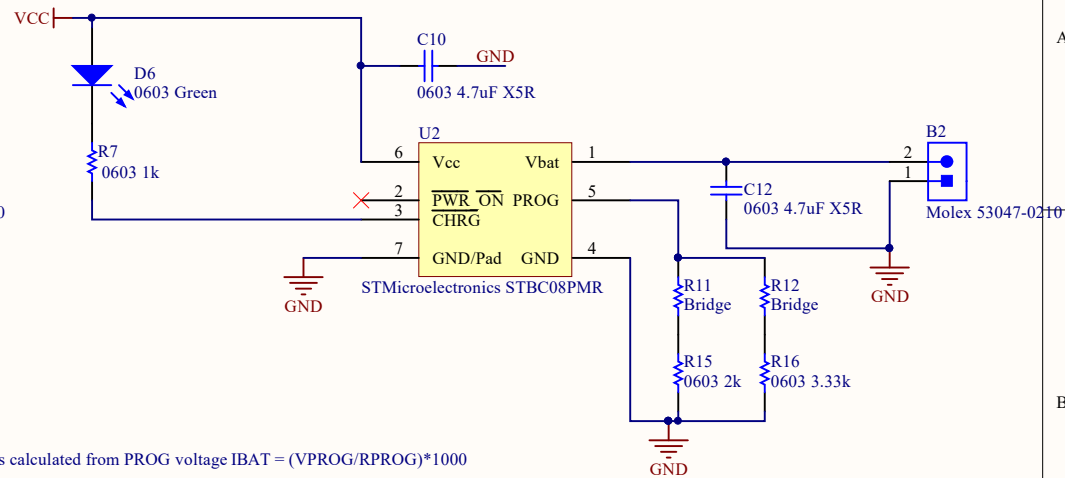
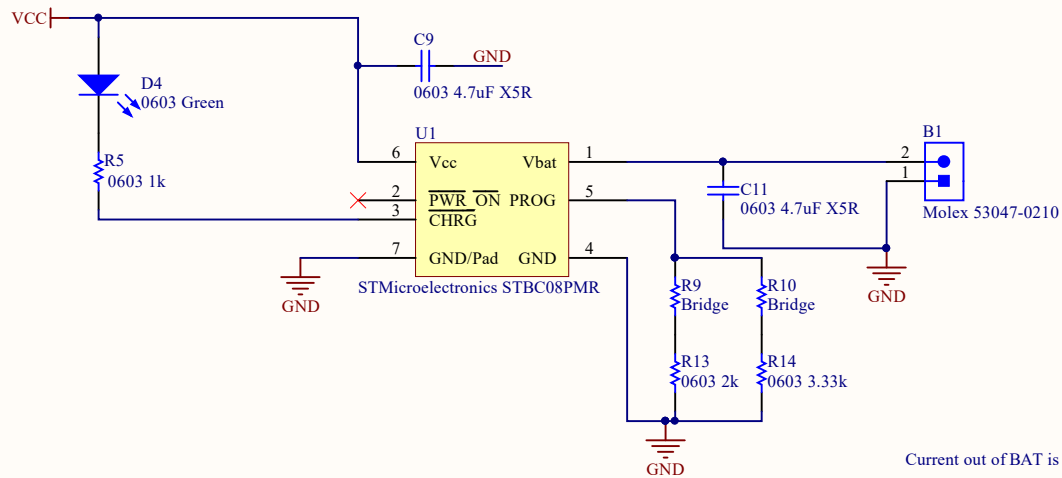


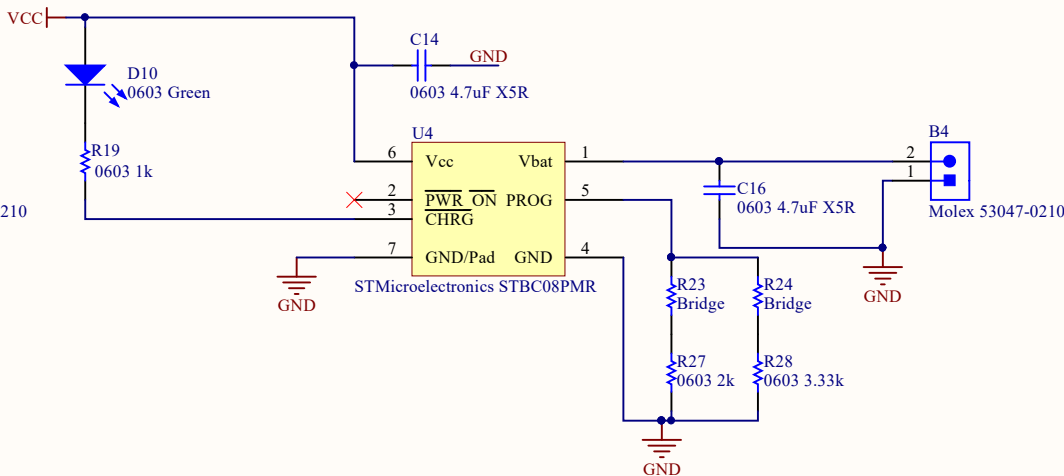
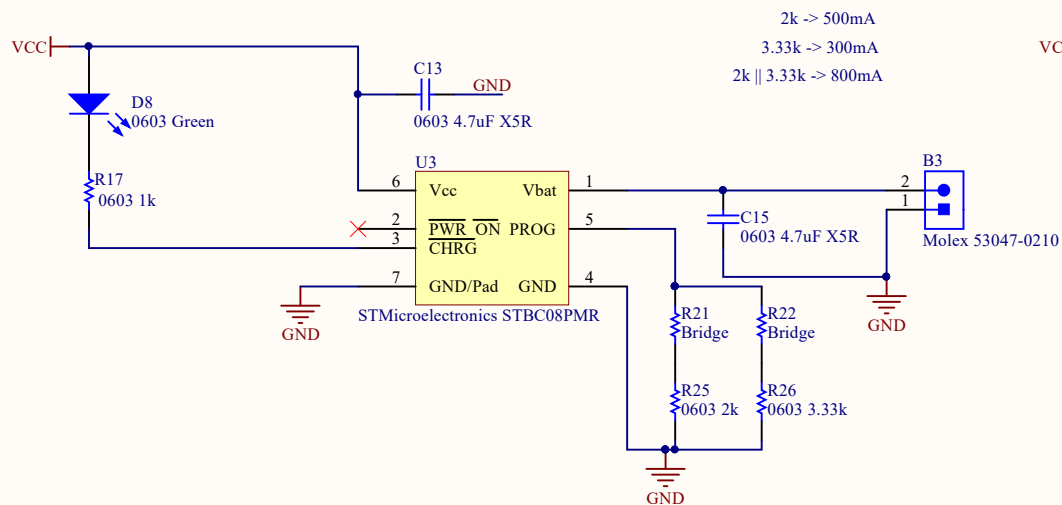
Comment	Designator	Description	LibRef	Quantity
XT60PT		Amass PCB Mount XT60 Connector	CMP-ys0k18bgy9431xyemrn-2	1
Molex 53047-0210	B1, B2, B3, B4	1.25mm Pitch PicoBlade™ Wire-to-Board Header, Vertical, with Friction Lock, 2 Circuits	CMP-5075997b4c378fb2-1	4
0603 100nF	C1	AVX 0603YC104K4Z2A	CMP-955451-2	1
0603 10pF	C2	Multilayer Ceramic Capacitors MLCC - SMD/SMT 50volts 10pF 5% COG	CMP-3554890-2	1
1210 10uF	C3, C4	CAP CER 10UF 25V 10% X5R 1210	CMP-127194-2	2
0603 1uF	C5, C8	CAP CER 1UF 10V Y5V 0603	CMP-126001-2	2
0603 10nF	C6	CAP CER 10000PF 25V 10% X7R 0603	CMP-171279-2	1
1210 47uF	C7, C17	1210 47 uF 10 V ±10% Tolerance X5R SMT Multilayer Ceramic Capacitor	CMP-cdd204dbeb8b1215-2	2
0603 4.7uF X5R	C9, C10, C11, C12, C13, C14, C15, C16	Cap Ceramic 4.7uF 10V X5R 10% SMD 0603 85C Paper T/R	CMP-9133140-3	8
SMB 3A 40V	D1	DIODE SCHOTTKY 100V 3A SMB	CMP-816754-2	1
SMAJ30CAHE3/5A	D2	Transient Voltage Suppressor, 6.40 to 231 V, 30 V Stand-off Voltage, Bi-Directional, -55 to 155 degC, 2-pin DO-214AC, Pb-Free, Tape and Reel	CMP-16576639-3	1
0603 Green	D4, D4, D6, D8, D10	Green 1.6 x 0.8 x 0.8 mm 130° Water Clear 6 mcd 2.1 V SMT LED	CMP-1544853-3	5
IHLP2525EZER3R3M01	L1	Surface Mount Power Inductor, IHLP-2525EZ-01 Series, 3.3 H, 20%, Shielded, 0.0209 ohm, 8 A	CMP-55fd9e7d09658a3a-1	1
0603 10k	R1	RES SMD 10K OHM 0.1% 1/10W 0603	CMP-1863099-2	1
0603 133k 1%	R3	Thick Film Resistors - SMD 0603 133Kohms 1% Tol	CMP-3663980-2	1
0603 24k 1%	R4	Thick Film Resistors - SMD 0603 24Kohms 5% Tol	CMP-3679912-2	1
0603 1k	R5, R5, R7, R17, R19	Precision resistor, SMD [Panasonic Automotive & Industrial Systems] ERJ3KEF1001V Precision resistor, SMD	CMP-3654795-5	5
Bridge	R9, R10, R11, R12, R21, R22, R23, R24	Bridge resistor 0ohm	CMP-15792799-5	8
0603 2k	R13, R15, R25, R27	RES SMD 2K OHM 5% 1/10W 0603	CMP-1877180-2	4
0603 3.33k	R14, R16, R26, R28	Thick Film Resistors - SMD 0603 3.3Kohms 5% Tol	CMP-3656259-2	4
STMicroelectronics STBC08PMR	U1, U2, U3, U4	IC BATT CHRGR LI-ION 4.2V 800MA DFN6	CMP-facc33d44885250b-1	4
Texas Instruments TPS54339DDA	U5	4.5V to 23V Input, 3A Synchronous Step-Down Converter with D-CAP2 M	CMP-827	1



Current out of BAT is calculated from PROG voltage $IBAT = (VPROG/RPROG)*1000$

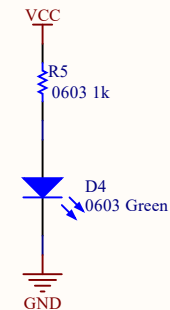
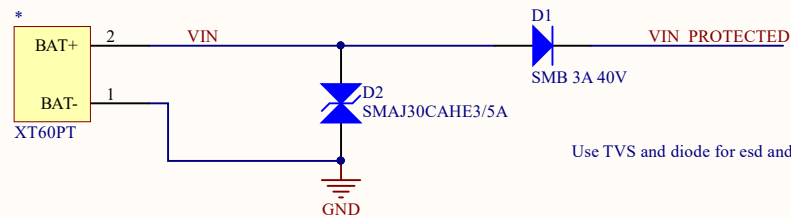
The battery charge current is 1000 times the PROG pin current value.

Vprog can be around 1V

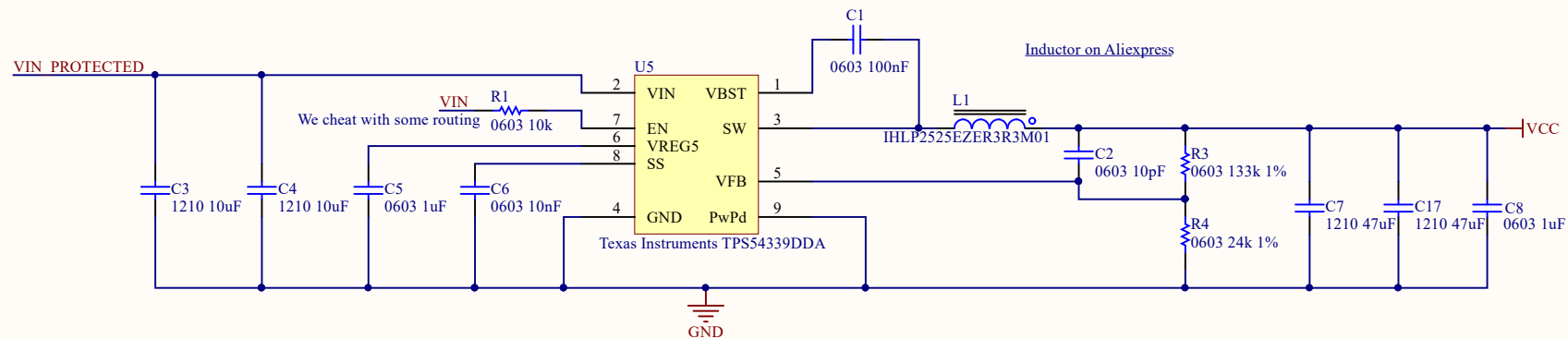


Title		
Size	Number	Revision
A4		
Date:	7/01/2017	Sheet of
File:	MultiCharge2.SchDoc	Drawn By:

XT60 PCB Mount



4 charge controllers (VCC 5V) which draw combined ~14W peak, 8W standard
3A 5V switching supply, >90% efficiency



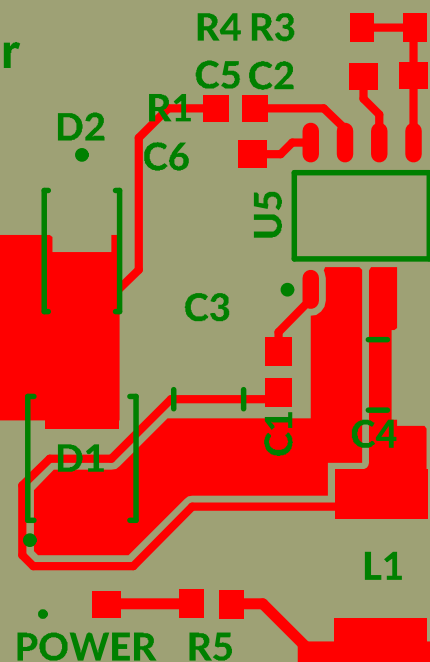
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RotorMagic
4x 1S Charger

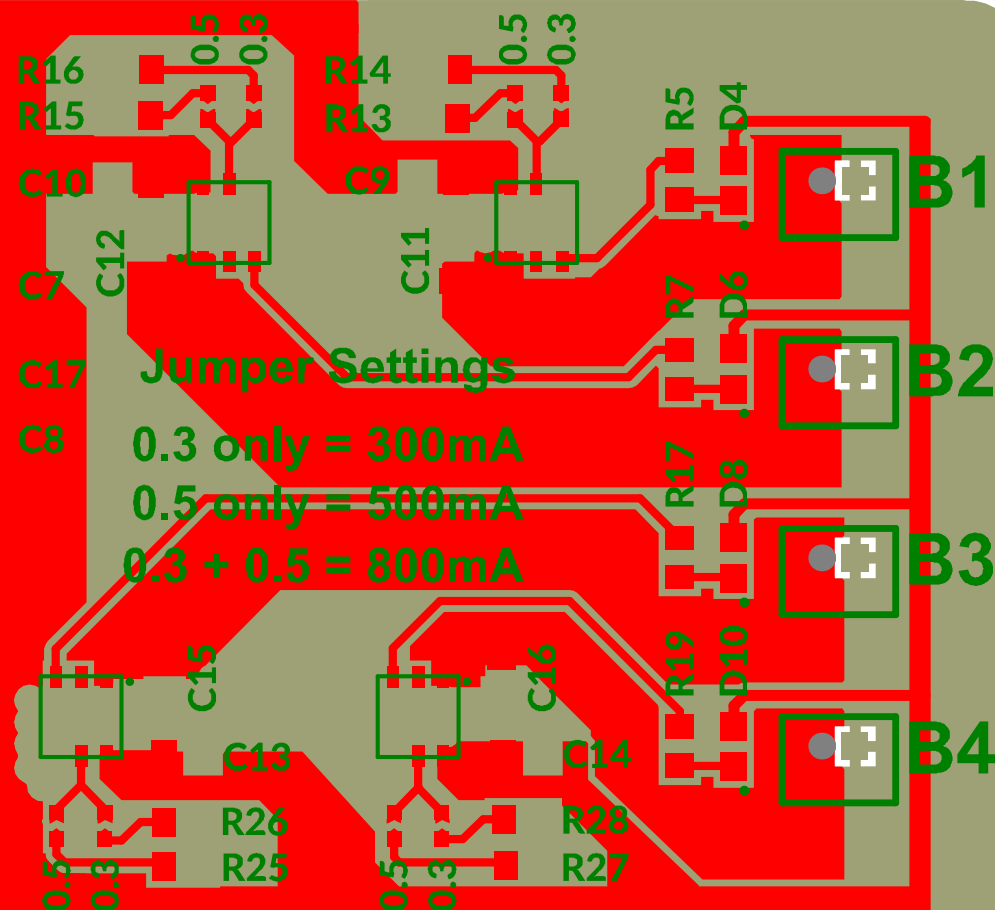
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9-20V DC IN
3-5S LiPo IN



L1



RotorMagic 4x 1S Charger

9-20V DC IN
3-5S LiPo IN

