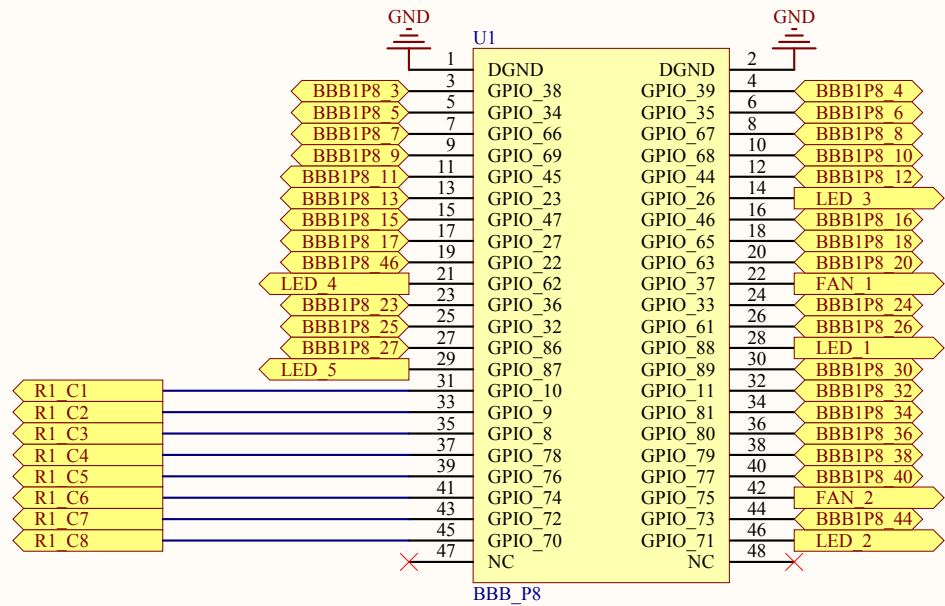
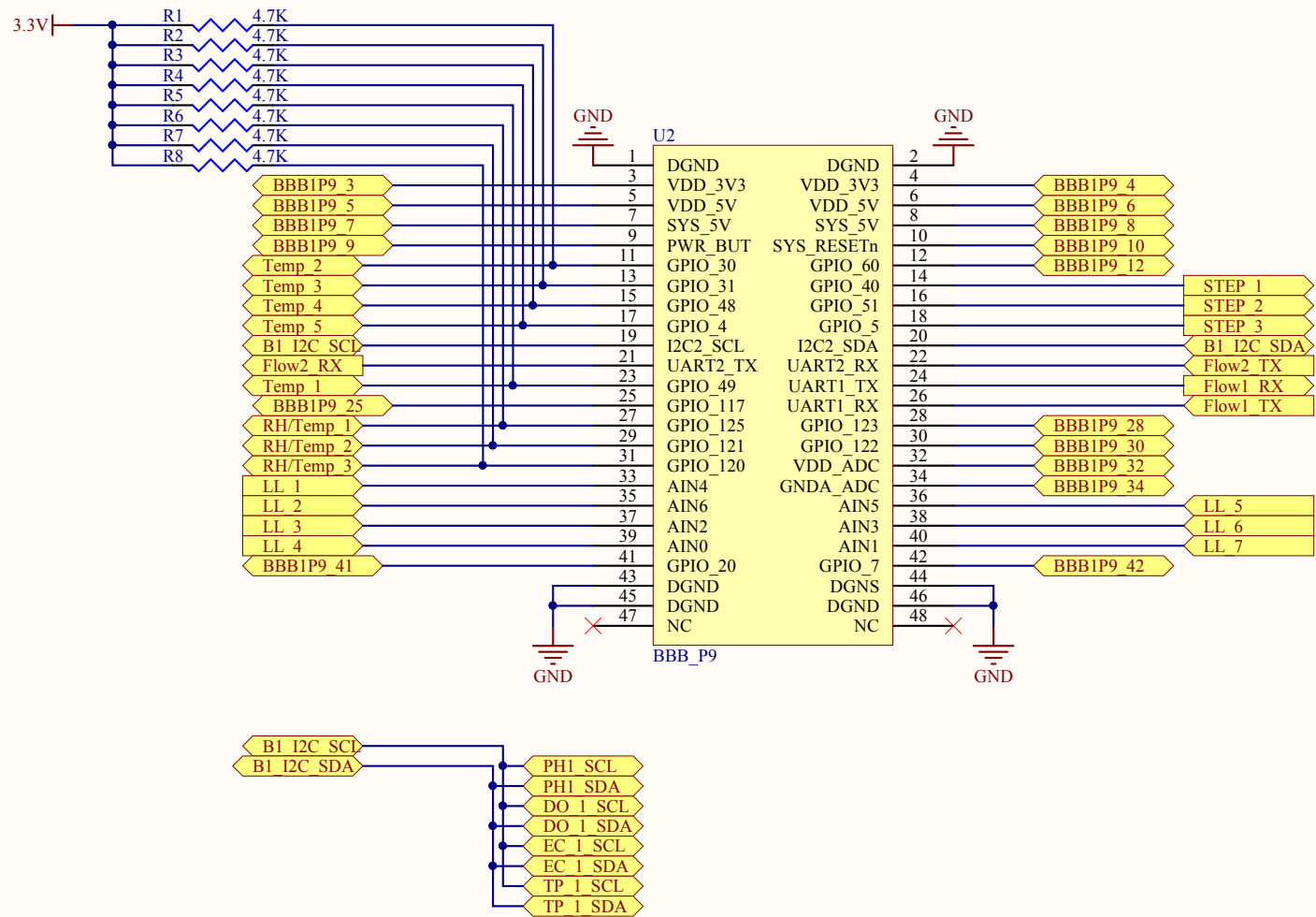


BeagleBone Black 1 P8



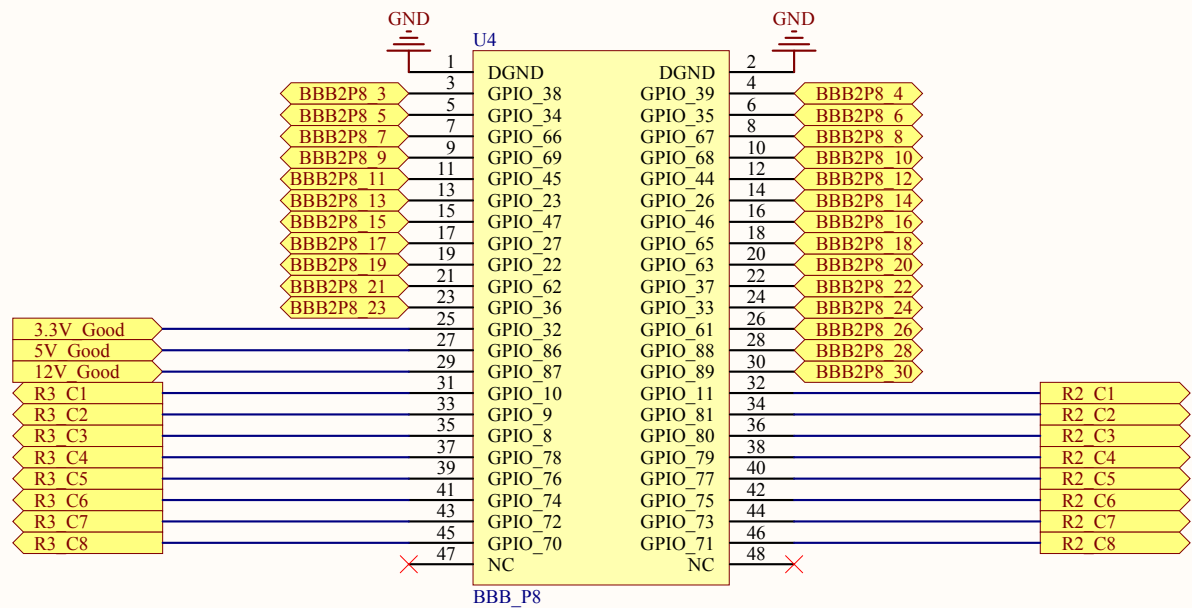
Title		
BeagleBone Black 1 P8		
Size	Number	Revision
A	P1	A
Date:	3/30/2015	Sheet of 3 of 9
File:	C:\Users\BB1 P8.SchDoc	Drawn By: Chaitanya Soma

BeagleBone Black 1 P9



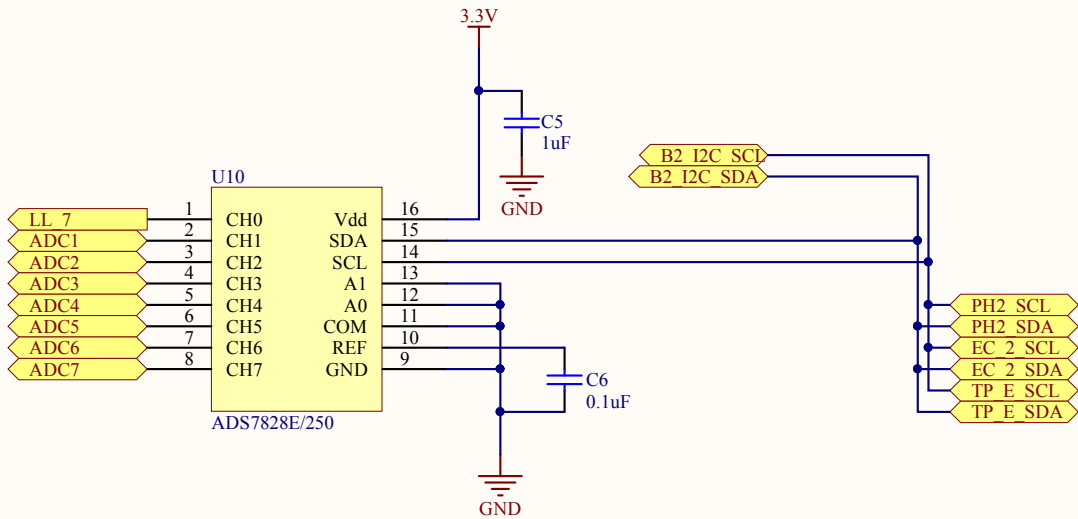
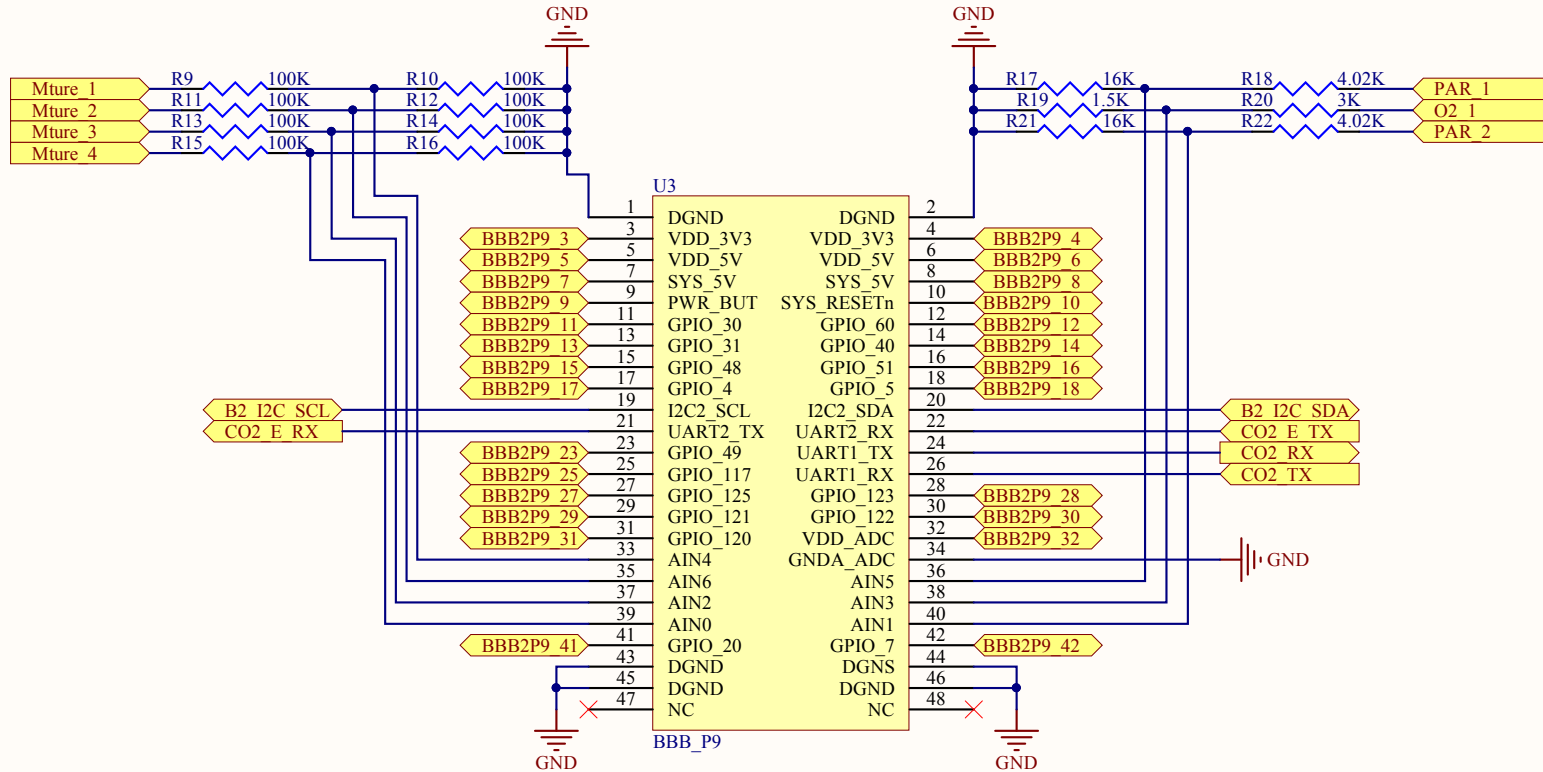
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BeagleBone Black 1 P9		
Size	Number	Revision
A	P1	A
Date:	3/30/2015	Sheet of 4 of 9
File:	C:\Users\BB1 P9\SchDoc	Drawn By: Chaitanya Soma

BeagleBone Black 2 P8



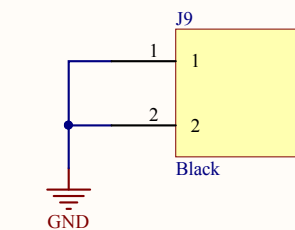
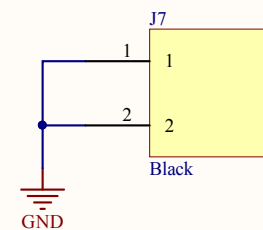
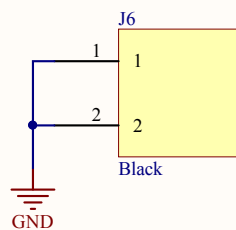
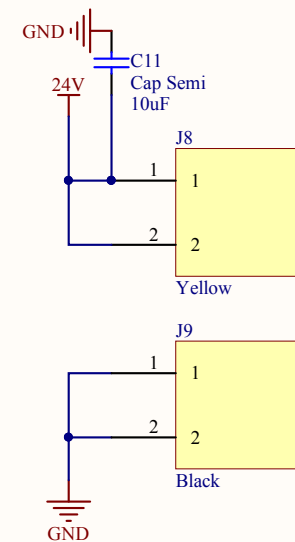
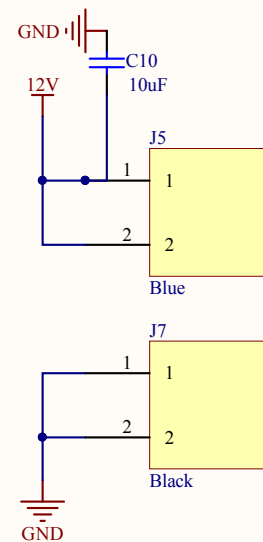
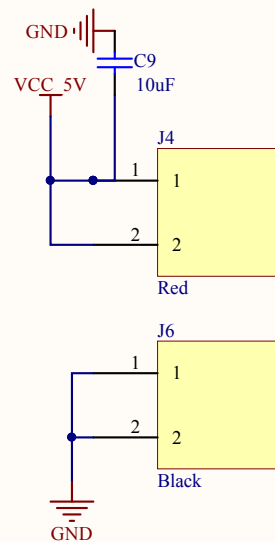
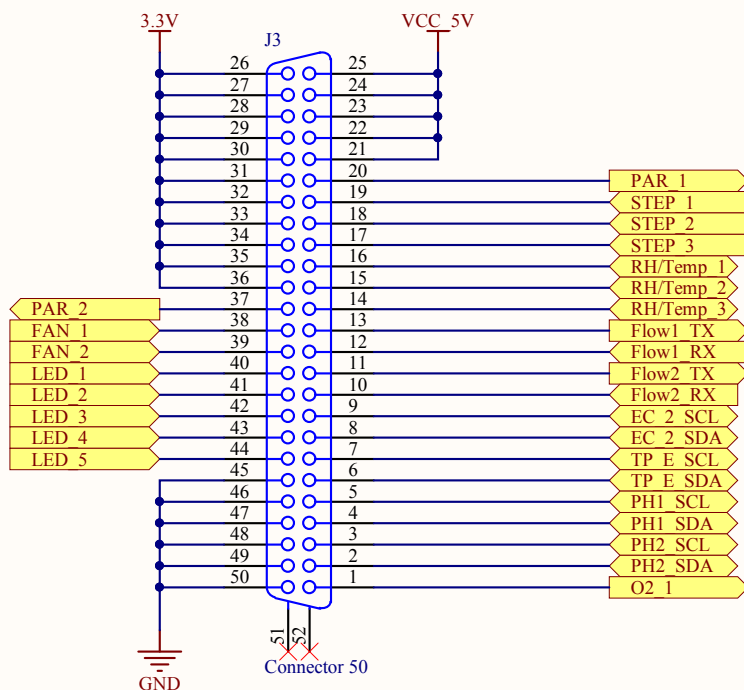
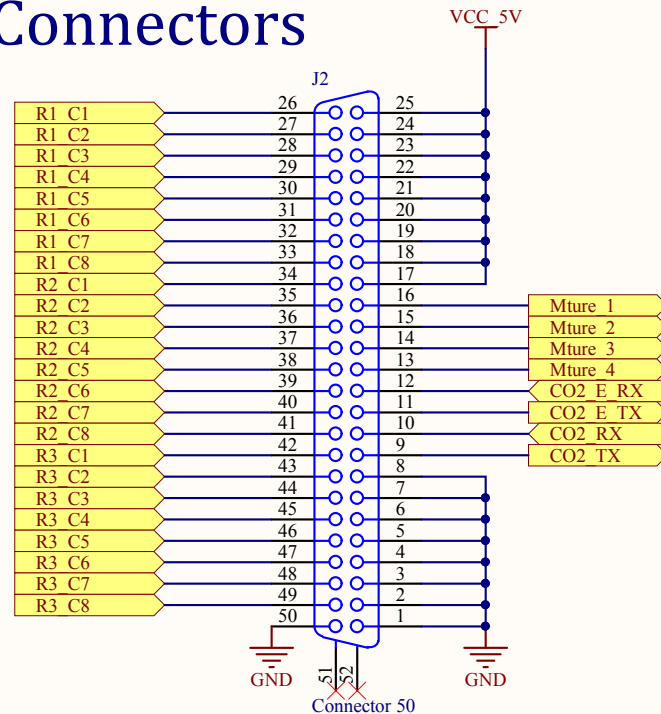
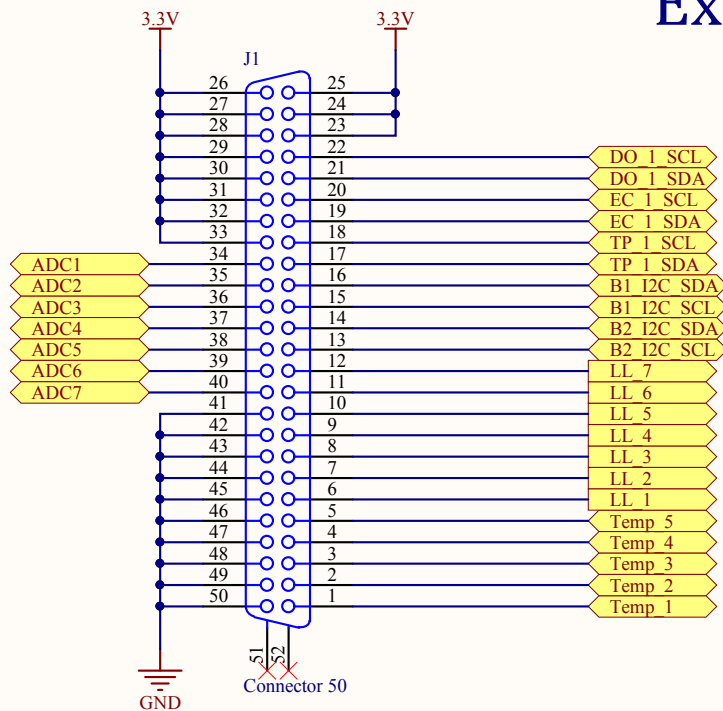
Title		
BeagleBone 2 Black P8		
Size	Number	Revision
A	P1	A
Date:	3/30/2015	Sheet of 6 of 9
File:	C:\Users\...\BBB2 P8.SchDoc	Drawn By: Chaitanya Soma

BeagleBone Black 2 P9



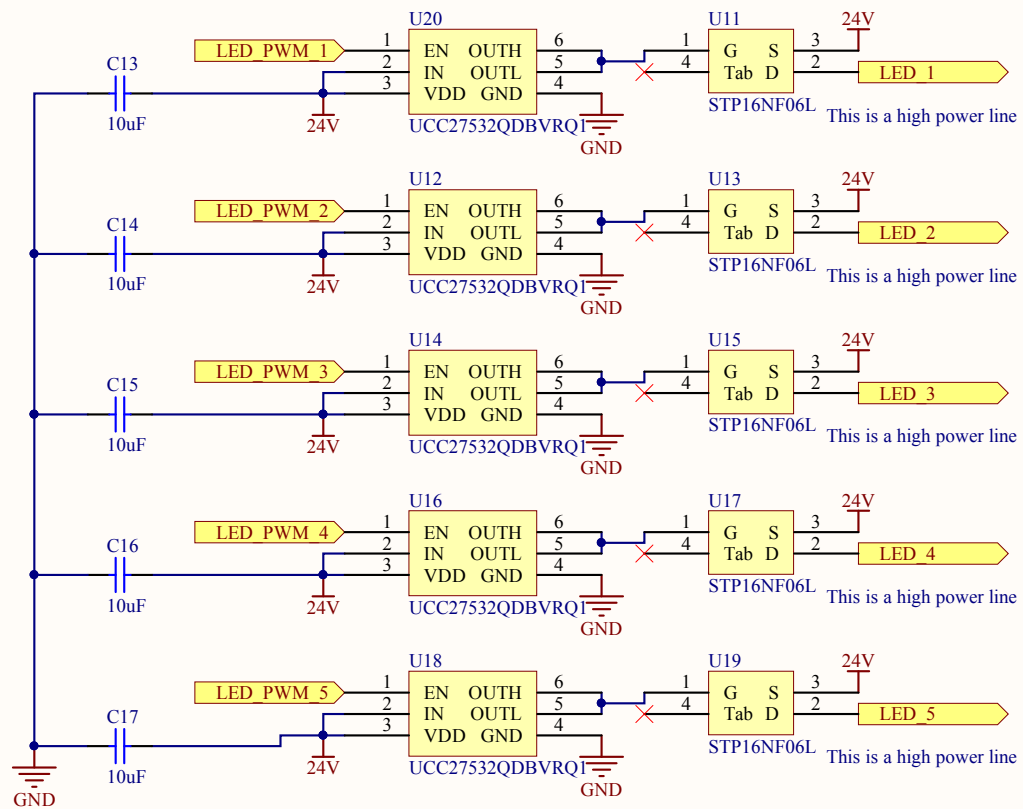
Title		
BeagleBone Black 2 P9		
Size	Number	Revision
A	P1	A
Date:	3/30/2015	Sheet of 5 of 9
File:	C:\Users\...\BBB2 P9.SchDoc	Drawn By: Chaitanya Soma

External Connectors



Title		
External Connectors		
Size	Number	Revision
A	P1	A
Date:	3/30/2015	Sheet of 8 of 9
File:	C:\Users\...\External Connectors.SchDoc	Drawn By: Chaitanya Soma

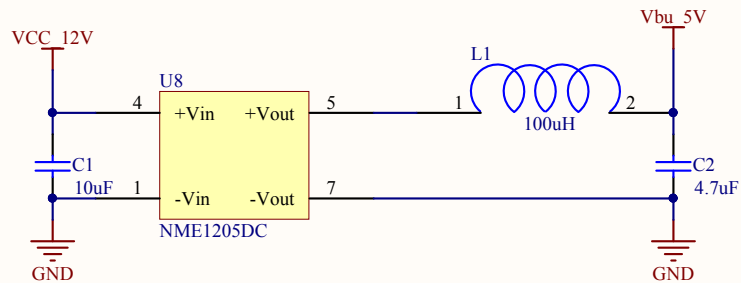
LED Strip Drivers



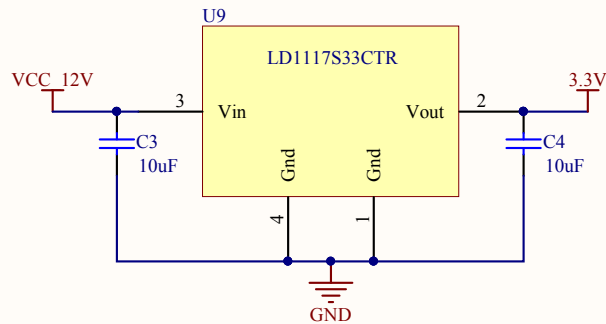
The enable line can be used as an input for the PWM and is perfect for us as the high threshold is around 2.4V. The enable line has an internal pull up so an external might not be necessary but might not be a bad idea to add one-will look for recommendations

Title		
LED Strip Driver		
Size	Number	Revision
A	P1	A
Date:	3/30/2015	Sheet of 7 of 9
File:	C:\Users\LED Driver.SchDoc	Drawn By: Chaitanya Soma

Power Supplies

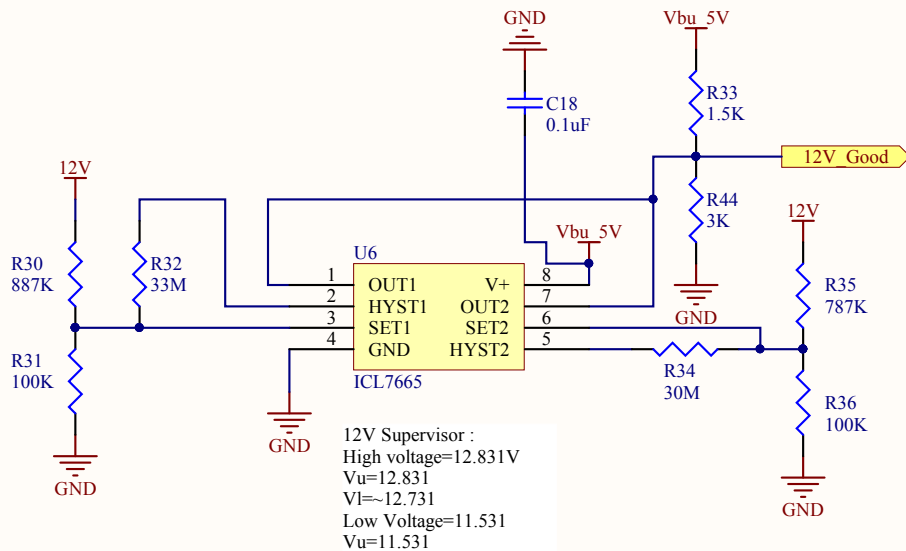
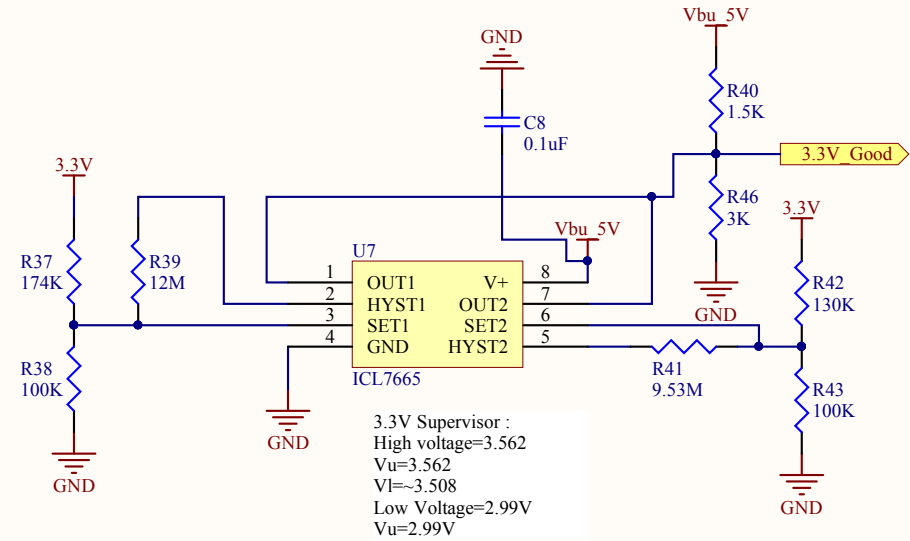
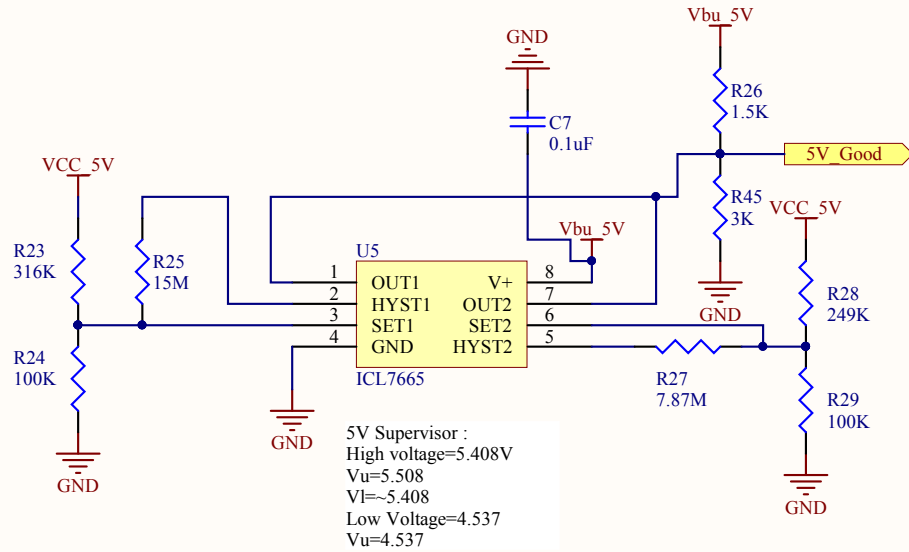


Always on supply to power supervisors.
200mA max. Use low ESR capacitor
The LC circuit keeps the output ripple



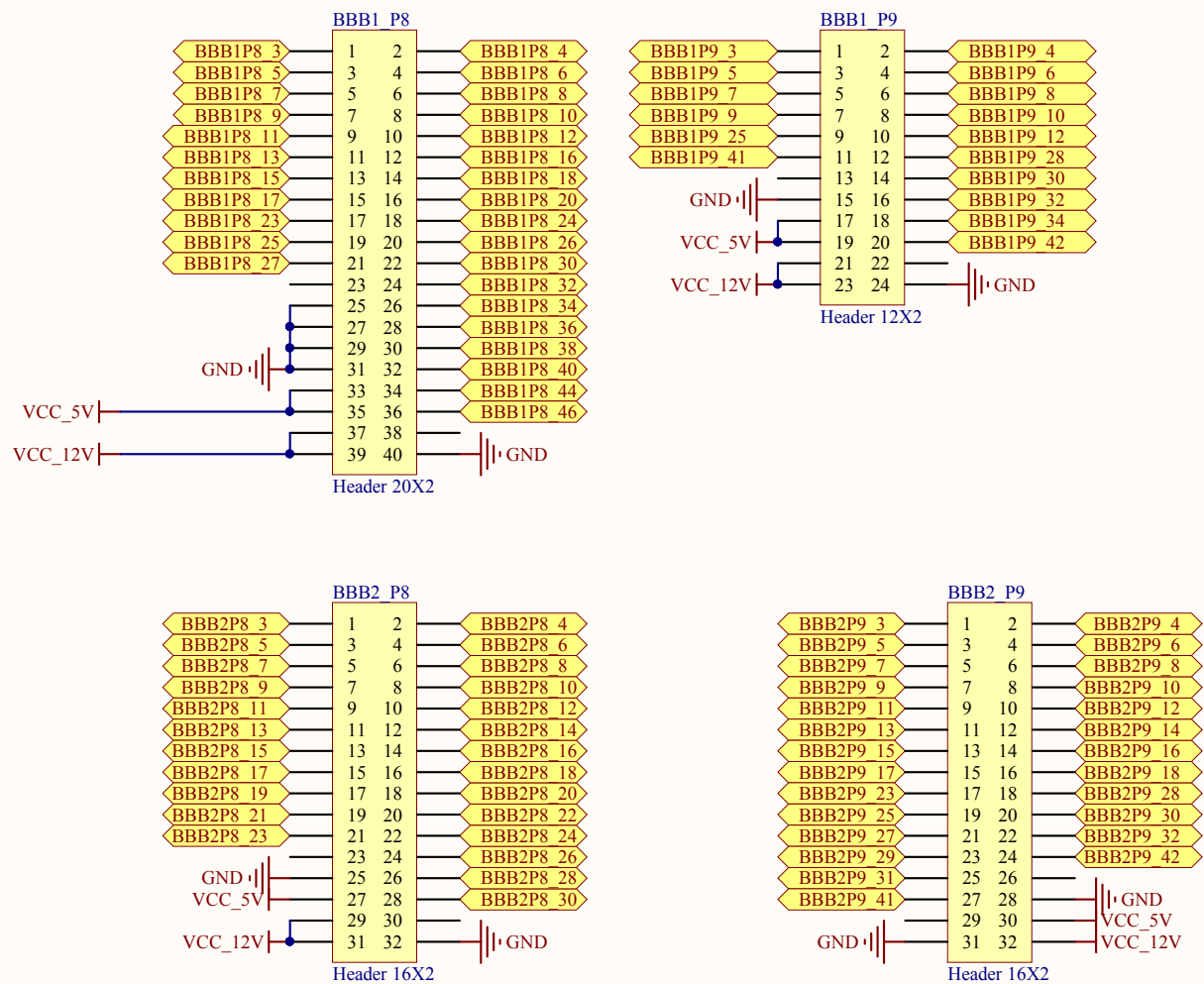
Title		
Power Supplies		
Size	Number	Revision
A	P1	A
Date:	3/30/2015	Sheet of 1 of 9
File:	C:\Users\...\Power Supplies.SchDoc	Drawn By: Chaitanya Soma

Power Supply Supervisors

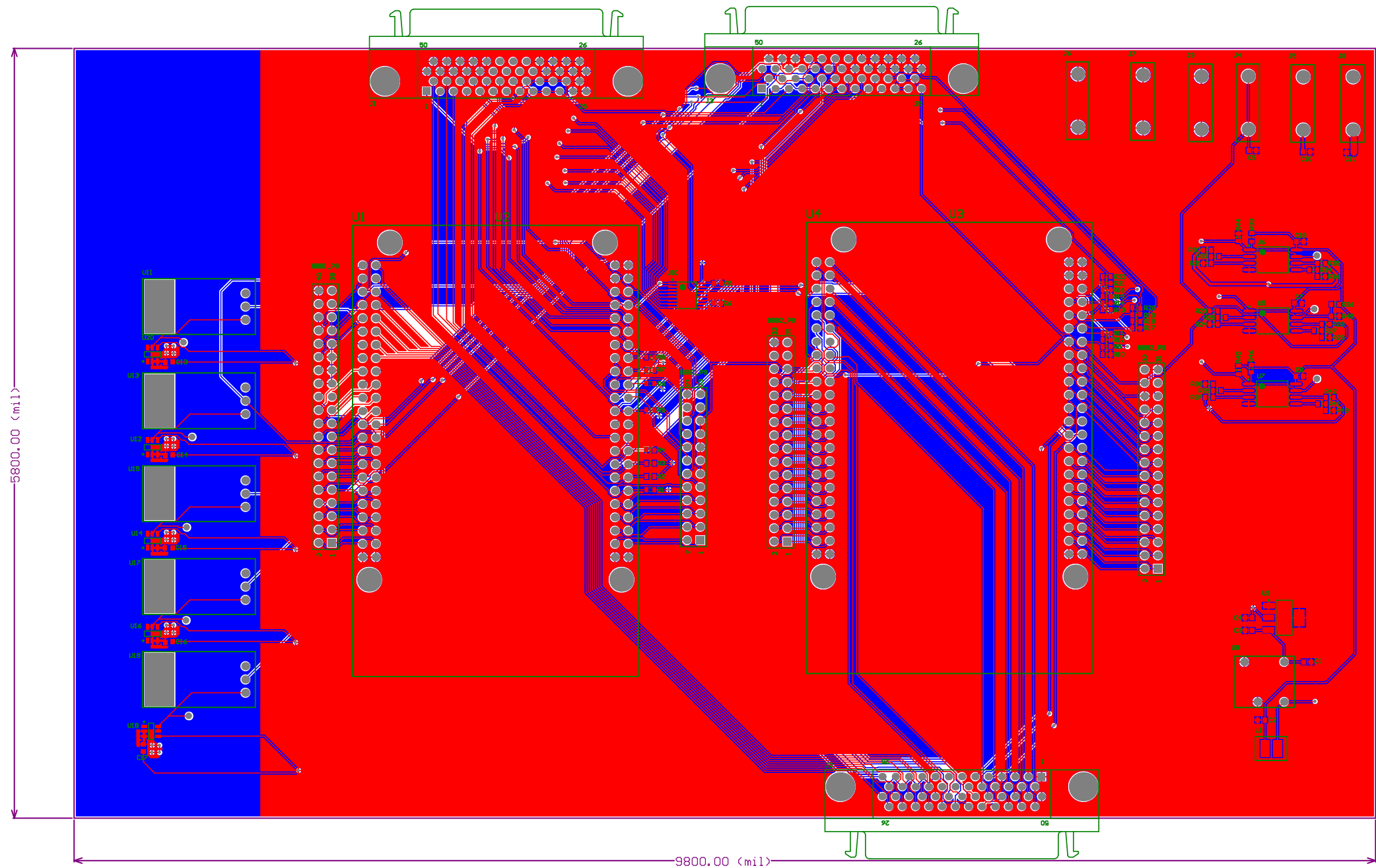


Title		
Power Supply Monitoring		
Size	Number	Revision
A	P1	A
Date:	3/30/2015	Sheet of 2 of 9
File:	C:\Users\...\Supervisor.SchDoc	Drawn By: Chaitanya Soma

Unused I/O



Title Unused I/O		
Size A	Number P1	Revision A
Date: 3/30/2015	Sheet of 9 of 9	
File: C:\Users\...\Unused Pins.SchDoc	Drawn By: Chaitanya Soma	



Designator	Quantity	Component Cost	Component Item Description	Component Item URL	Display PN	Measur PN
B881_P8	1	2.84000	CONN HEADER HMA, 40PS, 1" O.D. SGLD	http://www.digiparty.com/product/... detail.htm?PRC=203, PBA=RC,STL3, NO=93279	57125-ND	
B881_P9	1	1.80000	CONN HEADER HMA, 40PS, 1" O.D. SGLD	http://www.digiparty.com/product/... detail.htm?PRC=123, PBA=RC,STL3, NO=93279	57125-ND	
B882_P8, B882_P9	2	2.07000	CONN HEADER HMA, 40PS, 1" O.D. SGLD	http://www.digiparty.com/product/... detail.htm?PRC=123, PBA=RC,STL3, NO=93279	57125-ND	
C1, C3, C4, C5, C16, C11, C14, C15, C16, C17	20	0.00000	CAP CER 100P 50V 20% XFR 0603	http://www.digiparty.com/product/... detail.htm?PRC=188, RUC=100MAY2D495, C10, 5, 140, 100MAY	495-7205-1-ND	
C2	1	0.00000	CAP CER 4.7UF 2V 20% XFR 0603	http://www.digiparty.com/product/... detail.htm?C128475, RARCOC=C125, 100K, 2, 140, 100MAY	1276-3805-1-ND	
C3	1	0.00000	CAP CER 1UF 25V 20% XFR 0603	http://www.digiparty.com/product/... detail.htm?GRG=389, R13, 100K, 2, 140, 100MAY	495-1887-1-ND	
C5, C7, C8, C18	40	0.00000	CAP CER 0.1UF 20V 20% XFR 0603	http://www.digiparty.com/product/... detail.htm?GRG=488, R13, 100K, 2, 140, 100MAY	495-1204-1-ND	
C13	1	0.89000	CAP CER 100P 50V 20% XFR 0603	http://www.digiparty.com/product/... detail.htm?C100R03, R13, 100MAY2D495, C10, 5, 140, 100MAY	495-8055-1-ND	
C1, C2, C3	3	4.78000	CONN D-PIN REPT DIPCS, 8-16, 500R	http://www.digiparty.com/product/... detail.htm?C78783, FAL18E2, NO=93279	433832-ND	
H4	1	0.40000	CONN TEST PROBE SGLD RED PCB	http://www.digiparty.com/product/... detail.htm?5-SAC118, 215-582118-2, NO=929209	5-S82118-2-ND	
H5	1	0.04000	CONN TEST PROBE SGLD BLUE PCB	http://www.digiparty.com/product/... detail.htm?5-SAC118, 215-582118-2, NO=929209	A111498-ND	
H6, H7, H8	3	0.00000	CONN TEST PROBE SGLD BLACK PCB	http://www.digiparty.com/product/... detail.htm?5-SAC118, 215-582118-6, NO=929209	5-S82118-6-ND	
H9	1	0.04000	CONN TEST PROBE SGLD VIL PCB	http://www.digiparty.com/product/... detail.htm?5-SAC118, 215-582118-7, NO=929209	A111497-ND	
H1	1	0.12000	FIXED RES 500OHM 5% 1/4W 0603	http://www.digiparty.com/product/... detail.htm?R254C,R1, 1, 2475, 1, NO=931935	R13-2475-1-ND	
H1, R2, R3, R4, R5, R6, R7, R8	8	0.00000	RES SMD 4.7K OHM 1% 1/4W 0603	http://www.digiparty.com/product/... detail.htm?R2, FAL18E2, NO=929209	74-7824CT-ND	
H9, R10, R11, R12, R13, R14, R15, R16	8	0.00000	RES SMD 500K OHM 1% 1/4W 0603	http://www.digiparty.com/product/... detail.htm?R2, FAL18E2, NO=929209	P2080HCT-ND	
H17, R18	2	0.00000	RES SMD 10K OHM 1% 1/4W 0603	http://www.digiparty.com/product/... detail.htm?R2, FAL18E2, NO=929209	P2080HCT-ND	
H18, R19	2	0.00000	RES SMD 4.0K OHM 1% 1/4W 0603	http://www.digiparty.com/product/... detail.htm?R2, FAL18E2, NO=929209	P2080HCT-ND	
H19, R20, R21, R22, R23, R24, R25, R26	8	0.00000	RES SMD 1.5K OHM 1% 1/4W 0603	http://www.digiparty.com/product/... detail.htm?R2, FAL18E2, NO=929209	1276-4985-1-ND	
R20, R44, R45, R46	4	0.00000	RES SMD 30K OHM 1% 1/4W 0603	http://www.digiparty.com/product/... detail.htm?R2, FAL18E2, NO=929209	P1306HCT-ND	
R21	1	0.00000	RES SMD 100K OHM 1% 1/4W 0603	http://www.digiparty.com/product/... detail.htm?R2, FAL18E2, NO=929209	P1306HCT-ND	
R24, R25, R31, R36, R38, R43	6	0.00000	RES SMD 300K OHM 1% 1/4W 0603	http://www.digiparty.com/product/... detail.htm?R2, FAL18E2, NO=929209	P2080HCT-ND	
R25	1	0.40000	RES SMD 100K OHM 1% 1/4W 0603	http://www.digiparty.com/product/... detail.htm?R2, FAL18E2, NO=929209	146-1306HCT-ND	
R27	1	0.00000	RES SMD 7.87M OHM 1% 1/4W 0603	http://www.digiparty.com/product/... detail.htm?R2, FAL18E2, NO=929209	1276-4985-1-ND	
R28	1	0.00000	RES SMD 240K OHM 1% 1/4W 0603	http://www.digiparty.com/product/... detail.htm?R2, FAL18E2, NO=929209	P1306HCT-ND	
R30	1	0.00000	RES SMD 807K OHM 1% 1/4W 0603	http://www.digiparty.com/product/... detail.htm?R2, FAL18E2, NO=929209	P8876HCT-ND	
R32	1	0.00000	RES SMD 33M OHM 1% 1/4W 0603	http://www.digiparty.com/product/... detail.htm?R2, FAL18E2, NO=929209	146-1306HCT-ND	
R34	1	0.40000	RES SMD 100K OHM 1% 1/4W 0603	http://www.digiparty.com/product/... detail.htm?R2, FAL18E2, NO=929209	146-1306HCT-ND	
R35	1	0.00000	RES SMD 787K OHM 1% 1/4W 0603	http://www.digiparty.com/product/... detail.htm?R2, FAL18E2, NO=929209	P7876HCT-ND	
R37	1	0.00000	RES SMD 14K OHM 1% 1/4W 0603	http://www.digiparty.com/product/... detail.htm?R2, FAL18E2, NO=929209	P1306HCT-ND	
R39	1	0.00000	RES SMD 12M OHM 1% 1/4W 0603	http://www.digiparty.com/product/... detail.htm?R2, FAL18E2, NO=929209	P12M6CT-ND	
R41	1	0.00000	RES SMD 9.51M OHM 1% 1/4W 0603	http://www.digiparty.com/product/... detail.htm?R2, FAL18E2, NO=929209	1276-4985-1-ND	
R42	1	0.00000	RES SMD 10K OHM 1% 1/4W 0603	http://www.digiparty.com/product/... detail.htm?R2, FAL18E2, NO=929209	P1306HCT-ND	
U1, U4	2	0.80000	CONN HEADER HMA, 40PS, 1" O.D. SGLD	http://www.digiparty.com/product/... detail.htm?PRC=123, PBA=RC,STL3, NO=93279	57125-ND	
U2, U3	2	0.80000	CONN HEADER HMA, 40PS, 1" O.D. SGLD	http://www.digiparty.com/product/... detail.htm?PRC=123, PBA=RC,STL3, NO=93279	57125-ND	
U4, U6, U7	3	0.00000	IC VOLT DETEC DUAL, OV, UNDET 500C	http://www.digiparty.com/product/... detail.htm?R2, FAL18E2, NO=929209	IC-7805ACCA-1-ND	
U8	1	0.00000	IC REG LDO 3.3V 1A, 500mA	http://www.digiparty.com/product/... detail.htm?R2, FAL18E2, NO=929209	380-AMM1220DC	
U9	1	0.00000	IC REG LDO 3.3V 1A, 500mA	http://www.digiparty.com/product/... detail.htm?R2, FAL18E2, NO=929209	495-1245-1-ND	
U10	1	0.00000	IC REG LDO 3.3V 1A, 500mA	http://www.digiparty.com/product/... detail.htm?R2, FAL18E2, NO=929209	296-12465-1-ND	
U11, U13, U15, U17, U19	1	0.00000	IC REG LDO 3.3V 1A, 500mA	http://www.digiparty.com/product/... detail.htm?R2, FAL18E2, NO=929209	495-1245-1-ND	
U14, U16, U18, U20	1	0.00000	IC REG LDO 3.3V 1A, 500mA	http://www.digiparty.com/product/... detail.htm?R2, FAL18E2, NO=929209	296-12465-1-ND	