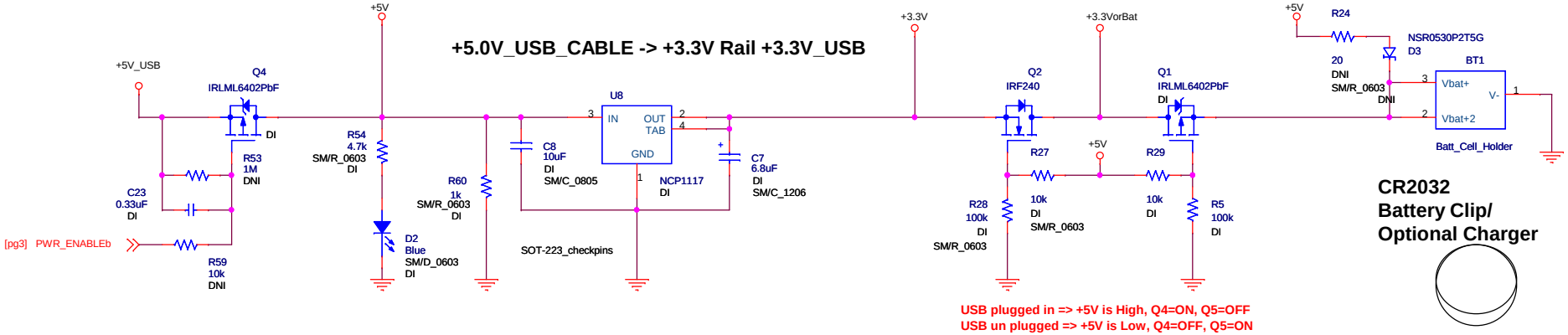
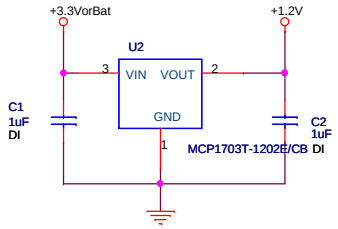
+5.0V_USB_CABLE -> +3.3V Rail +3.3V_USB



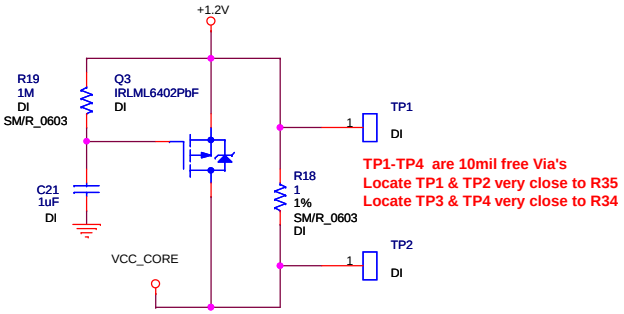
CR2032
Battery Clip/
Optional Charger

USB plugged in => +5V is High, Q4=ON, Q5=OFF
USB un plugged => +5V is Low, Q4=OFF, Q5=ON

+3.3V or Bat -> +1.2V Rail



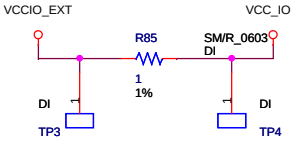
Core Current



TP1-TP4 are 10mil free Via's
Locate TP1 & TP2 very close to R35
Locate TP3 & TP4 very close to R34

To U9 sense for current
Thin signal traces or non load bearing copper pour
Direct path from R35 to U7

I/O Current



To U9 sense for current
Thin signal traces
Direct path from R34 to U7

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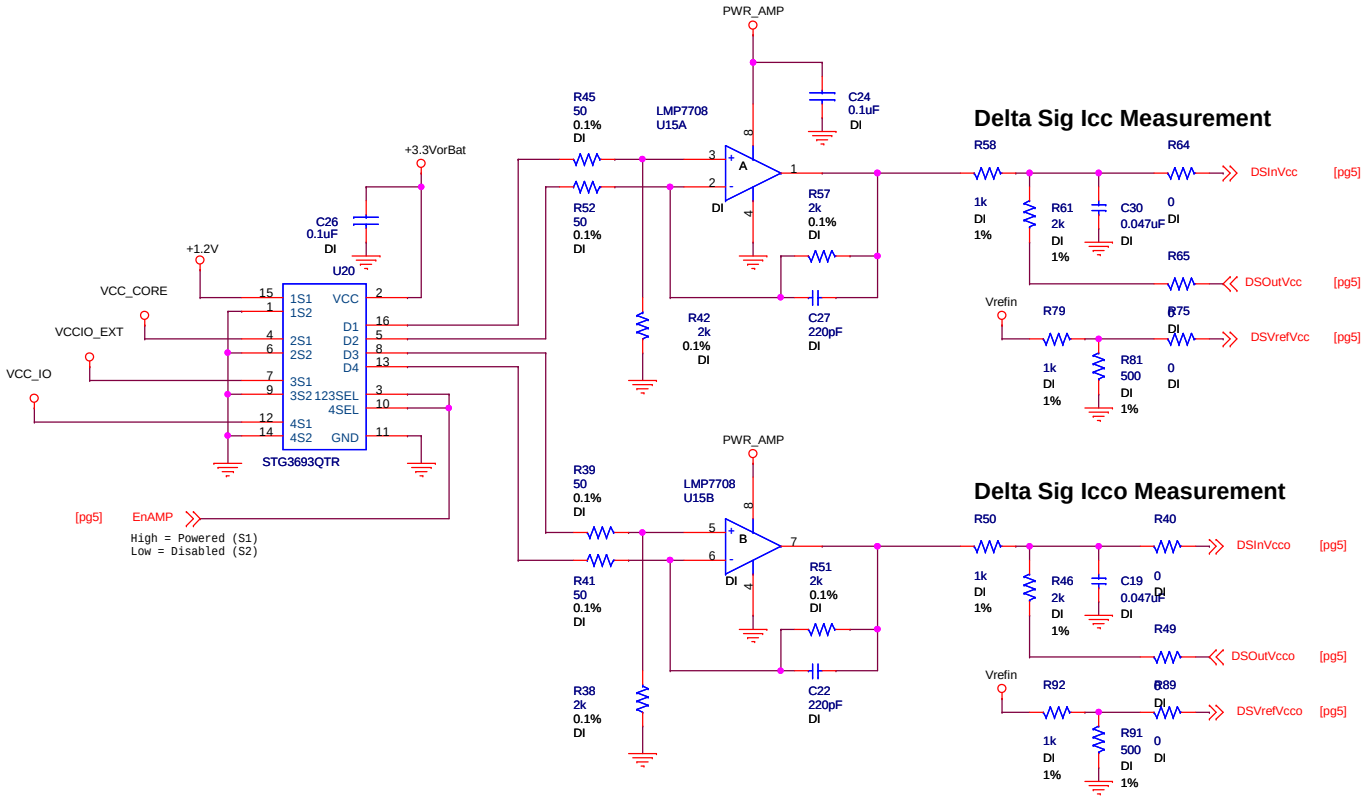
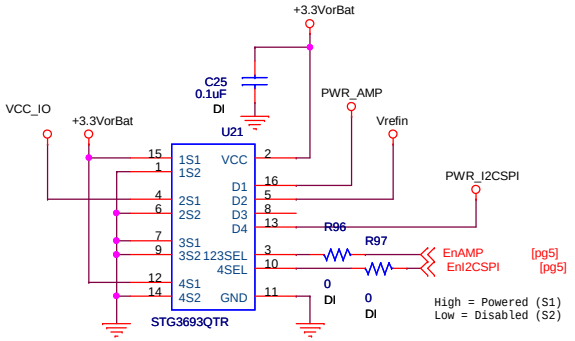
Title: USB 5V, XO Power Rails 3.0V Batt, 1.2V Rail and Current Monitors		
Size: B	Project: MACHXO2 Pico Board	Schematic Rev: A
		Board Rev: E
Date: Friday, March 4, 2011	Sheet: 1 of 6	



Power Supply Enable Mux



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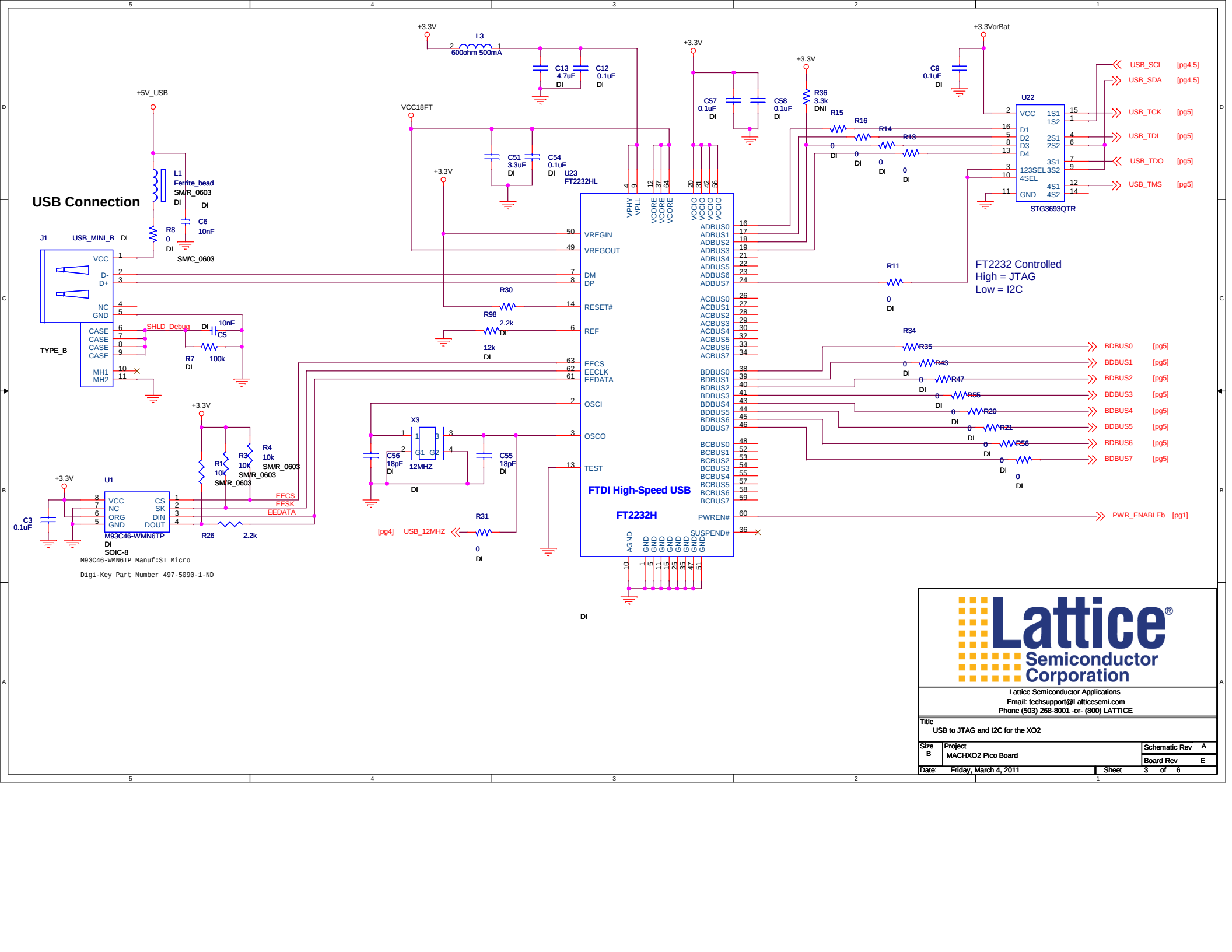
Title: Current Sense Amplifiers, Power Enable Mux		
Size: B	Project: MACHXO2 Pico Board	Schematic Rev: A
		Board Rev: E
Date: Friday, March 4, 2011	Sheet: 2 of 6	


USB Connection
FTDI High-Speed USB
FT2232H
FT2232 Controlled
High = JTAG
Low = I2C
M93C46-WMN6TP Manuf:ST Micro
Digi-Key Part Number 497-5090-1-ND
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Lattice Semiconductor Applications
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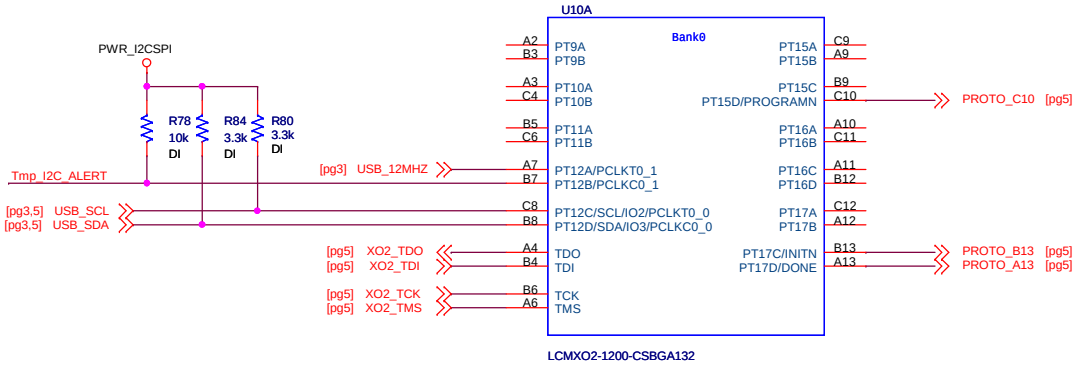
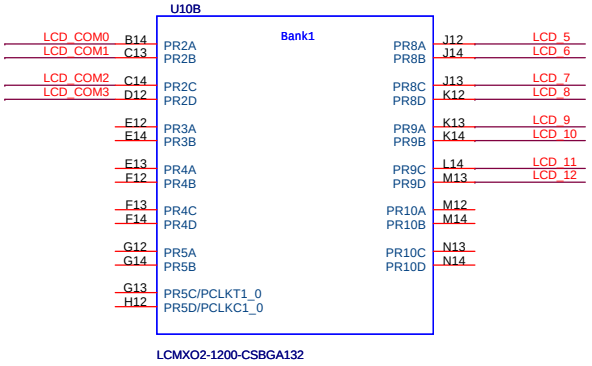
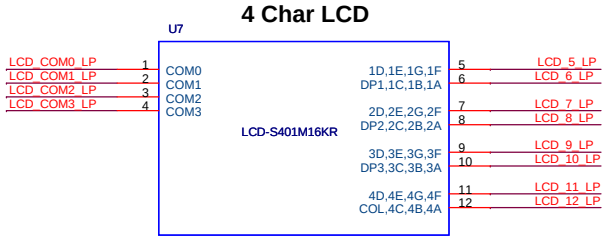
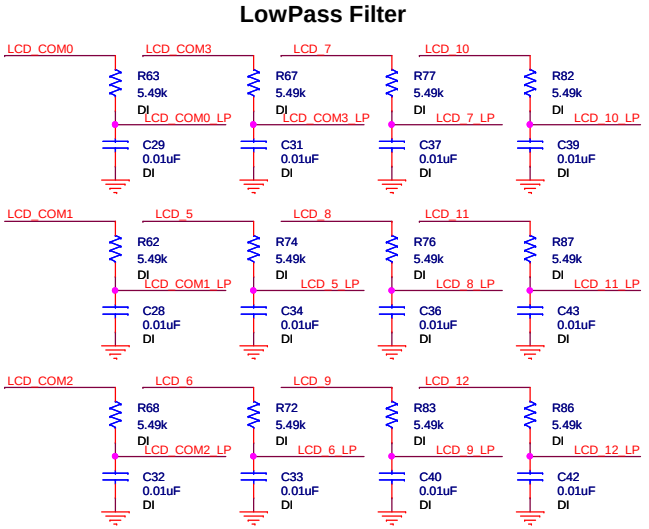
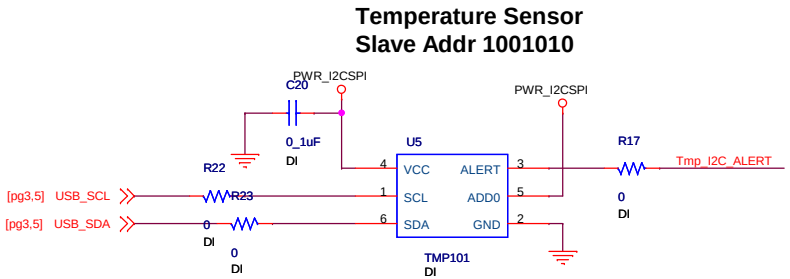
Phone (503) 268-8001 -or- (800) LATTICE
Title
USB to JTAG and I2C for the XO2
Size B
Project
MACHXO2 Pico Board
Schematic Rev A
Board Rev E
Date: Friday, March 4, 2011
Sheet 3 of 6











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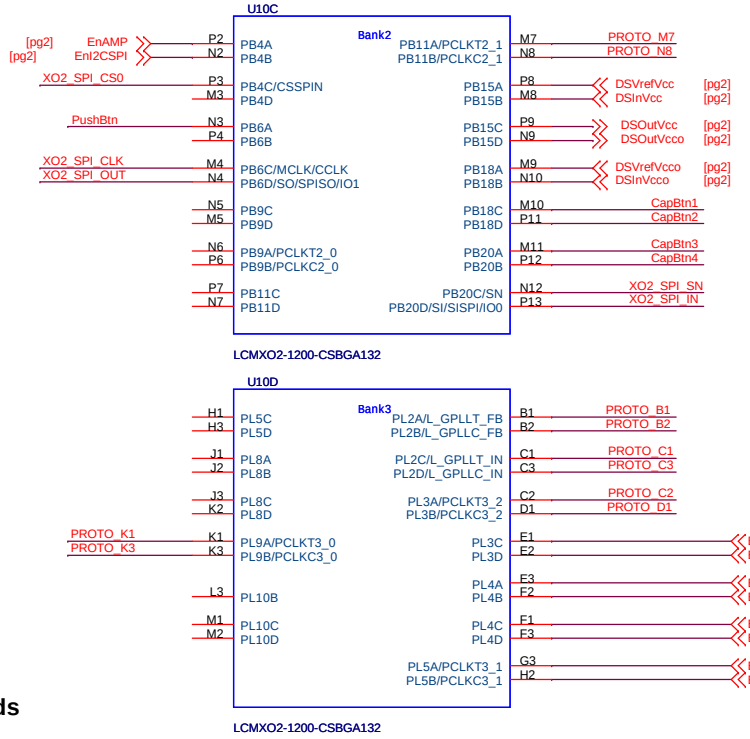
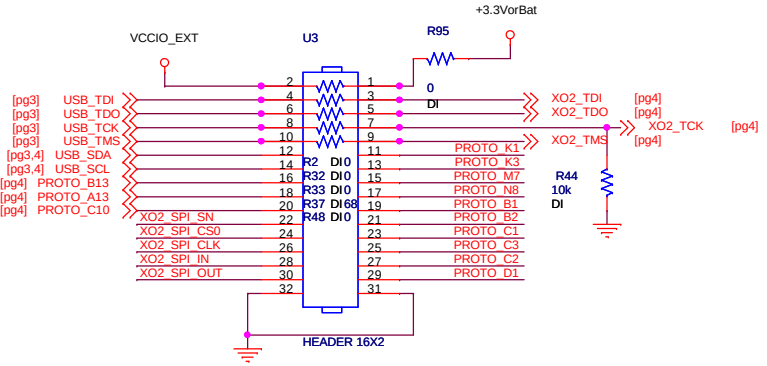
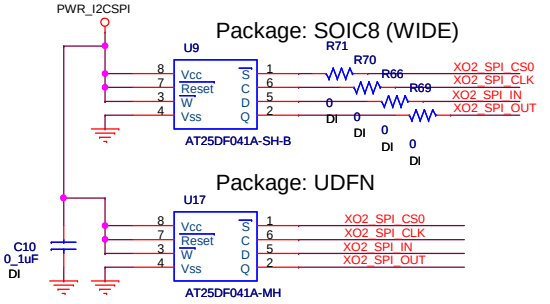
Title: XO2 Bank 0-1, LCD, I2C Temp		
Size: B	Project: MACHXO2 Pico Board	Schematic Rev: A
		Board Rev: E
Date: Friday, March 4, 2011	Sheet: 4 of 6	



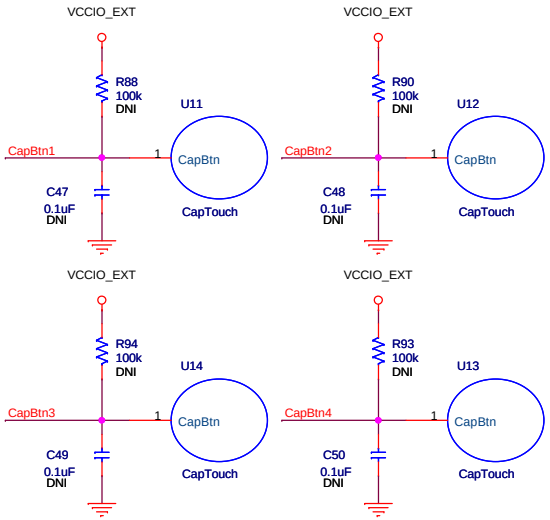
Header



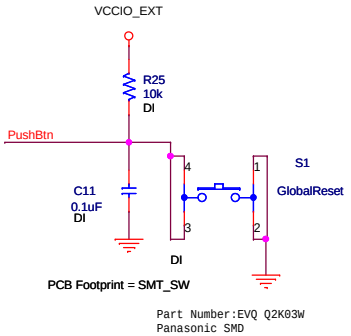
4MBit SPI



Capacitive Touch Pads



GSR/Wake from Standby



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Title	XO2 Bank 2-3, Cap Pads, Expansion Header, SPI		
Size B	Project MACHXO2 Pico Board	Schematic Rev	A
		Board Rev	E
Date: Friday, March 4, 2011		Sheet	5 of 6

Board Logos

G4
Lattice Logo
DI

G6
WEEE
DI

G5
E-Friendly
DI

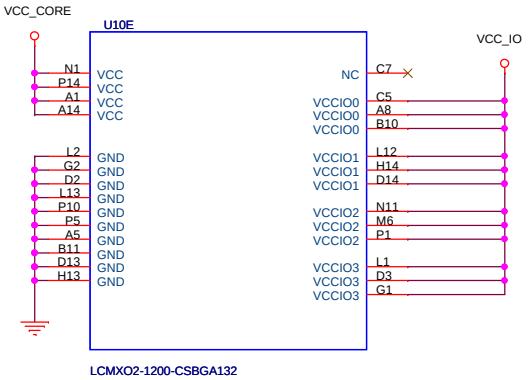
Board Mounting Holes

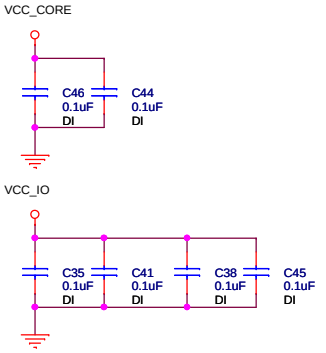
MH10
M_HOLE1
DI
IW_MNT0

MH12
M_HOLE1
DI
IW_MNT0

MH9
M_HOLE1
DI
IW_MNT0

MH11
M_HOLE1
DI
IW_MNT0





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Title: XO2 Power		
Size: B	Project: MACHXO2 Pico Board	Schematic Rev: A
		Board Rev: E
Date: Friday, March 4, 2011	Sheet: 6 of 6	