Table of Contents

gumstix

Title: AeroCore for the DuoVero (17)
Board: aerocore2_duovero
9/8/15 2:40 PM
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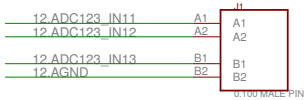
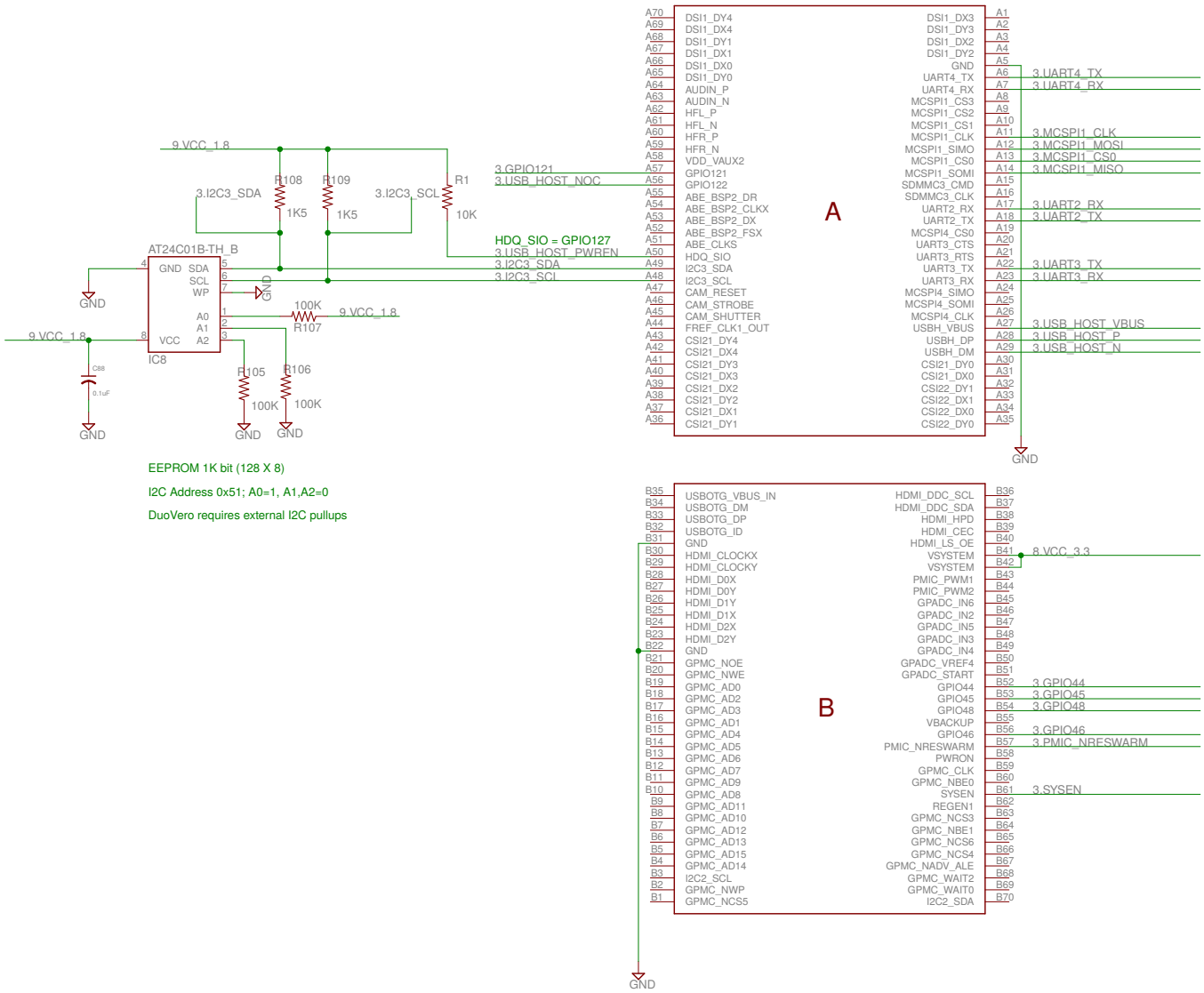
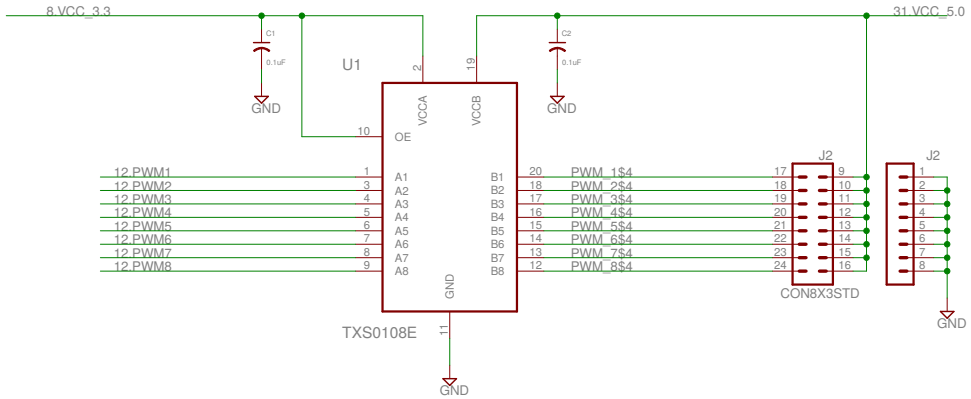


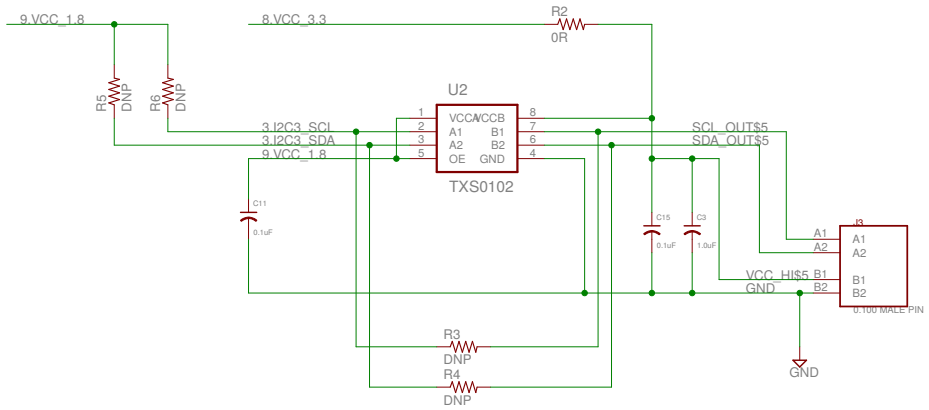
Title:	Analog Module
Board:	aerocore2_duovero
	9/8/15 2:40 PM
Sheet:	2/35


9.VCC_1.8
R108
1K5
R109
1K5
3.I2C3_SDA
3.I2C3_SCL
R1
10K
3.GPIO121
3.USB_HOST_NOC
HDQ_SIO = GPIO127
3.USB_HOST_PWREN
3.I2C3_SDA
3.I2C3_SCL
AT24C01B-TH_B
GND SDA
SCL
WP
A0
A1
VCC A2
IC8
GND
100K
R107
9.VCC_1.8
C88
0.1uF
R105
100K
R106
100K
GND
GND
GND
EEPROM 1K bit (128 X 8)
I2C Address 0x51; A0=1, A1,A2=0
DuoVero requires external I2C pullups
A
DSI1_DY4
DSI1_DX4
DSI1_DY1
DSI1_DX1
DSI1_DX0
DSI1_DY0
AUDIN_P
AUDIN_N
HFL_P
HFL_N
HFR_P
HFR_N
VDD_VAUX2
GPIO121
GPIO122
ABE_BSP2_DR
ABE_BSP2_CLKX
ABE_BSP2_DX
ABE_BSP2_FSX
ABE_CLKS
HDQ_SIO
I2C3_SDA
I2C3_SCL
CAM_RESET
CAM_STROBE
CAM_SHUTTER
FREF_CLK1_OUT
CSI21_DY4
CSI21_DX4
CSI21_DY3
CSI21_DX3
CSI21_DX2
CSI21_DY2
CSI21_DX1
CSI21_DY1
DSI1_DX3
DSI1_DY3
DSI1_DX2
DSI1_DY2
GND
UART4_TX
UART4_RX
MCSPI1_CS3
MCSPI1_CS2
MCSPI1_CS1
MCSPI1_CLK
MCSPI1_SIMO
MCSPI1_CS0
MCSPI1_SOMI
SDMMC3_CMD
SDMMC3_CLK
UART2_RX
UART2_TX
MCSPI4_CS0
UART3_CTS
UART3_RTS
UART3_TX
UART3_RX
MCSPI4_SIMO
MCSPI4_SOMI
MCSPI4_CLK
USBH_VBUS
USBH_DP
USBH_DM
CSI21_DY0
CSI21_DX0
CSI22_DY1
CSI22_DX1
CSI22_DX0
CSI22_DY0
3.UART4_TX
3.UART4_RX
3.MCSPI1_CLK
3.MCSPI1_MOSI
3.MCSPI1_CS0
3.MCSPI1_MISO
3.UART2_RX
3.UART2_TX
3.UART3_TX
3.UART3_RX
3.USB_HOST_VBUS
3.USB_HOST_P
3.USB_HOST_N
GND
B
USBOTG_VBUS_IN
USBOTG_DM
USBOTG_DP
USBOTG_ID
GND
HDMI_CLOCKX
HDMI_CLOCKY
HDMI_D0X
HDMI_D0Y
HDMI_D1Y
HDMI_D1X
HDMI_D2X
HDMI_D2Y
GND
GPMC_NOE
GPMC_NWE
GPMC_AD0
GPMC_AD2
GPMC_AD3
GPMC_AD1
GPMC_AD4
GPMC_AD5
GPMC_AD6
GPMC_AD7
GPMC_AD9
GPMC_AD8
GPMC_AD11
GPMC_AD10
GPMC_AD12
GPMC_AD13
GPMC_AD15
GPMC_AD14
I2C2_SCL
GPMC_NWP
GPMC_NCS5
HDMI_DDC_SCL
HDMI_DDC_SDA
HDMI_HPD
HDMI_CEC
HDMI_LS_OE
VSYSTEM
VSYSTEM
PMIC_PWM1
PMIC_PWM2
GPADC_IN6
GPADC_IN2
GPADC_IN5
GPADC_IN3
GPADC_IN4
GPADC_VREF4
GPADC_START
GPIO44
GPIO45
GPIO48
VBACKUP
GPIO46
PMIC_NRESWARM
PWRON
GPMC_CLK
GPMC_NBE0
SYSEN
REGEN1
GPMC_NCS3
GPMC_NBE1
GPMC_NCS6
GPMC_NCS4
GPMC_NADV_ALE
GPMC_WAIT2
GPMC_WAIT0
I2C2_SDA
8.VCC_3.3
3.GPIO44
3.GPIO45
3.GPIO48
3.GPIO46
3.PMIC_NRESWARM
3.SYSEN
GND
gumstix
Title: OMAP4430 COM
Board: aerocore2_duovero
9/8/15 2:40 PM
Sheet: 3/35



gumstix

Title: Octal Servo
Board: aerocore2_duovero
9/8/15 2:40 PM
Sheet: 4/35



I2C

==========

This level-shift requires Level1=(1v8) and TX/RX.

The circuit may provide the external level (1v8 <= Vext <= 5v5) to a maximum.

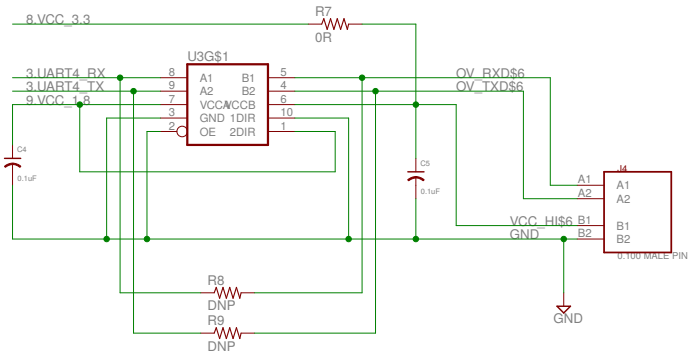
gumstix

Title: I2C Header

Board: aerocore2_duovero

9/8/15 2:40 PM

Sheet: 5/35



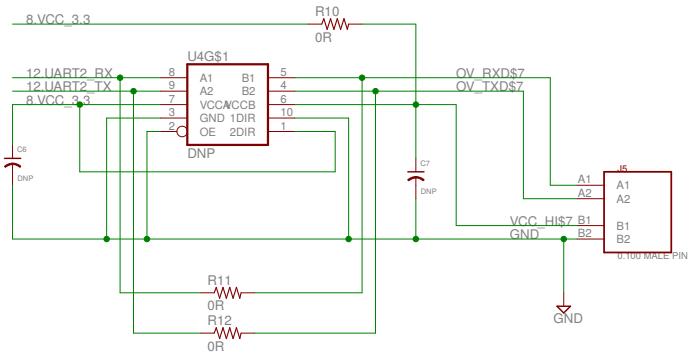
UART

==========

This level-shift requires Level1=(1v8) and TX/RX.

The circuit may provide the external level (1v8 <= Vext <= 5v5) to a maximum.

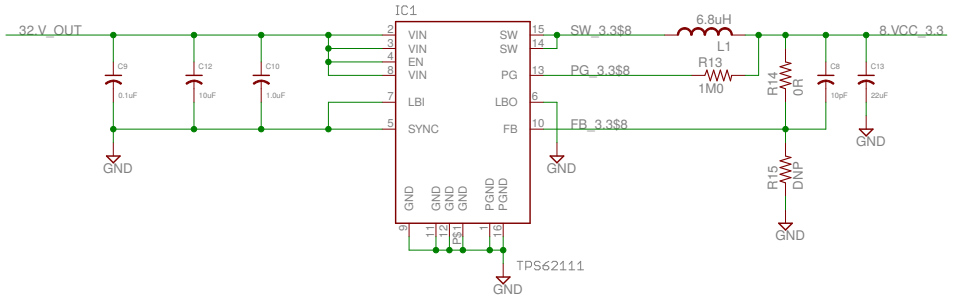
gumstix	Title: UART Header
	Board: aerocore2_duovero
	9/8/15 2:40 PM
	Sheet: 6/35



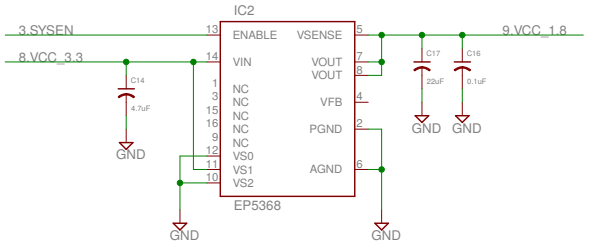
UART
==========
This level-shift requires Level1=(1v8) and TX/RX.
The circuit may provide the external level (1v8 <= Vext <= 5v5) to a maximum.

gumstix

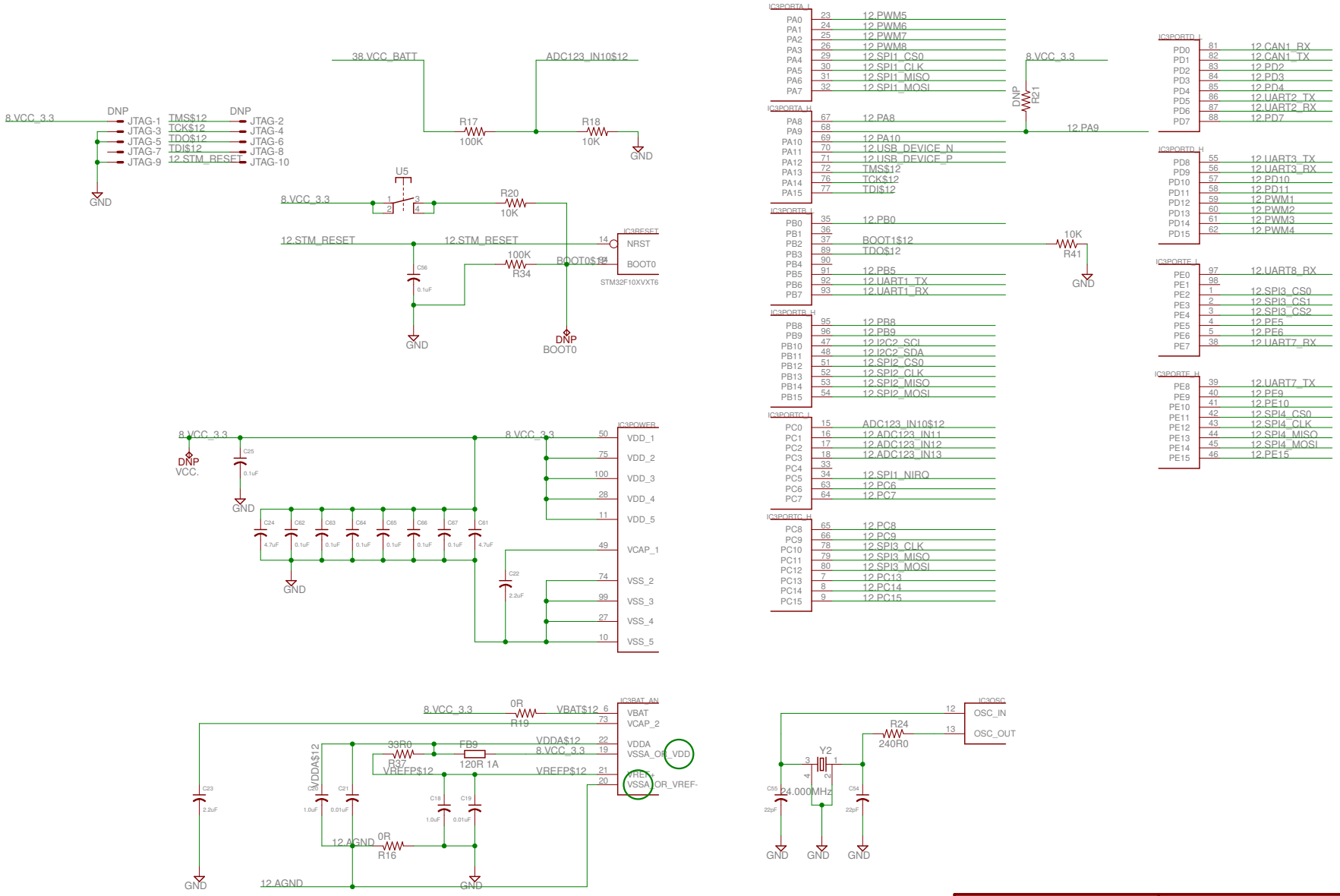
Title: UART Header	
Board: aerocore2_duovero	
9/8/15 2:40 PM	
Sheet: 7/35	



gumstix	Title: 3.3V 1500mA Buck
	Board: aerocore2_duovero
	9/8/15 2:40 PM
	Sheet: 8/35

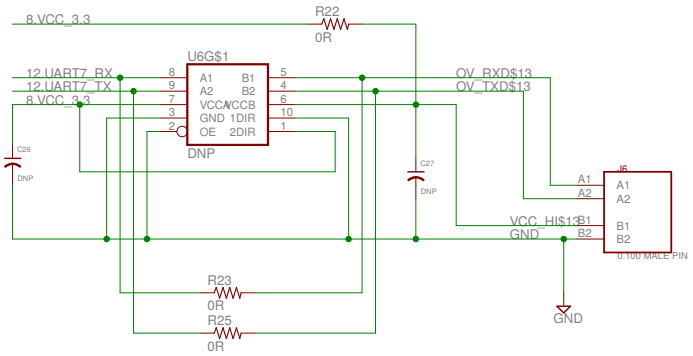


Title:	1.8V 600mA Switcher
Board:	aerocore2_duovero
9/8/15	2:40 PM
Sheet:	9/35



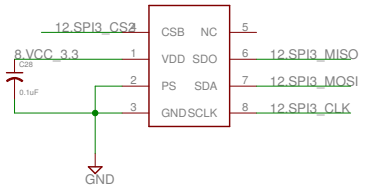
gumstix

Title:	M4 Microprocessor
Board:	aerocore2_duovero
9/8/15 2:40 PM	
Sheet:	10/35



UART
==========
This level-shift requires Level1=(1v8) and TX/RX.
The circuit may provide the external level (1v8 <= Vext <= 5v5) to a maximum.

gumstix	Title: UART Header
	Board: aerocore2_duovero
	9/8/15 2:40 PM
	Sheet: 11/35



Title:	Barometer
Board:	aerocore2_duovero
	9/8/15 2:40 PM
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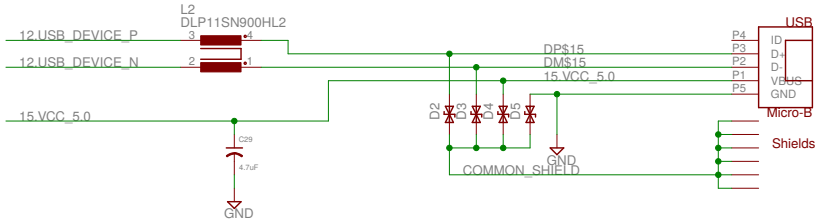
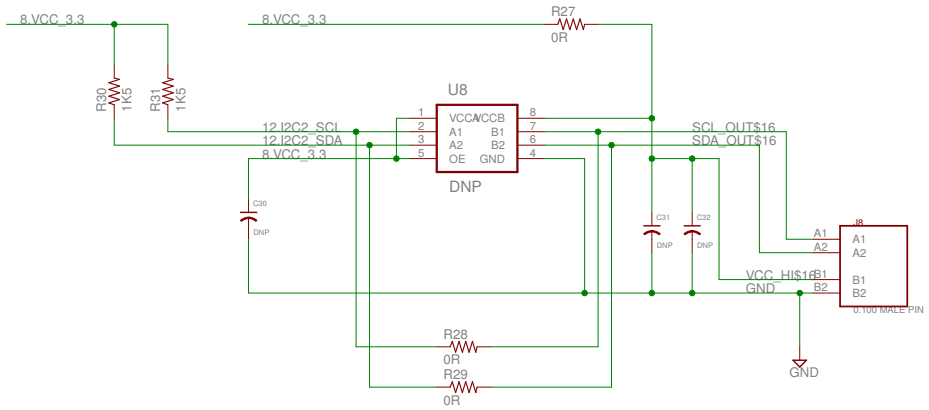


gumstix

Title: Micro-B Jack
Board: aerocore2_duovero
9/8/15 2:40 PM
Sheet: 13/35



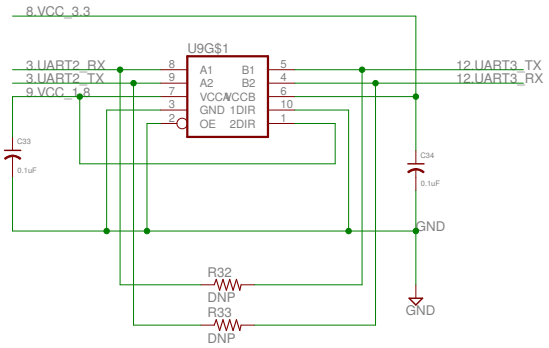
I2C

==========

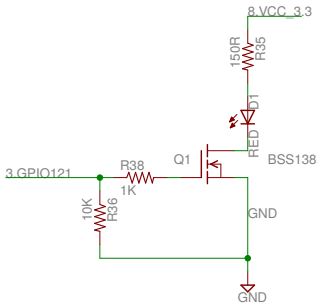
This level-shift requires Level1=(1v8) and TX/RX.

The circuit may provide the external level (1v8 <= Vext <= 5v5) to a maximum.

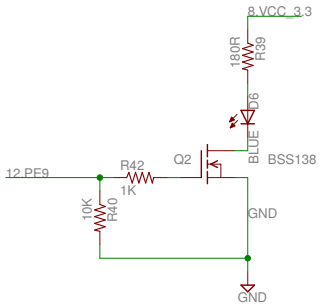
gumstix	Title: I2C Header
	Board: aerocore2_duovero
	9/8/15 2:40 PM
	Sheet: 14/35



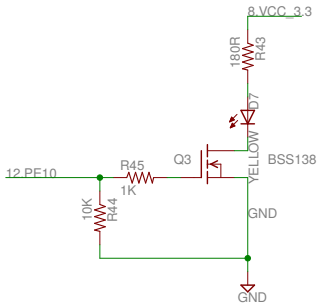
gumstix	Title: UART-UART Bridge
	Board: aerocore2_duovero
	9/8/15 2:40 PM
	Sheet: 15/35



Title:	Red LED
Board:	aerocore2_duovero
	9/8/15 2:40 PM
Sheet:	16/35



Title:	Blue LED
Board:	aerocore2_duovero
	9/8/15 2:40 PM
Sheet:	17/35



Title:	Yellow LED
Board:	aerocore2_duovero
	9/8/15 2:40 PM
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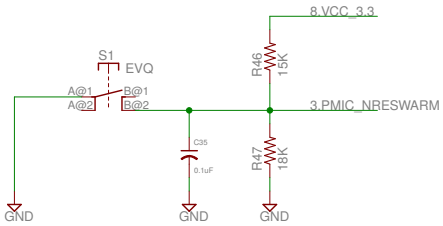
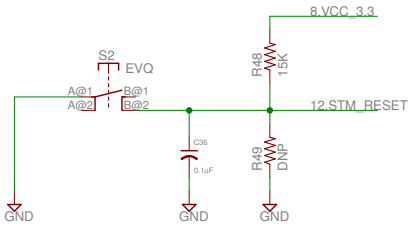
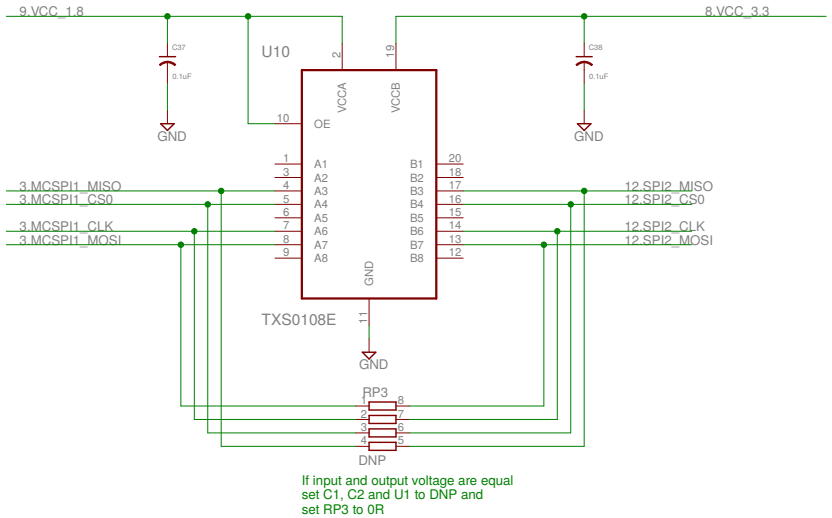


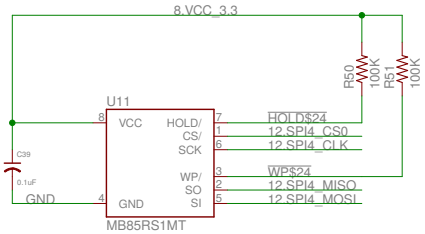
gumstix	Title: Pushbutton
	Board: aerocore2_duovero
	9/8/15 2:40 PM
	Sheet: 19/35



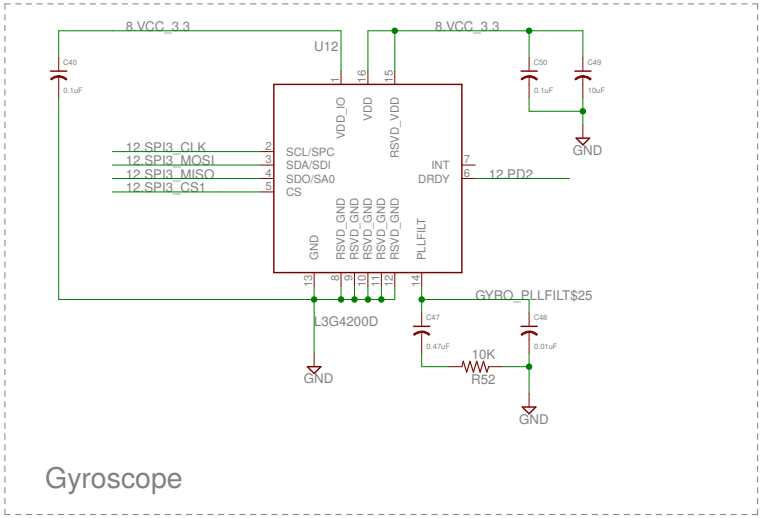
gumstix	Title: Pushbutton
	Board: aerocore2_duovero
	9/8/15 2:40 PM
	Sheet: 20/35



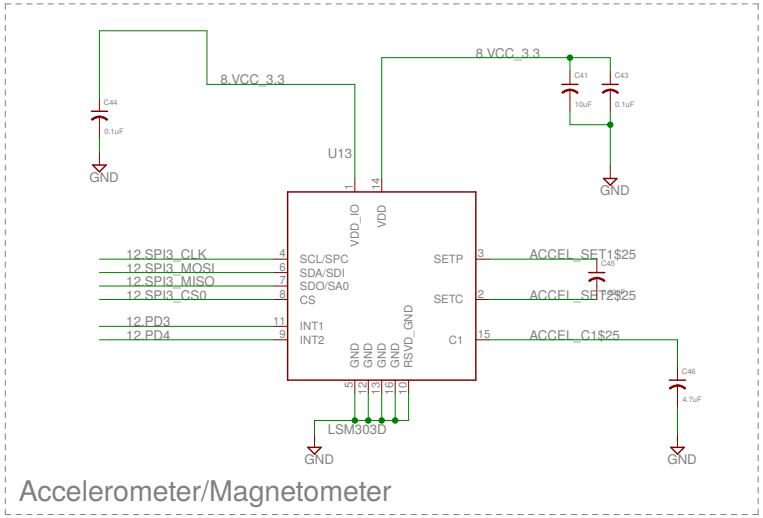
gumstix	Title: SPI Bridge
	Board: aerocore2_duovero
	9/8/15 2:40 PM
	Sheet: 21/35



Title:	Fujitsu Non-Volatile Memory
Board:	aerocore2_duovero
9/8/15 2:40 PM	
Sheet:	22/35

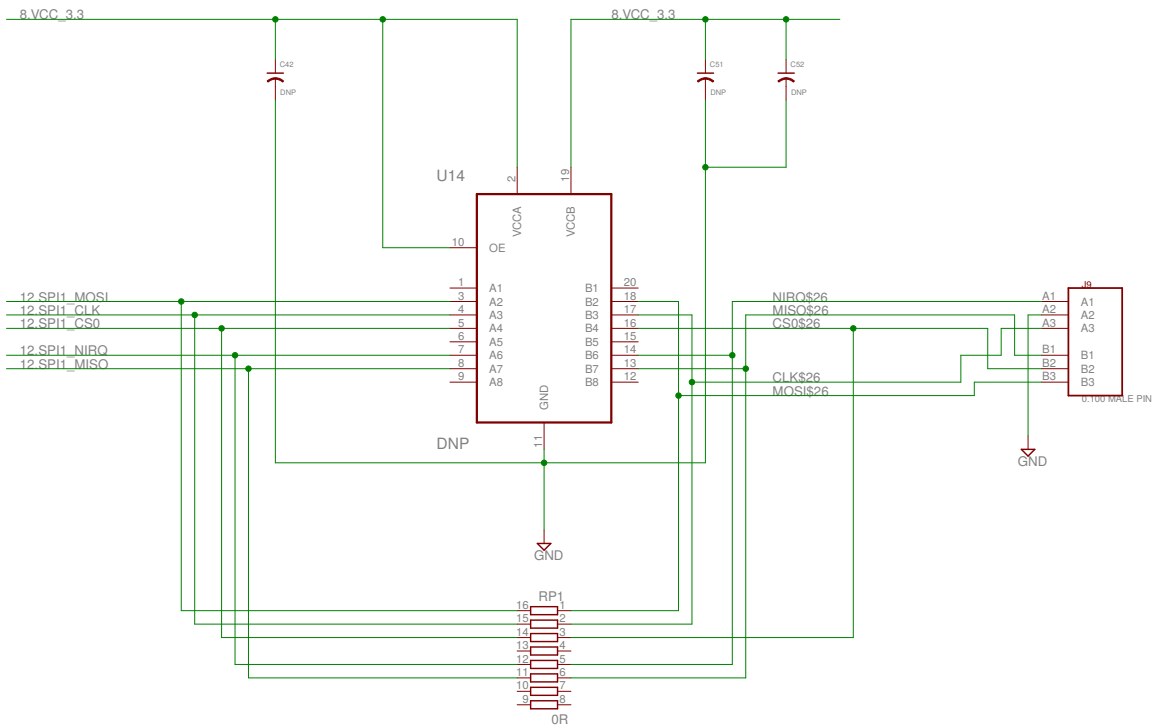


Gyroscope

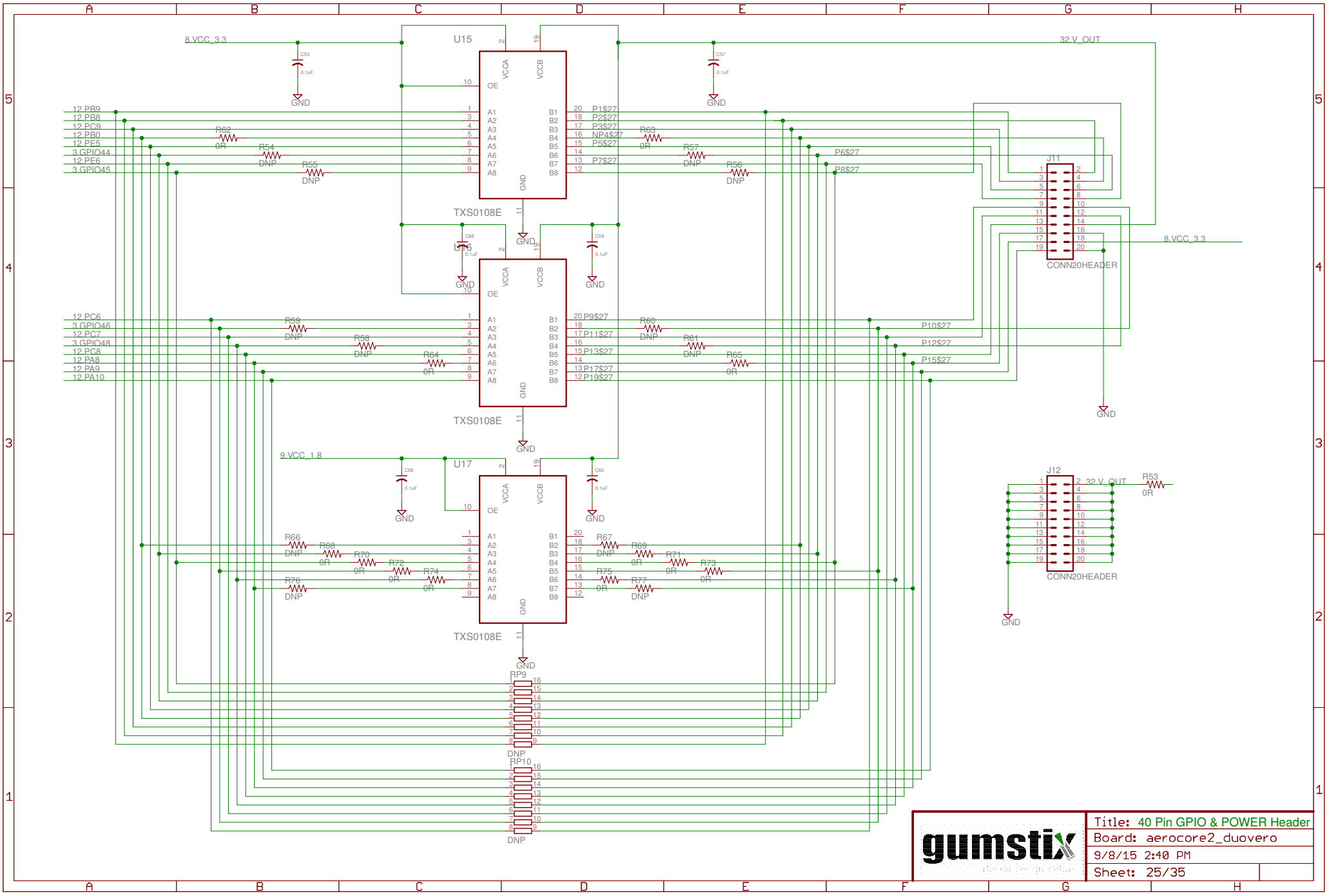


Accelerometer/Magnetometer

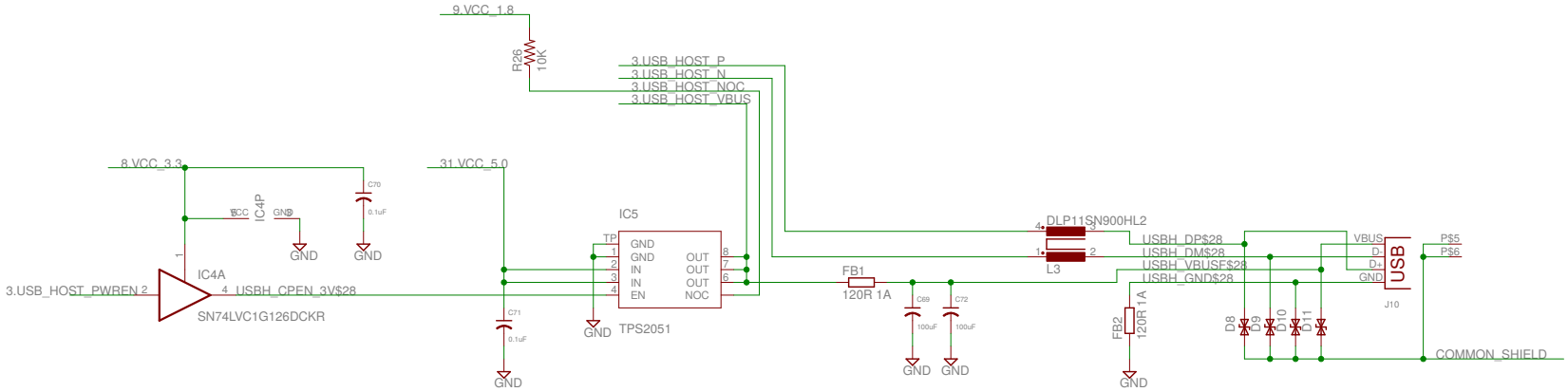
gumstix	Title: IMU
	Board: aerocore2_duovero
	9/8/15 2:40 PM
	Sheet: 23/35



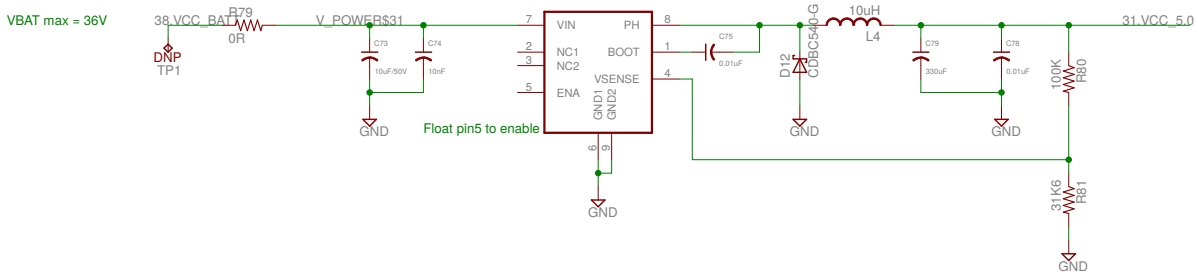
Title:	SPI Header
Board:	aerocore2_duovero
	9/8/15 2:40 PM
Sheet:	24/35



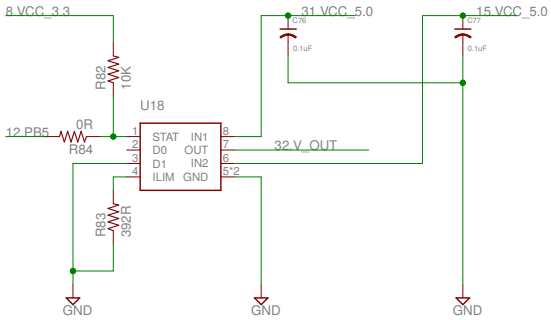
Title:	40 Pin GPIO & POWER Header
Board:	aerocore2_duovero
9/8/15 2:40 PM	
Sheet:	25/35



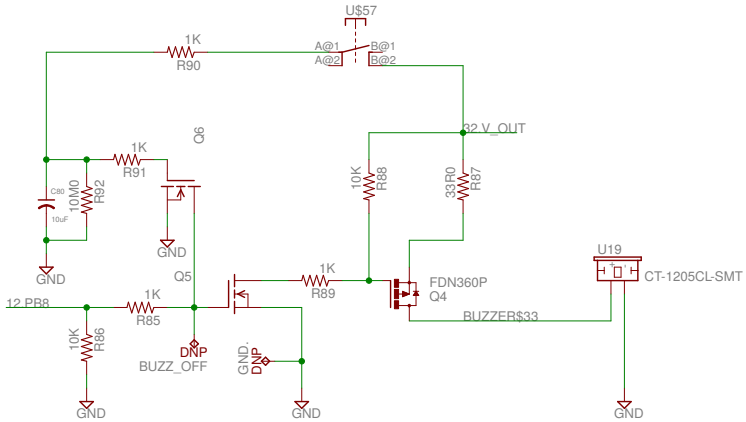
Title:	USB HOST
Board:	aerocore2_duovero
	9/8/15 2:40 PM
Sheet:	26/35



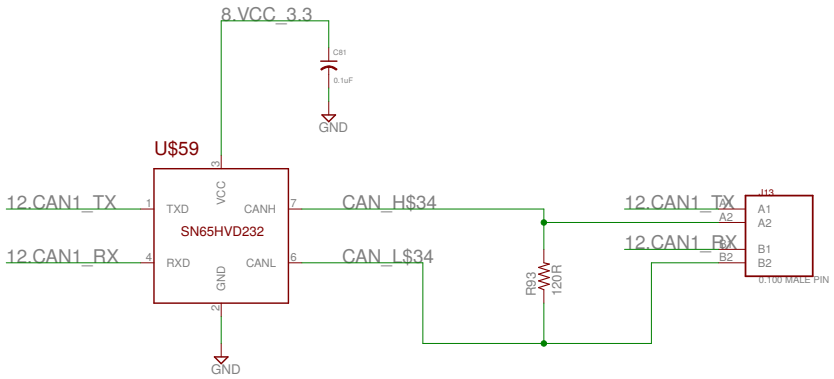
Title:	Li-Po Battery
Board:	aerocore2_duovero
	9/8/15 2:40 PM
Sheet:	27/35



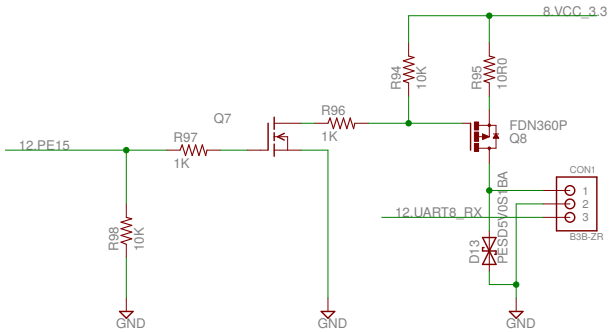
gumstix	Title: Power Source Muxer
	Board: aerocore2_duovero
	9/8/15 2:40 PM
	Sheet: 28/35



gumstix	Title: Buzzer
	Board: aerocore2_duovero
	9/8/15 2:40 PM
	Sheet: 29/35

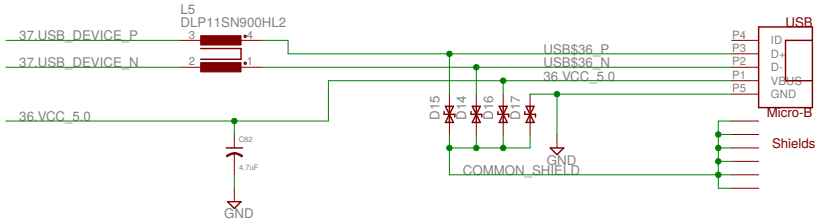


Title:	CAN Header
Board:	aerocore2_duovero
	9/8/15 2:40 PM
Sheet:	30/35

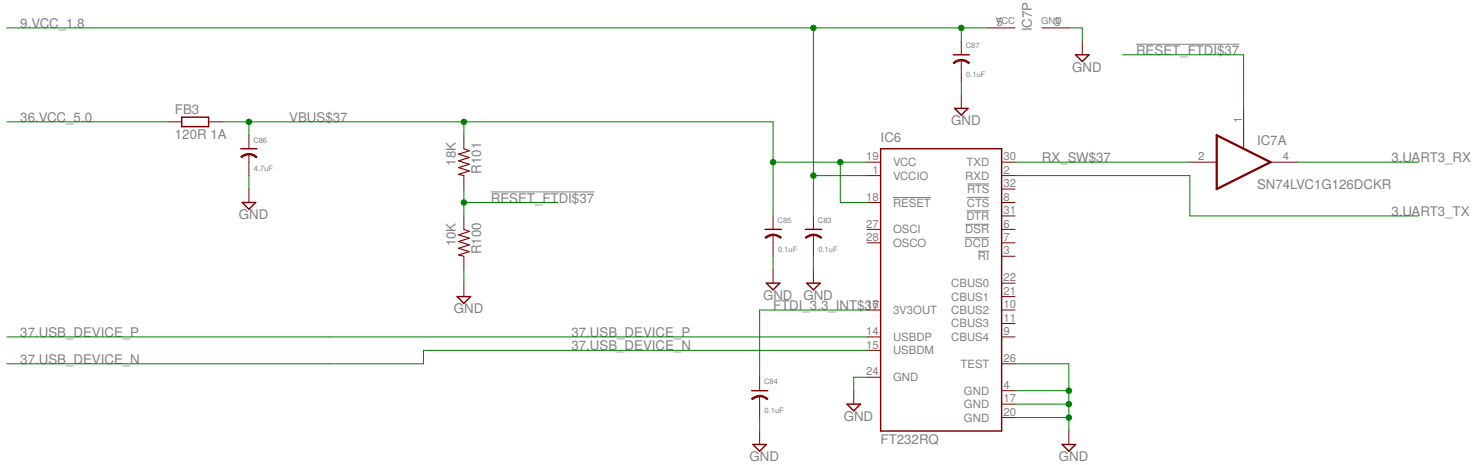


Spektrum receiver uses approximately 23mA (measured) while operating.

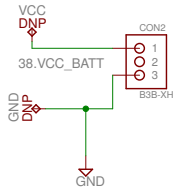
gumstix	Title: Spektrum DSM Header
	Board: aerocore2_duovero
	9/8/15 2:40 PM
	Sheet: 31/35



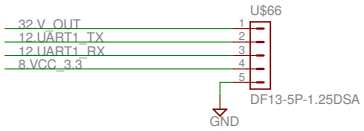
Title:	Micro-B Jack
Board:	aerocore2_duovero
	9/8/15 2:40 PM
Sheet:	32/35



gumstix	Title: USB to UART
	Board: aerocore2_duovero
	9/8/15 2:40 PM
	Sheet: 33/35



gumstix	Title: Battery 2S Balance
	Board: aerocore2_duovero
	9/8/15 2:40 PM
	Sheet: 34/35



gumstix	Title: GPS Off-board
	Board: aerocore2_duovero
	9/8/15 2:40 PM
	Sheet: 35/35