI/SPIFI SERIAL FLASH



FUTURE DESIGNS, INC. 996 A CLEANER WAY HUNTSVILLE, AL 35805		
Title: SDRAM QSPI FLASH		
Size: B	Document Number: UEZGUI-4357-50WVN	Rev: 1.3
Date: Friday, June 24, 2016		Sheet: 4 of 7

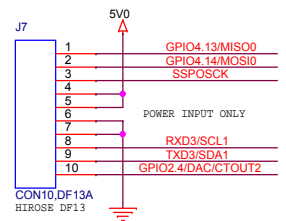
TO CONVERT FROM USB MINI-AB TO USB A UTILIZE CABLE SHOWN BELOW, AVAILABLE FROM DIGI-KEY, PN: 10-00003-ND



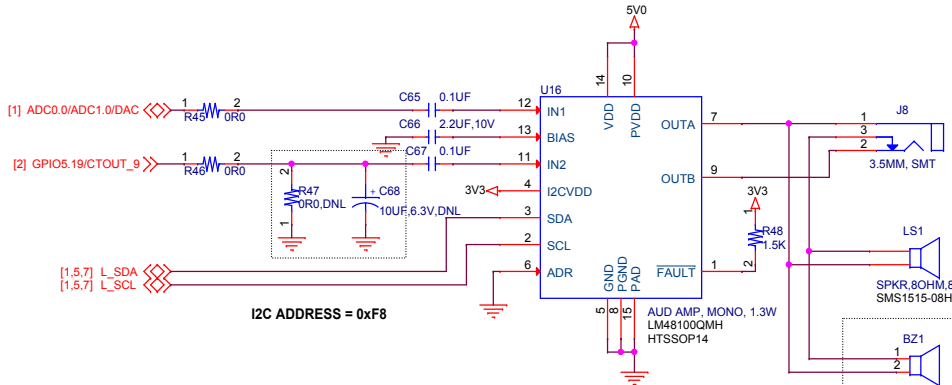
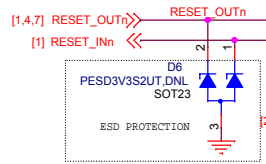
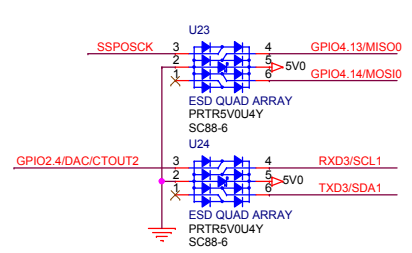
FUTURE DESIGNS, INC. 996 A CLEANER WAY HUNTSVILLE, AL 35805		FDI
Title: USB DEVICE I2C PERIPHERALS		
Size B	Document Number: UEZGUI-4357-50WVN	Rev 1.3
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- [3] GPIO7.19/ADC1.4/U3_UCLK/SSP1_SSEL
- [3] GPIO7.20/ADC1.3/U3_DIR/SSP1_MISO
- [3] GPIO7.22/ADC0.2/U0_CLK/CTIN2
- [2] GPIO3.12/CTOUT13/ADC0.4
- [2] GPIO3.13/CTOUT12/ADC0.3
- [2] GPIO4.8/TXD2
- [2] GPIO4.9/RXD2
- [2] GPIO4.15/MCOA0/RXD3
- [2] GPIO5.17/MCOB0/RXD3
- [3] GPIO6.24/CTIN1
- [3] GPIO6.25/CTOUT14
- [3] GPIO6.26/CTOUT10
- [3] GPIO6.27/CTOUT13
- [3] GPIO6.28/CTOUT11
- [3] GPIO6.29/CTOUT8
- [3] GPIO6.30/CTOUT12

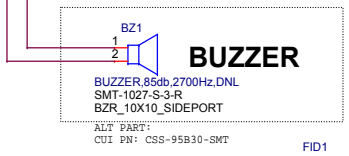
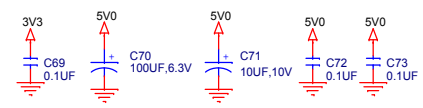
SECONDARY EXPANSION CONNECTOR



ALTERNATE POWER & COMM INTERFACE
(LIKE 70WVM)



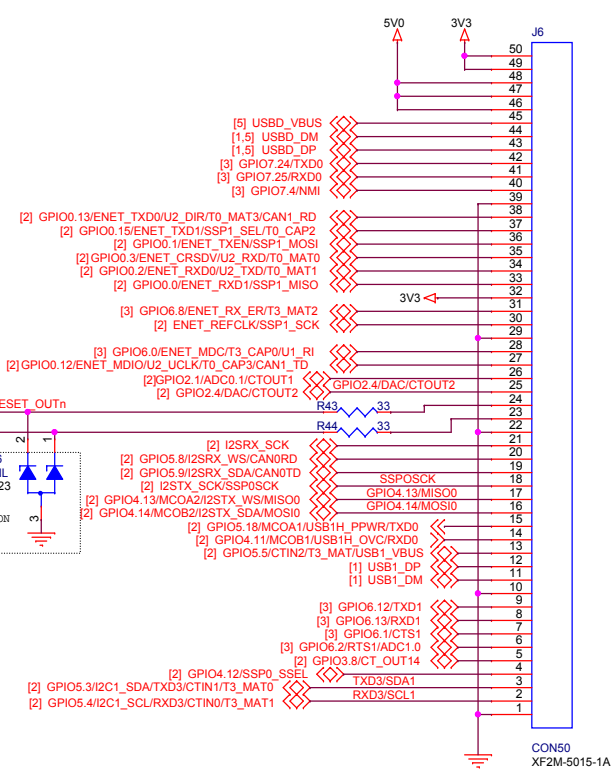
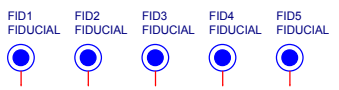
AMPLIFIER
1.3W BTL AMPLIFIER
3.6V TO 5.5V SUPPLY
8 OHM THD<1%
-54db TO +18db GAIN
12.5KOHM INPUT IMPEDANCE



OPTIONAL OFF-BOARD SPEAKER SUPPORT
PLUG IN OFF-BOARD SPEAKER DISABLES ON-BOARD ANNUNCIATOR

SPEAKER

BUZZER



PRIMARY EXPANSION CONNECTOR

FUTURE DESIGNS, INC. 996 A CLEANER WAY HUNTSVILLE, AL 35805		FDI
Title: IO CONN SPKR		
Size:	Document Number: UEZGUI-4357-50WVN	Rev: 1.3
Date: Friday, June 24, 2016	Sheet: 6 of 7	

