

Digital Side Car

Revision 8

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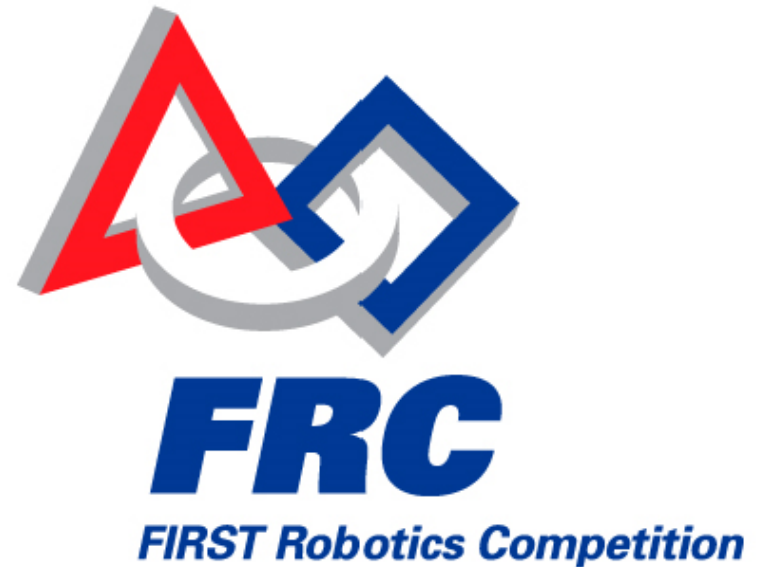


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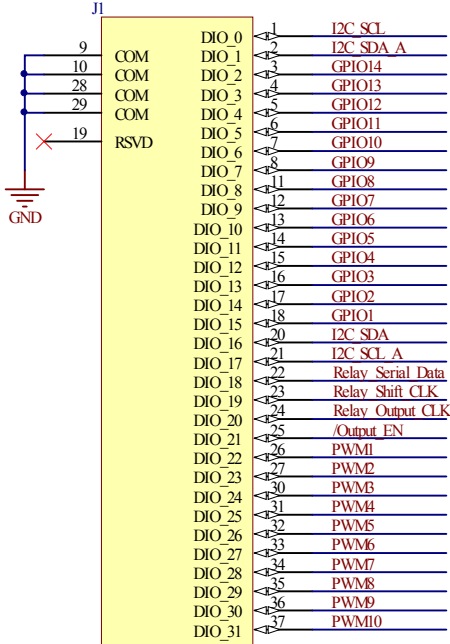
Consult the FRC Robot Rules before modifying any components. Modifying a component may invalidate its use in the FRC competition and may be dangerous.

Derivative works may or may not be allowed in the FRC competition. Consult the FRC Robot Rules for details.

These design packages are made available primarily to serve as an educational tool. Mentors are strongly encouraged to use them to help their students learn more about electronics.

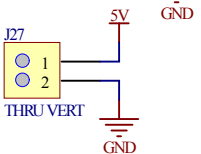
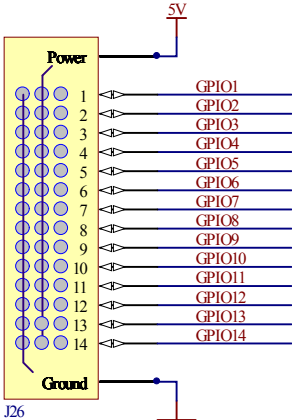


to NI 9403 Digital IO Module

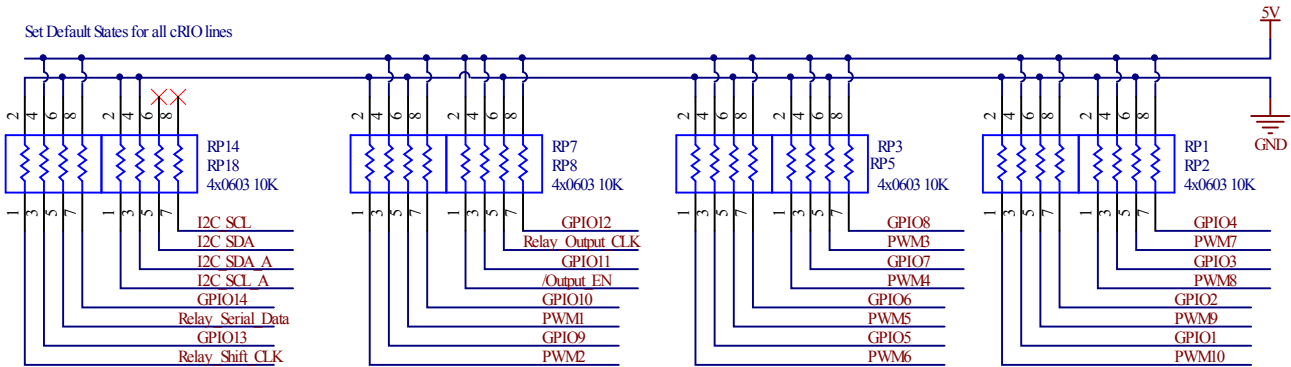


For use with NI 9403
DB37
191-037-213L571

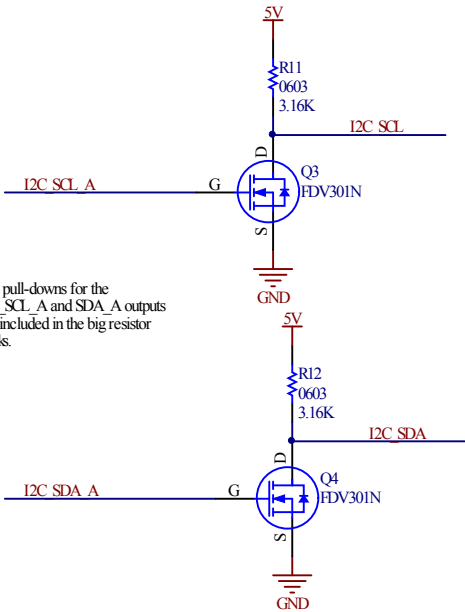
General Purpose Digital IO



Secondary SPI Power Spigot

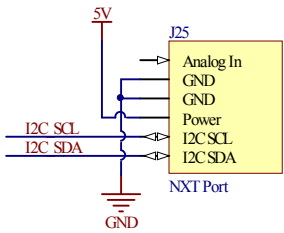


I2C Driver



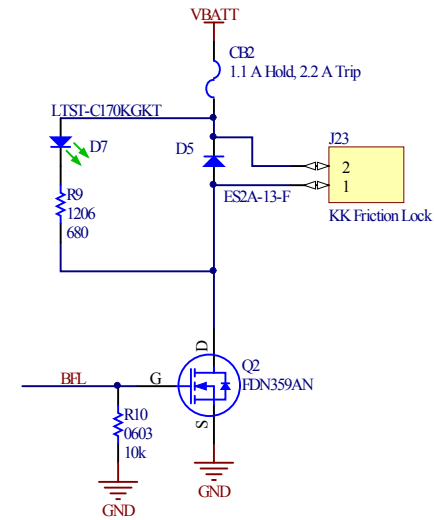
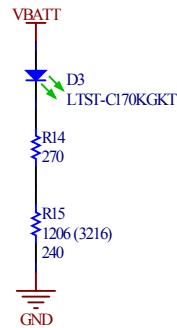
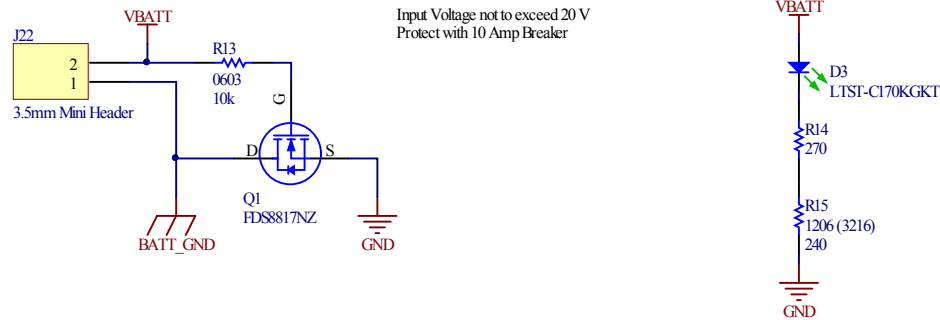
The pull-downs for the
I2C_SCL_A and SDA_A outputs
are included in the big resistor
packs.

I2C Port

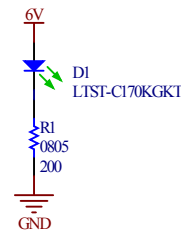
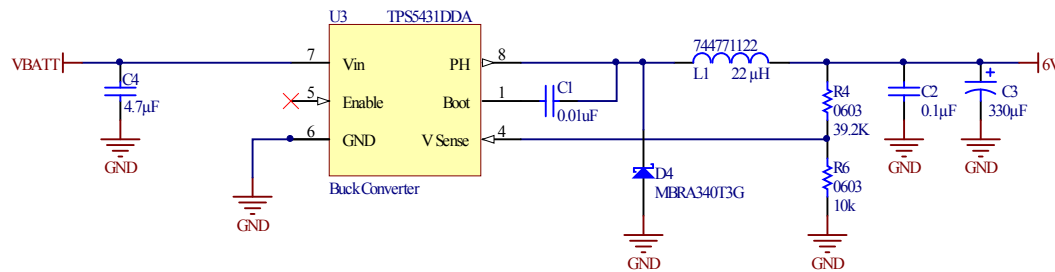


Project			
Digital Side Car, Rev 8			
Size	Page Title	Revision	
Letter	cRIO Connectors	2	
Date:	6/17/2009	Sheet:	1 of 4
File:	cRIO Connectors.SchDoc	Drawn By:	RHB

Power Input with Reverse Voltage Protection

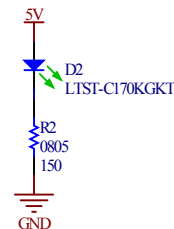
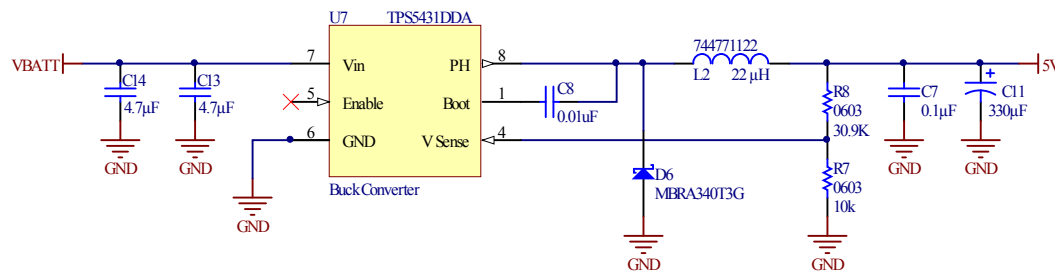


6V/3A Buck Supply

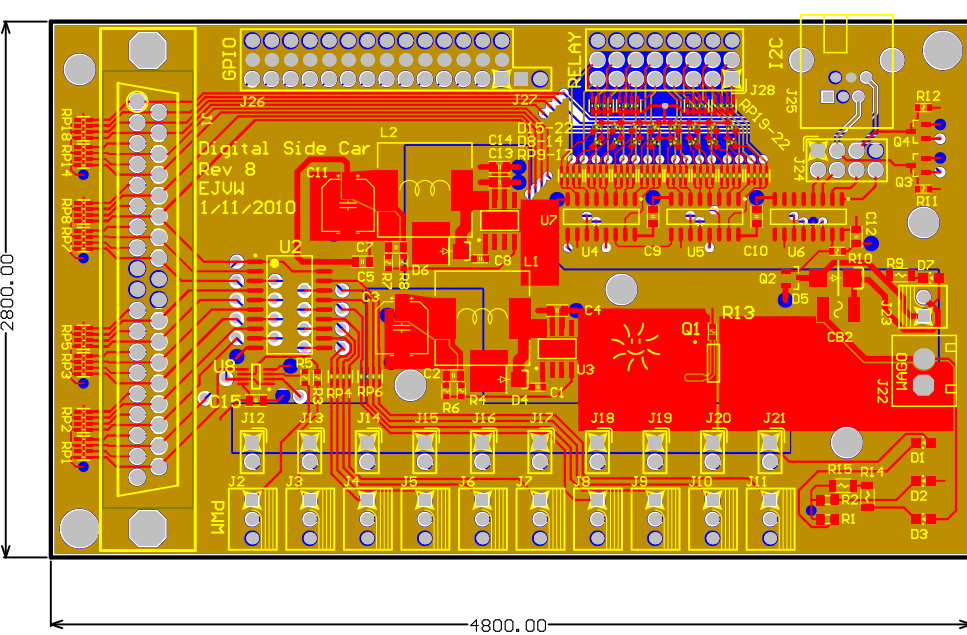


Change List:
Removed current source for cost.
Removed C6.
Replaced Q1
Added Q1 Gate Resistor

5V/3A Buck Supply



Project			
Digital Side Car, Rev 8			
Size	Page Title	Revision	
Letter	Power Input, Supplies & Indicators	4	
Date:	5/31/2009	Sheet:	3 of 4
File:	Power.SchDoc	Drawn By:	EJVV



Project	Phoenix
Board	Digital Side Car
Rev	8

Construction

Layers	4
Finished Thickness	062 +/- 30%
Solder Mask	Unspecified Color
	Top & Bottom
Silk Screen	Unspecified Color
	Top Only - Ignore Bottom Silk
Copper Weight	1/2 oz or thicker
Top Layer	.gtl
GND Plane	.gp1
Power Routing	.g1
Bottom Layer	.gbl