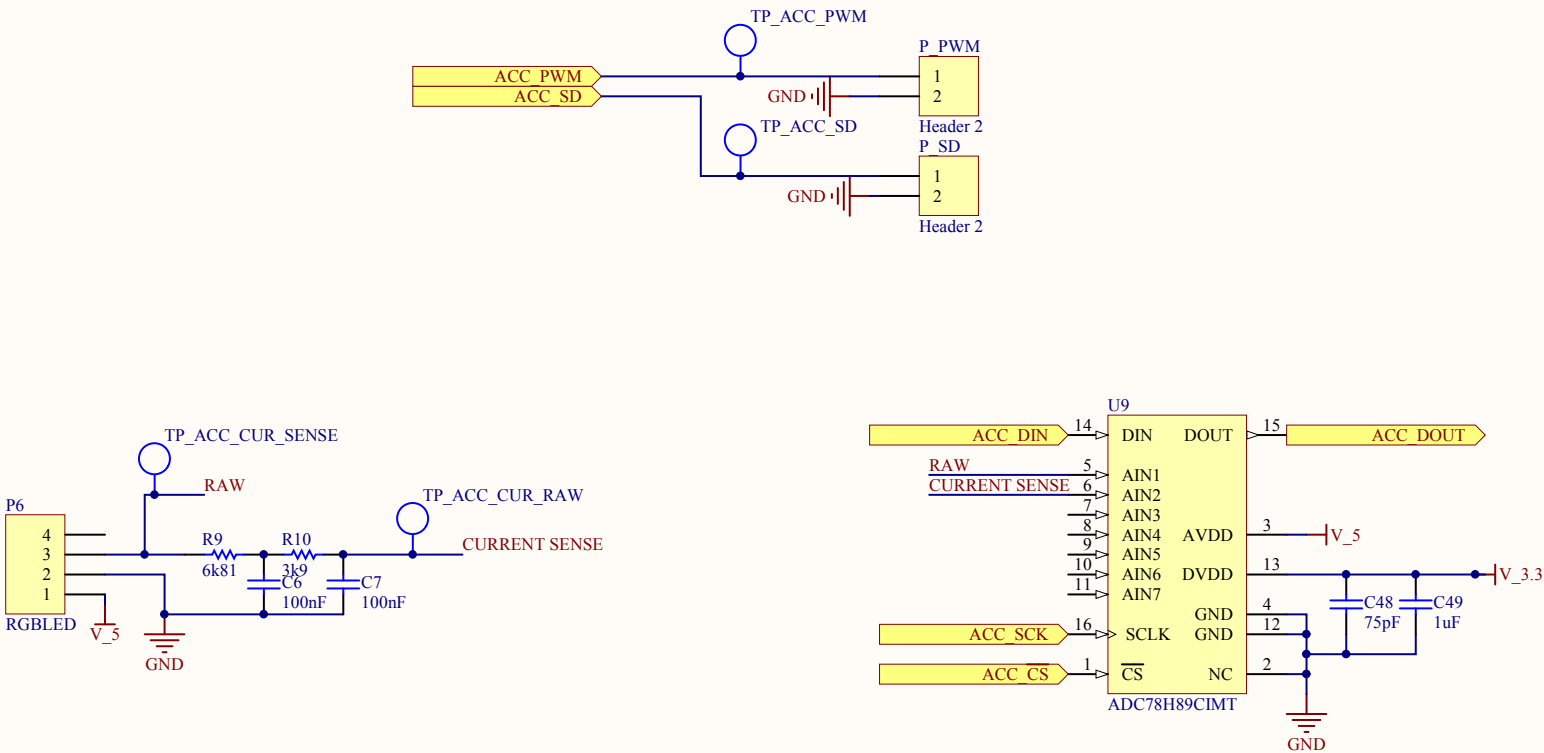
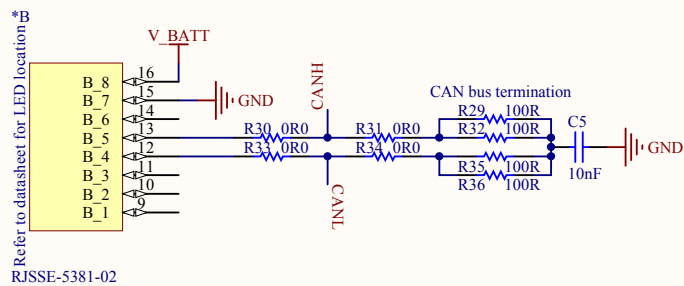
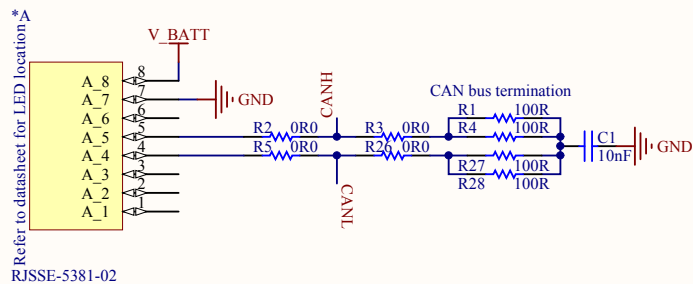


This section of the schematic is designed to replicate the student board that the go-kart is currently driven by.

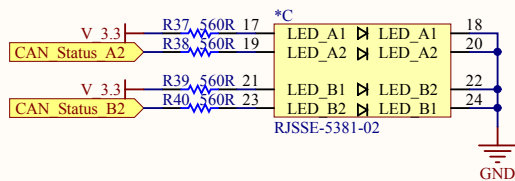
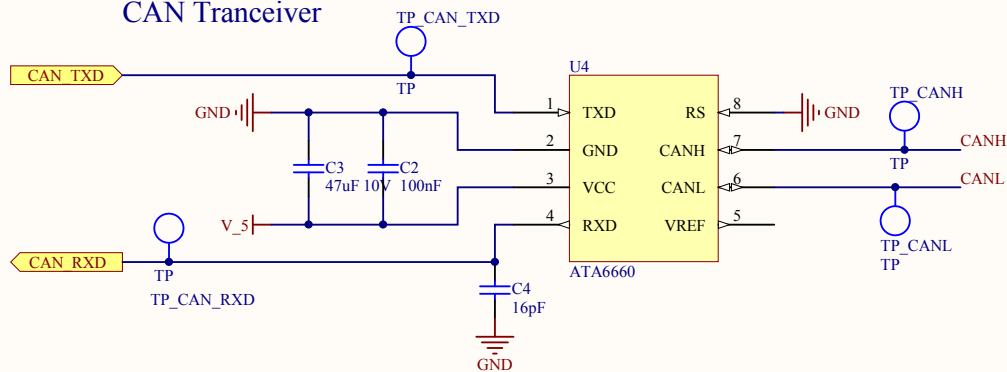
Because the go-kart's power control board is run off 5V logic, we have to level shift everything.



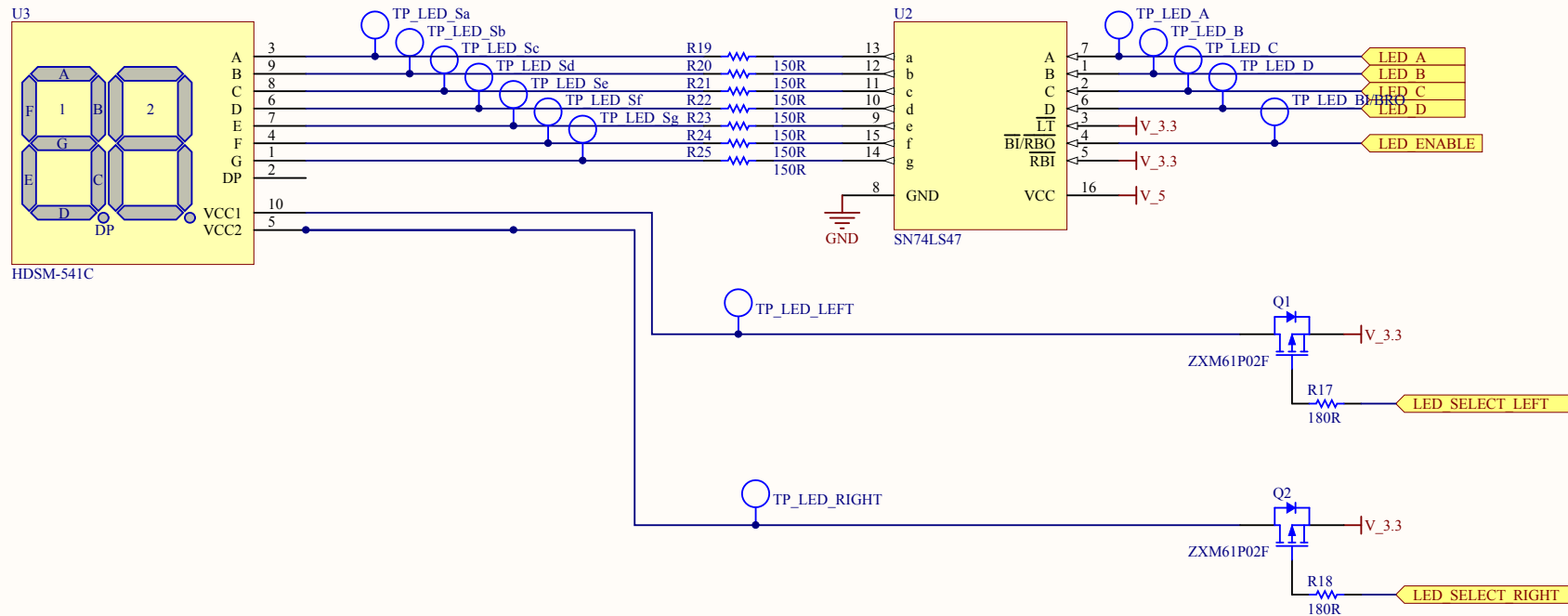
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Date:	2/06/2011	Sheet of
File:	G:\workspace\.\accelerator.SchDoc	Drawn By:




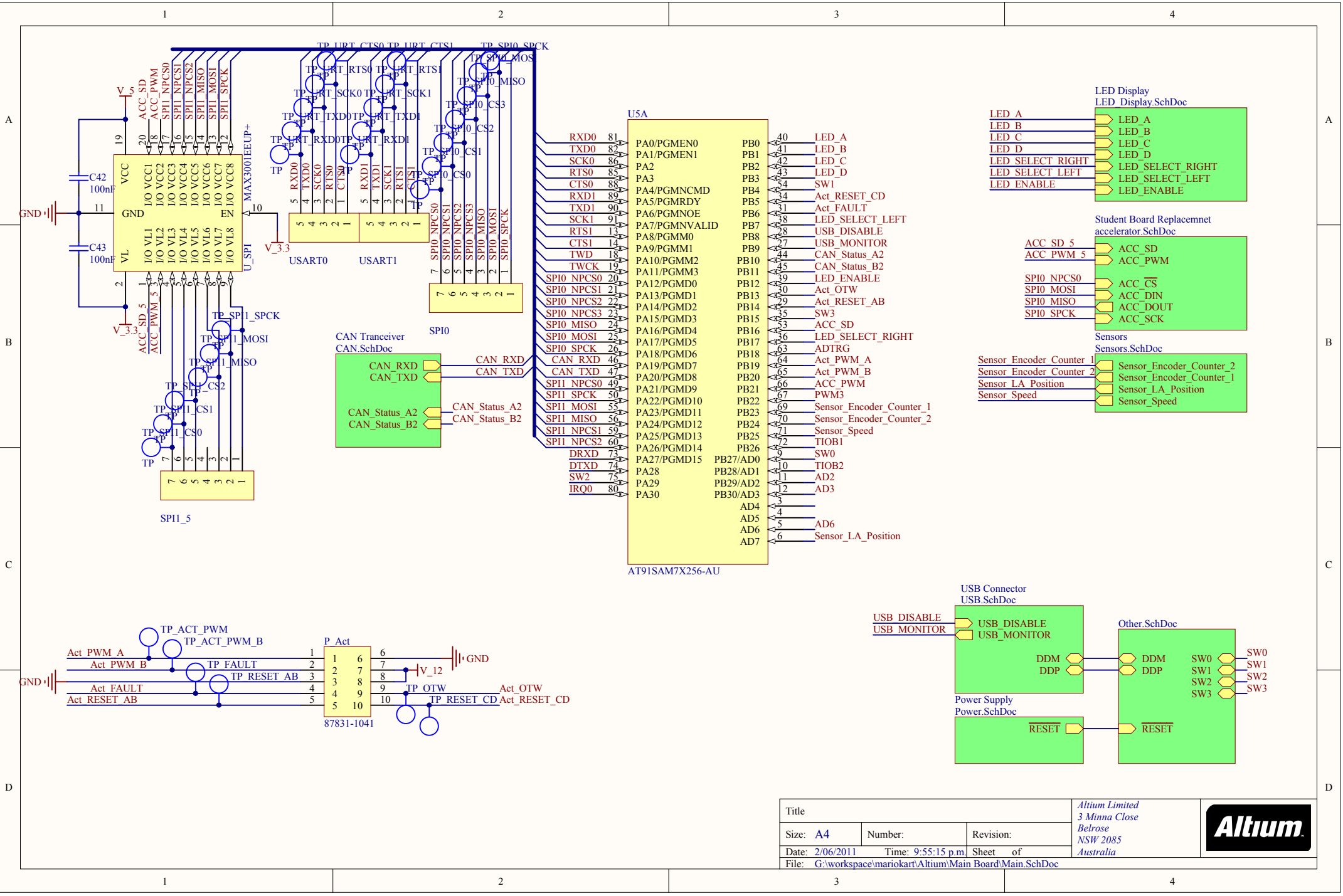
CAN Transceiver

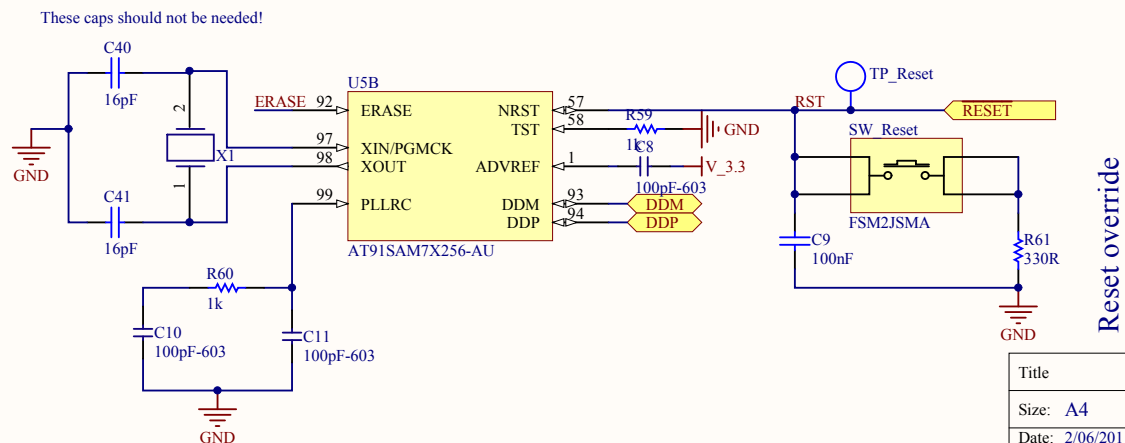
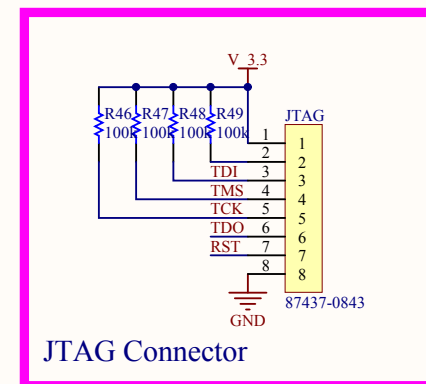
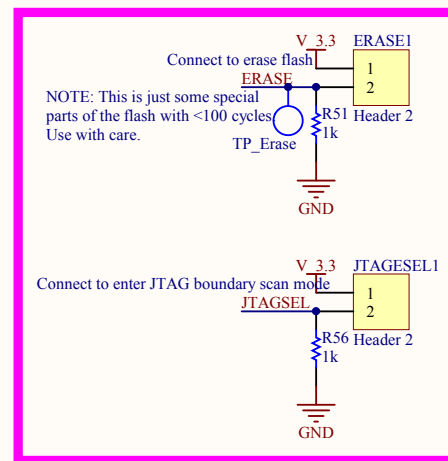
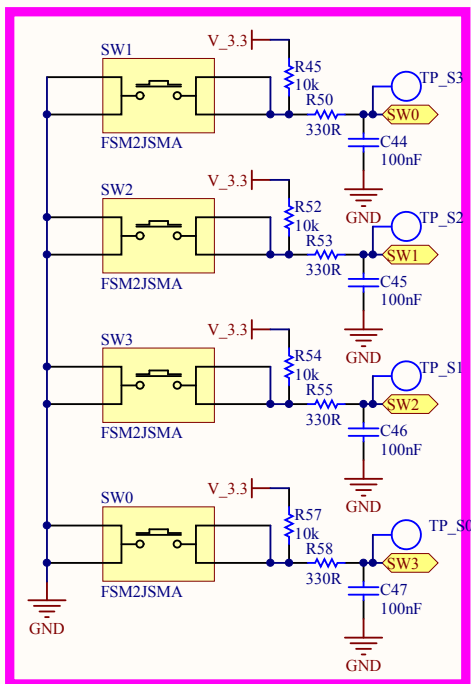
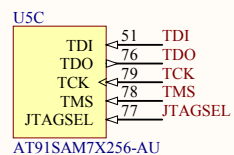



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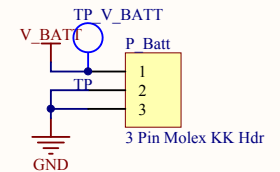
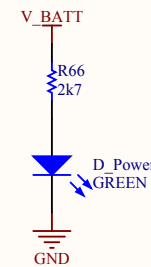
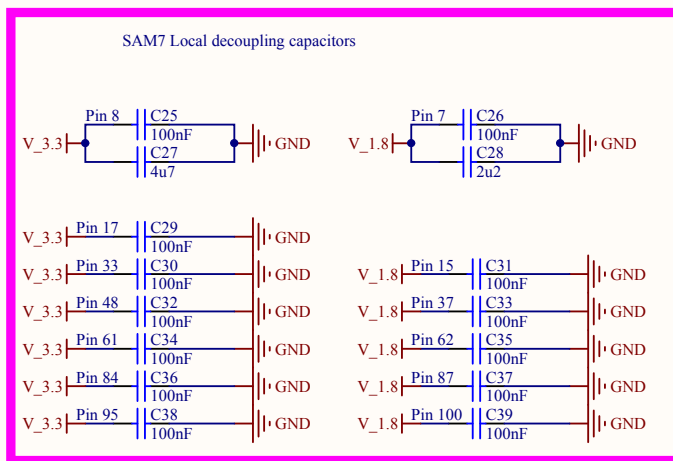
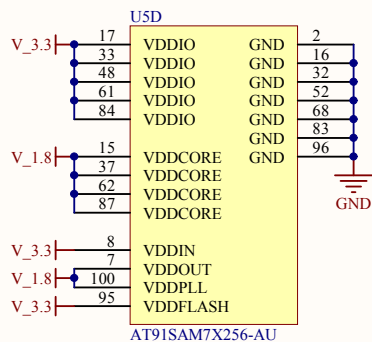
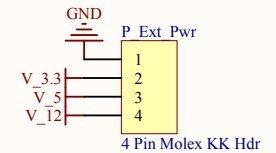
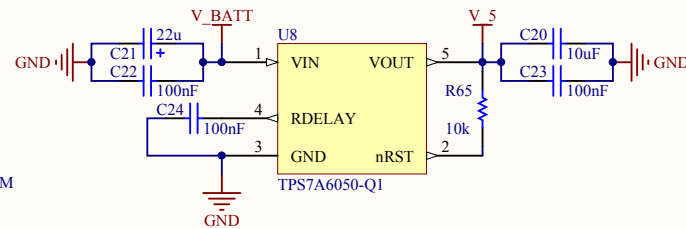
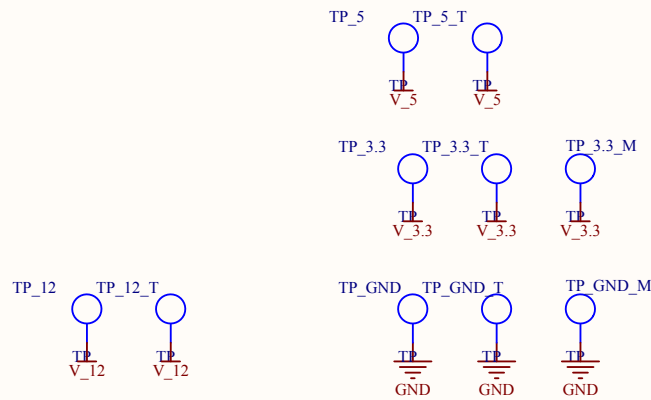
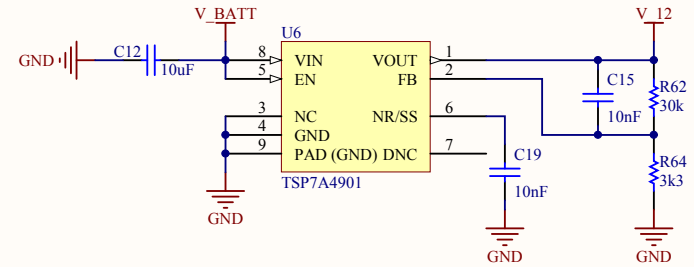
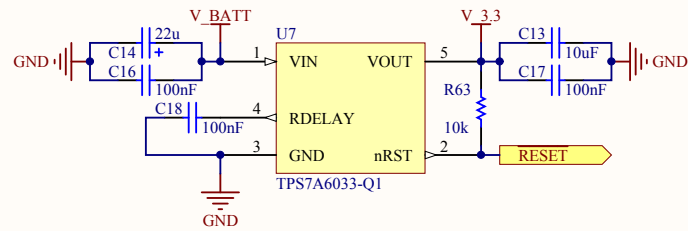



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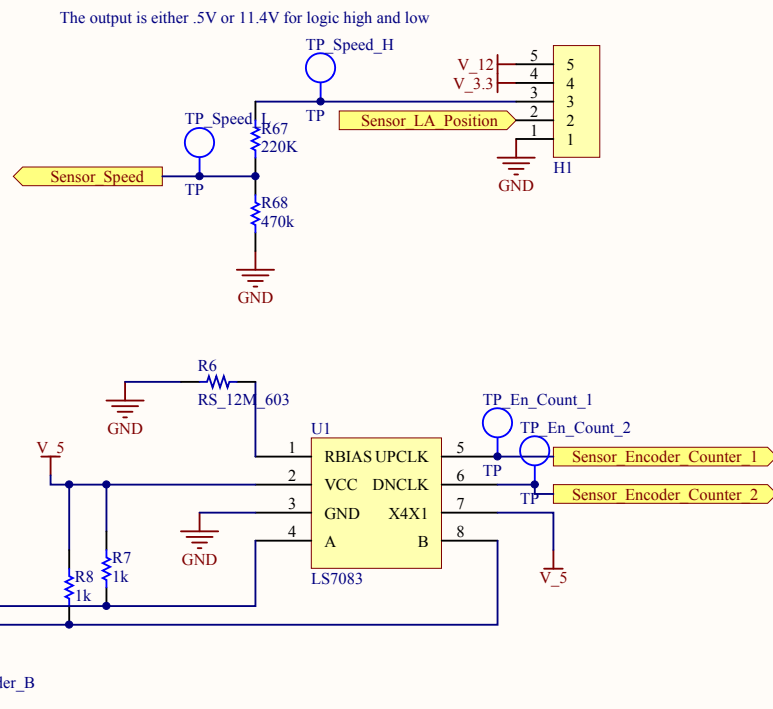




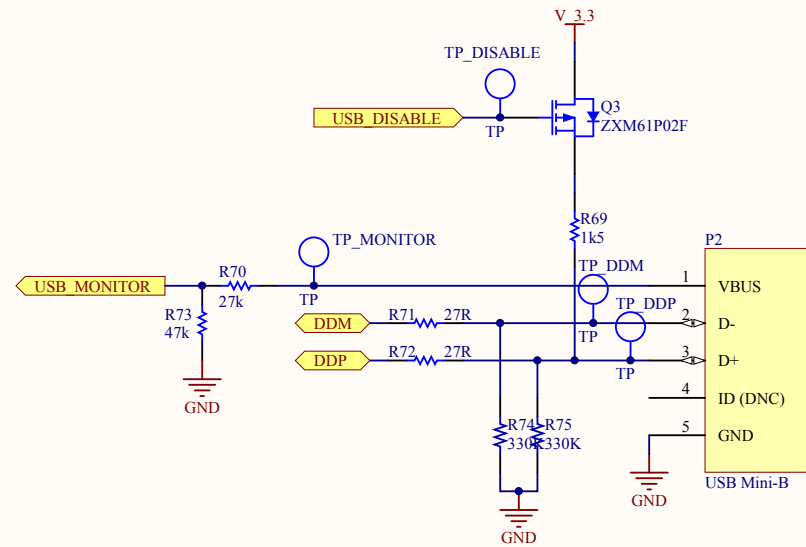
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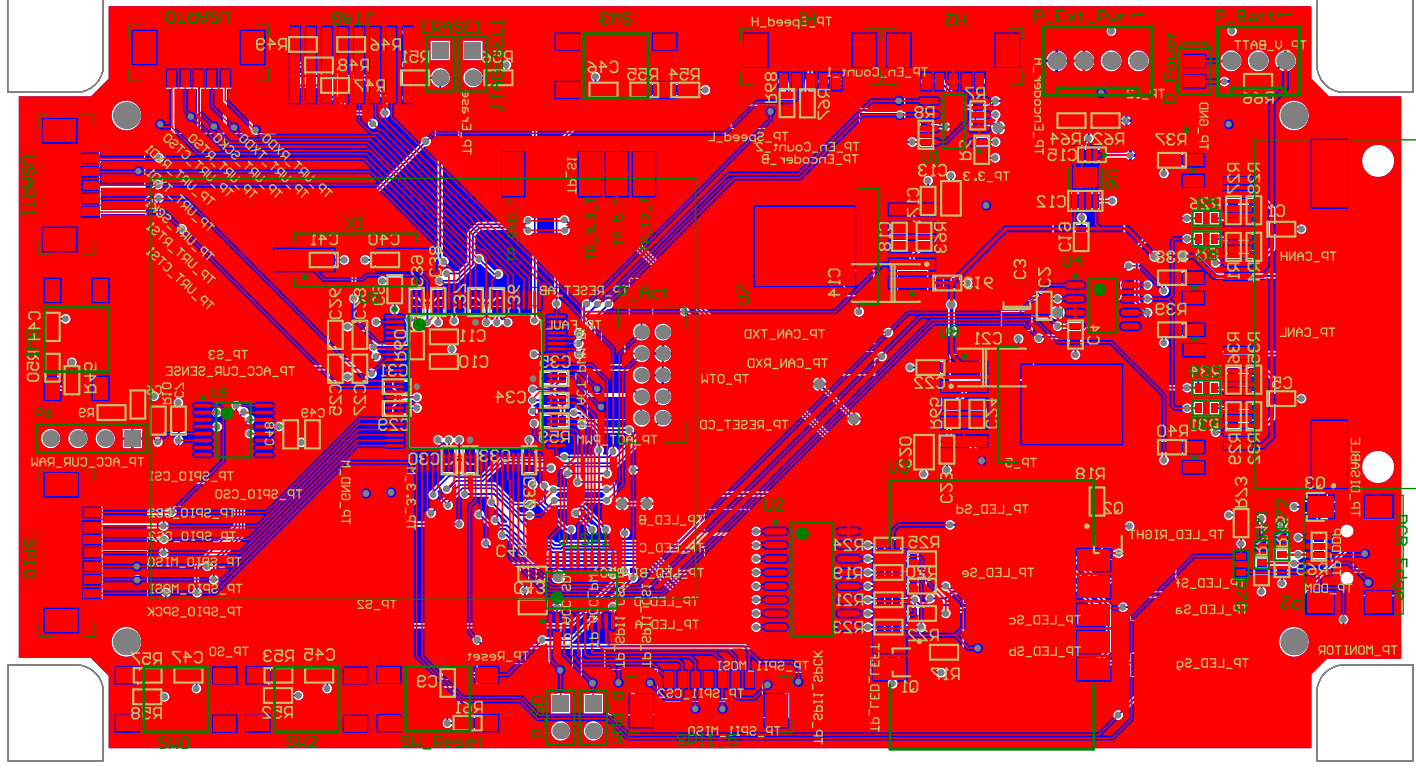
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Drawn by:	Revision: 1		
Date: 2/06/2011	Time: 9:55:15 p.m.	Sheet of	
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Comment	Description	Designator	Footprint	LibRef	Manufacture PN	Manufacturer	Quantity	Supplier 1	Suggested Part Number 1
RUSSE-6381-02	RJ45 SMT Right Angle x2		RJ55E-6381-02	RJ55E-6381-02	Amphenol Commercial Products		1	Digikey	RJ55E-6381-02-ND
OP-KEY 1000P 100H	OP-KEY 1000P 100V X7R 0603	C1, C5, C15, C19	0603	QP_100H 0603		Taiyo Yuden	4	Digi-Key	987-1446-2-ND
100nF	CAP CER 100F 50V X5R 0603	C2, C6, C7, C8, C16, C17, C18, C22, C23, C24, C26, C28, C29, C30, C31, C32, C33, C34, C35, C36, C37, C38, C39, C40, C43, C44, C45, C46, C47	0603	CP_100H 0603		Taiyo Yuden	26	Digi-Key	475-6206-1-ND
47uF 10V	CAP CER 47uF 10V X5R 1210	C3	1210	CP_47uF 10V 1210		Murata	1	Digi-Key	460-3887-1-ND
18pF	CAP CER 18P 100V 5%CGO 0603	C4, C40, C41	0603	CP_18pF_100V_0603		Murata	3	Digi-Key	460-1332-1-ND
100pF 603	CAP 100P 60V 10% X5R 0603	C8, C10, C11	0603 Resistor	100pF-603		AVX Corporation	3	Digi-Key	475-1175-1-ND
10uF	CAP TANT 22uF 35V 10%16MD	C12, C13, C20	0805	CP_10uF 0805		Murata	3	Digi-Key	490-4735-1-ND
CP_TANT_22uF	CP_TANT_22uF	C14, C21	6032	CP_TANT_22uF_35V		Vishay	2	Digi-Key	718-1071-1-ND
4u7	CAP CER 4.7uF 10V X5R 0603	C27	0603	CP_4u7 0603		Taiyo Yuden	1	Digi-Key	987-1441-1-ND
2u2	CAP CER 2.2uF 10V 10%X5R 0603	C28	0603	CP_2u2F_10V_0603	LMK079LA1756A-1	Murata Electronics North America	1	Digi-Key	460-1545-1-ND
CP_75pF 0603	CAP CER 75P 50V 5%CGO 0603	C48	0603	CP_75pF 0603		Murata Electronics	1	Digi-Key	460-1424-2-ND
1uF	CAP CER 1uF 50V X7R 0603	C49	0603	CP_1uF_50V_0603		Taiyo Yuden	1	Digi-Key	445-5090-2-ND
LED Green	Green LED 0805	G_Power	0805	0805		Vishay	1	Digi-Key	160-1179-2-ND
Header 2	Header 2 Pin	PROBES1	Header 1X2	Header 2			4	ECG Store	
53261-0571	5-pin PCB0805B Right-angle Header	JTAGSE1.1, P_PXIM, P_3D	53261-0571	53261-0571		Molex	4	Digikey	WM7623CT-ND
01437-0643	USB Mini-B	USB Mini-B	01437-0643	01437-0643		Molex	1	Digikey	WM7607CT-ND
RGBLED	Header 4 Pin	P6	Header 1X4	Header 4		TE Connectivity	1	Digikey	AS127CT-ND
87831-1041	HEADER MALE 10POS VERT W/LOCK	P_Act	87831-1041	87831-1041		Molex	1	Digi-Key	WM3591-ND
3 Pin Molex KK Hdr	CONTRACTOR 4POS 100 VERT TIN	G_MOLEX_KK_3_P_Ratt	JF_MOLEX_KK_3P 05	JF_MOLEX_KK_3P 05		Molex/Walcom	1	Digi-Key	WM4201-ND
4 Pin Molex KK Hdr	CONTRACTOR 4POS 100 VERT TIN	G_MOLEX_KK_4_P_Est_Per	JF_MOLEX_KK_4P 05	JF_MOLEX_KK_4P 05		Molex/Walcom	1	Digi-Key	WM4202-ND
ZXM61PQ2F	1W 1-channel enhancement mode MOSFET	Q1, Q2, Q3	SOT23	TF_ZXM61PQ2F		Zetex	3	Element 14	9525297
100R	RES 100 OHM 1/10W 1% 0603 SMD	R1, R2, R27, R28, R29, R32, R35, R36	0603	RS_100R 0603		ROHM	8	Digi-Key	RHM100HTR-ND
RS_12M_603	RES 12M OHM 1/10W 1% 0603 SMD	R7, R8, R51, R56, R59, R60	0603 Resistor	RS_12M_603		Panasonic - ECG	1	Digi-Key	P12M0CT-ND
1k	RES 1K OHM 1/10W 1% 0603 SMD	R5, R6, R51, R56, R59, R60	0603	RS_1k 0603		ROHM	6	Digi-Key	RHM100HTR-ND
6k81	RES 6.8K OHM 1/10W 5% 0603 SMD	R9	0603	RS_6k81 0603		Rohm	1	Digi-Key	RHM681KHTR-ND
3k9	RES 3.9K OHM 1/10W 1% 0603 SMD	R10	0603	RS_3k9 0603		Yageo	1	Digi-Key	311-3.9KGRTR-ND
180R	RES 180 OHM 1/10W 1% 0603 SMD	R17, R18	0603	RS_180R 0603		Panasonic - ECG	2	Digi-Key	P180HTR-ND
150R	RES 150 OHM 1/10W 1% 0603 SMD	R19, R26, R21, R22, R23, R24, R25	0603	RS_150R 0603		ROHM	7	Digi-Key	RHM150HTR-ND
960R	RES 960 OHM 1/10W 1% 0603 SMD	R37, R38, R39, R40	0603	RS_960R 0603		Yageo	4	Digi-Key	311-560GRTR-ND
10k	RES 10K OHM 1/10W 1% 0603 SMD	R45, R52, R54, R57, R63, R65	0603	RS_10k 0603		Yageo	6	Digi-Key	311-10.0KHTR-ND
100k	RES 100 OHM 1/10W 1% 0603 SMD	R46, R47, R48, R49	0603	RS_100k 0603		Yageo	4	Digi-Key	311-100KHTR-ND
330R	RES 330 OHM 1/10W 1% 0603 SMD	R50, R53, R55, R58, R61	0603	RS_330R 0603		Yageo	5	Digi-Key	311-330HTR-ND
30k	RES 30K OHM 1/10W 1% 0603 SMD	R62	0603	RS_30k 0603		Yageo	1	Digi-Key	311-30.0KHTR-ND
3k3	RES 3.3K OHM 1/10W 5% 0603 SMD	R64	0603	RS_3k3 0603		Yageo	1	Digi-Key	311-3.3KGRTR-ND
2k7	RES 2.7K OHM 1/10W 5% 0603 SMD	R66	0603	RS_2k7 0603		Yageo	1	Digi-Key	311-2.7KGRTR-ND
220k	RES 220K OHM 1/10W 5% 0603 SMD	R67	0603	RS_220k 0603		Yageo	1	Digi-Key	311-220KGRTR-ND
470k	RES 470K OHM 1/10W 5% 0603 SMD	R68	0603	RS_470k 0603		Yageo	1	Digi-Key	311-470KGRTR-ND
1k5	RES 1.5K OHM 1/10W 5% 0603 SMD	R69	0603	RS_1k5 0603		Yageo	1	Digi-Key	311-1.5KGRTR-ND
27k	RES 27K OHM 1/10W 1% 0603 SMD	R70	0603	RS_27k 0603		Yageo	1	Digi-Key	311-27.0KHTR-ND
27R	RES 27 OHM 1/10W 1% 0603 SMD	R71, R72	0603	RS_27R 0603		Yageo	2	Digi-Key	311-27.0HTR-ND
47k	RES 470K OHM 1/10W 1% 0603 SMD	R73	0603	RS_47k 0603		Yageo	1	Digi-Key	311-47.0KHTR-ND
330k	RES 330K OHM 1/10W 5% 0603 SMD	R74, R75	0603 Resistor	RS_330K 0603		Panasonic - ECG	2	Digi-Key	P330KHCT-ND
53261-0771	5-pin PCB0805B Right-angle Header	SPD, SP11_5	53261-0771	53261-0771		Molex	2	Digikey	WM7625CT-ND
F5M2J5MA	DPST SMD Switch	SW5, SW1, SW2, SW3, SW_Resist	F5M2J5MA	SW_F5M2J5MA		Tyco Electronics	5	Element 14	3601287
LS7083	LS7083	U1	LS7083	LS7083		LSI CSI	1	Active Components	U423428
9N74LS47	9N74LS47	U2	9N74LS47	9N74LS47		Texas Instruments	1	Digikey	296-13223-1-ND
HDSM-641C	2 Channel 64 Segment display	U3	HDSM-641C	HDSM-641C		XAVAGO TECHNOLOGIES	1	Digikey	916-2248-1-ND
ATA6660	Serial ATM Microcontroller, ARM7TDMI 32-Bit RISC CPU, 256KB Flash and 64KB SRAM, 100-Pin LQFP, Industrial, Pb-Free	U4	ATA6660	ATA6660		Almali	1	Mouser	656-ATA6660TAPY
AT91SAM7X256-AU	Microcontroller, ARM7TDMI 32-Bit RISC CPU, 256KB Flash and 64KB SRAM, 100-Pin LQFP, Industrial, Pb-Free	U5	AT91SAM7X256-AU	AT91SAM7X256-AU			1	Digi-Key	AT91SAM7X256B-AU-ND
TPS7A4901	TPS7A4901	U6	TPS7A4901	TPS7A4901			1	Ti Samples	
TPS7A6033-Q1	TPS7A6033-Q1	U7	TPS7A6033-Q1	TPS7A6033-Q1			1	Ti Samples	
TPS7A6050-Q1	TPS7A6050-Q1	U8	TPS7A6050-Q1	TPS7A6050-Q1			1	Ti Samples	
ADC78H89CMT	7 Channel 800 KSPS, 12-Bit A/D Converter	U9	ADC78H89CMT	ADC78H89CMT		National Semiconductor	1		
MAX3001EELP+	MAX3001EELP+	U_SPI	MAX3001EELP+	MAX3001EELP+			1	Element 14	1579763
ECS-184-20-6P2DU	ECS-184-20-6P2DU	X1	HC49 US	ECS-184-20-6P2DU		ECG Inc	1	Digikey	X2138CT-ND