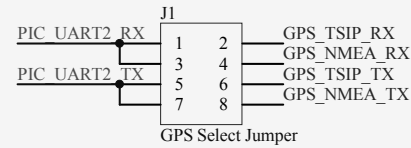


PIC UART-1 Interface (XBee Pro)



PIC UART-2 Interface (Trimble GPS Module)



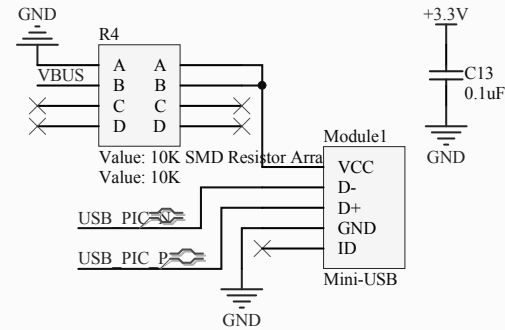
PIC UART-5 Interface (Bluetooth Module)



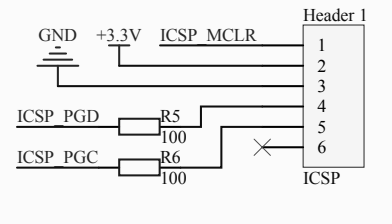
PIC Control Lines

XGPS_1PPS
 XXBEE_Associate
 XXBEE_/DTR
 XXBEE_/Reset
 XBarometer_/SHDN
 XBarometer_/CS
 XuSD_/CS
 XPS2_ACK
 XPS2_ATT

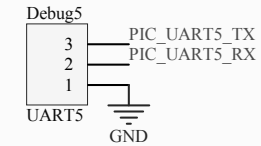
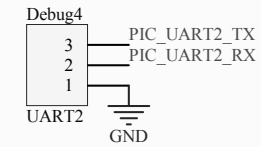
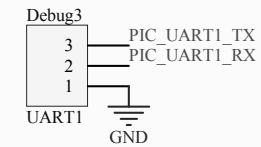
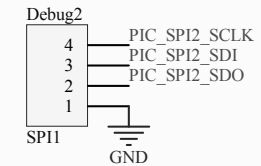
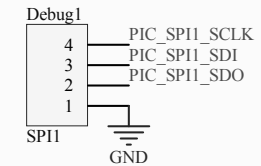
PIC32 USB Interface



In-Circuit Serial Programming Interface



Communication Debug Headers

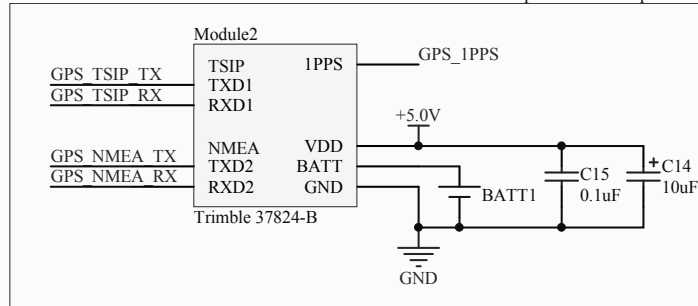


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Size A	Number	Revision
Date: 4/1/2012	Sheet of	
File: C:\Users\...\Connectors.SchDoc	Drawn By:	

A

A

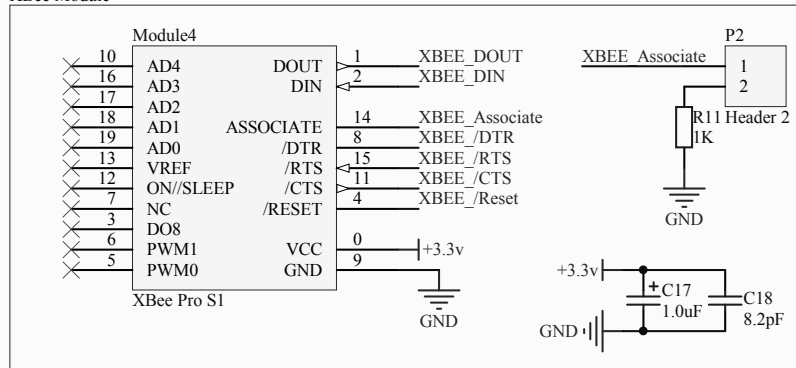
Trimble GPS 9600bps TSIP / 4800bps NMEA



B

B

XBee Module

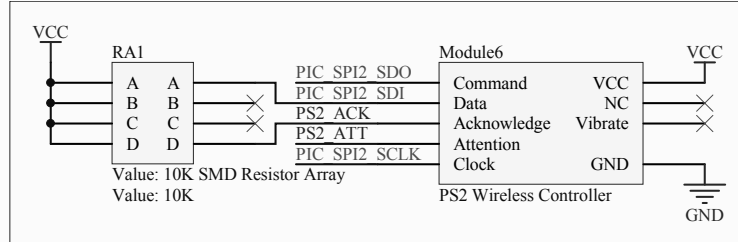


C

C

PS2 Wireless Controller Interface

250KHz SPI Interface

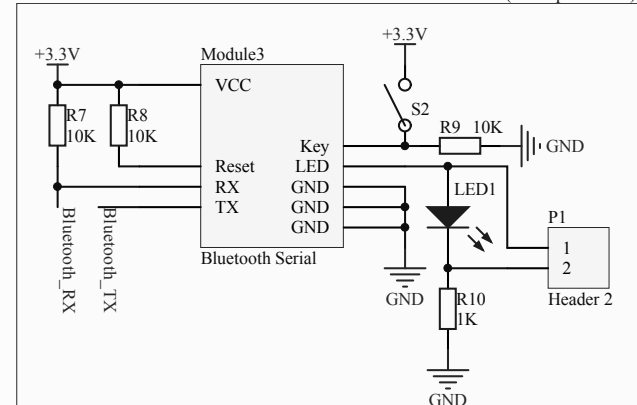


D

D

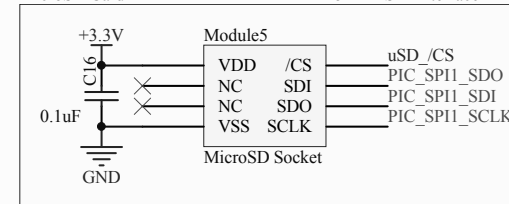
Bluetooth Serial Module

UART Interface (9600bps Default)



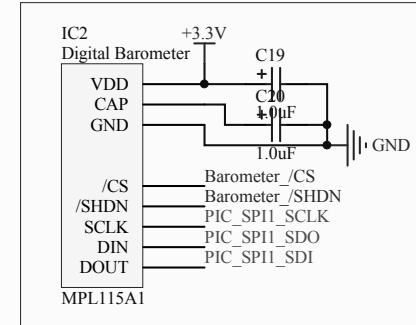
MicroSD Card

25MHz SPI Interface



Barometric Sensor

8MHz SPI Interface



Title

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File:

Number

Revision

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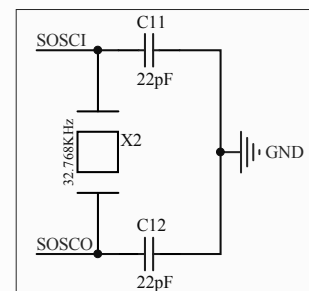
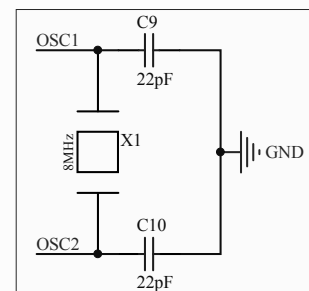
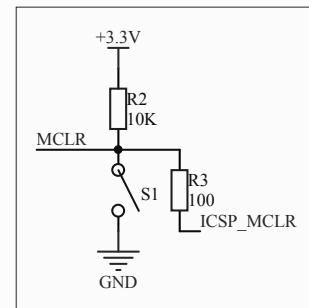
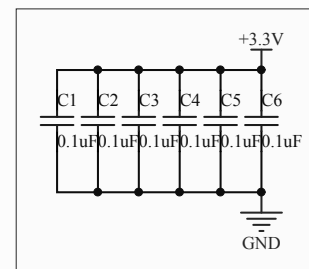
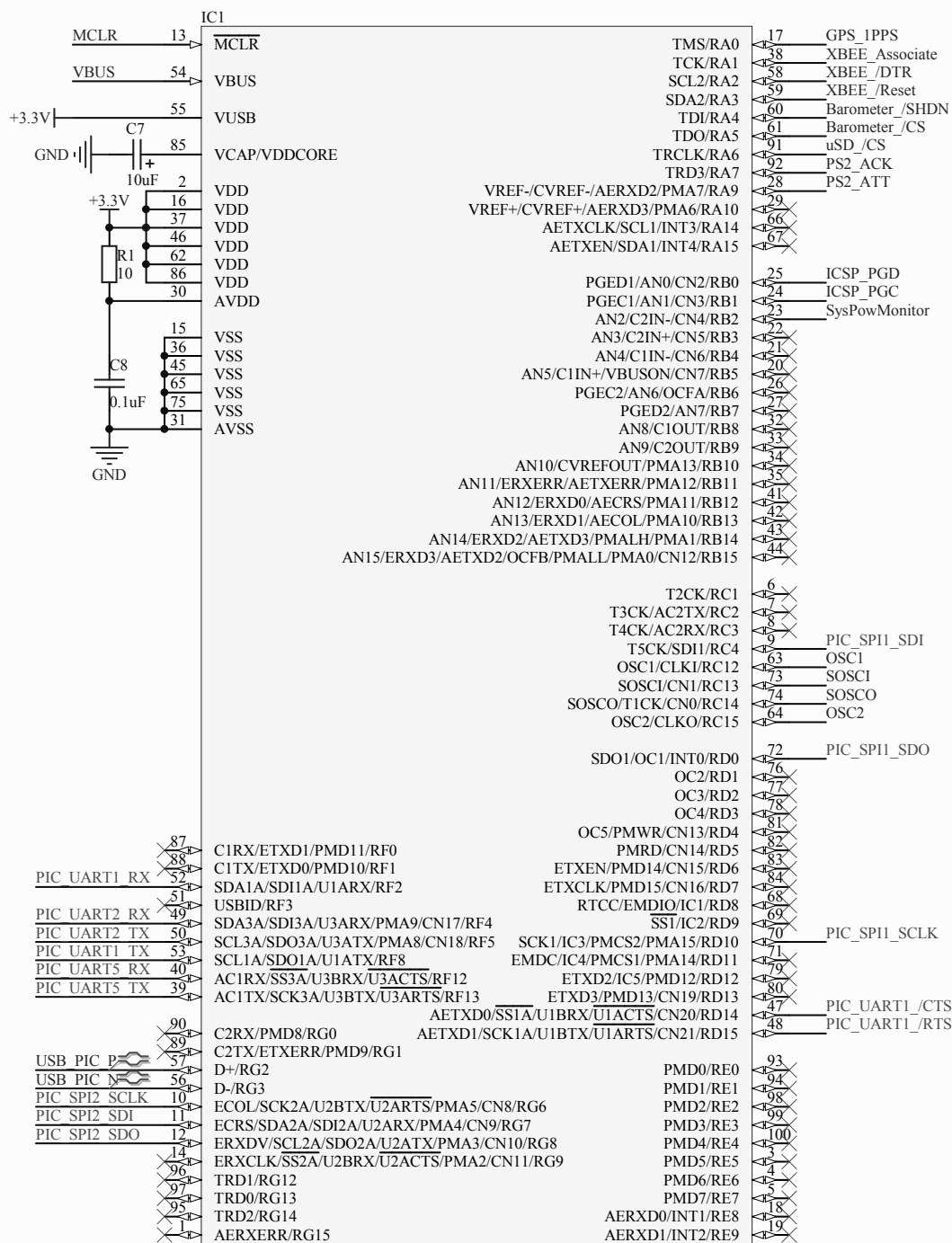
B

C

C

D

D

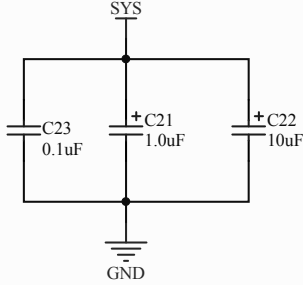


Notes:

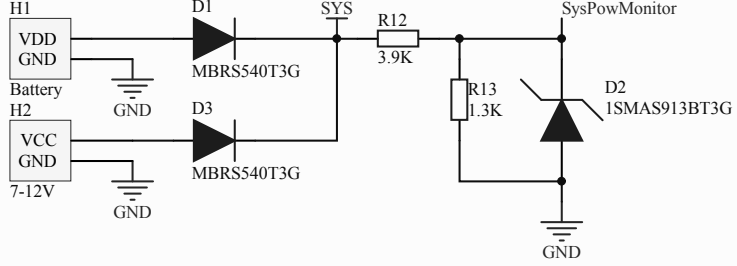
- VCAP is a 6V 1-Ohm Tantalum Capacitor

Title		
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3S Lipo Battery



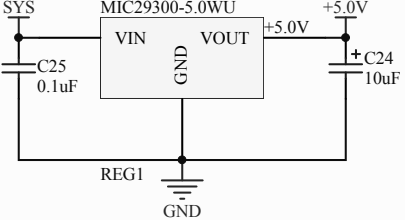
Power Input, Selection, and Monitoring



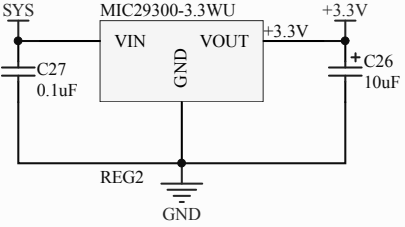
Power Rails:

+5.0V Rated: 3000mA
+3.3V Rated: 3000mA

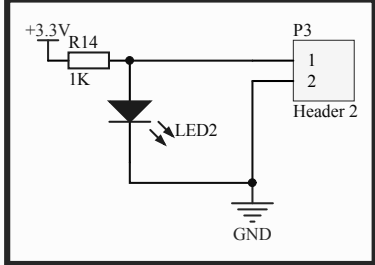
Battery -> 5.0 VDC



Battery -> 3.3 VDC



Power Indicator with External LED



Title		
Size A	Number	Revision
Date: 4/1/2012	Sheet 1 of 4	File: C:\Users\...\Power.SchDoc
Drawn By:		