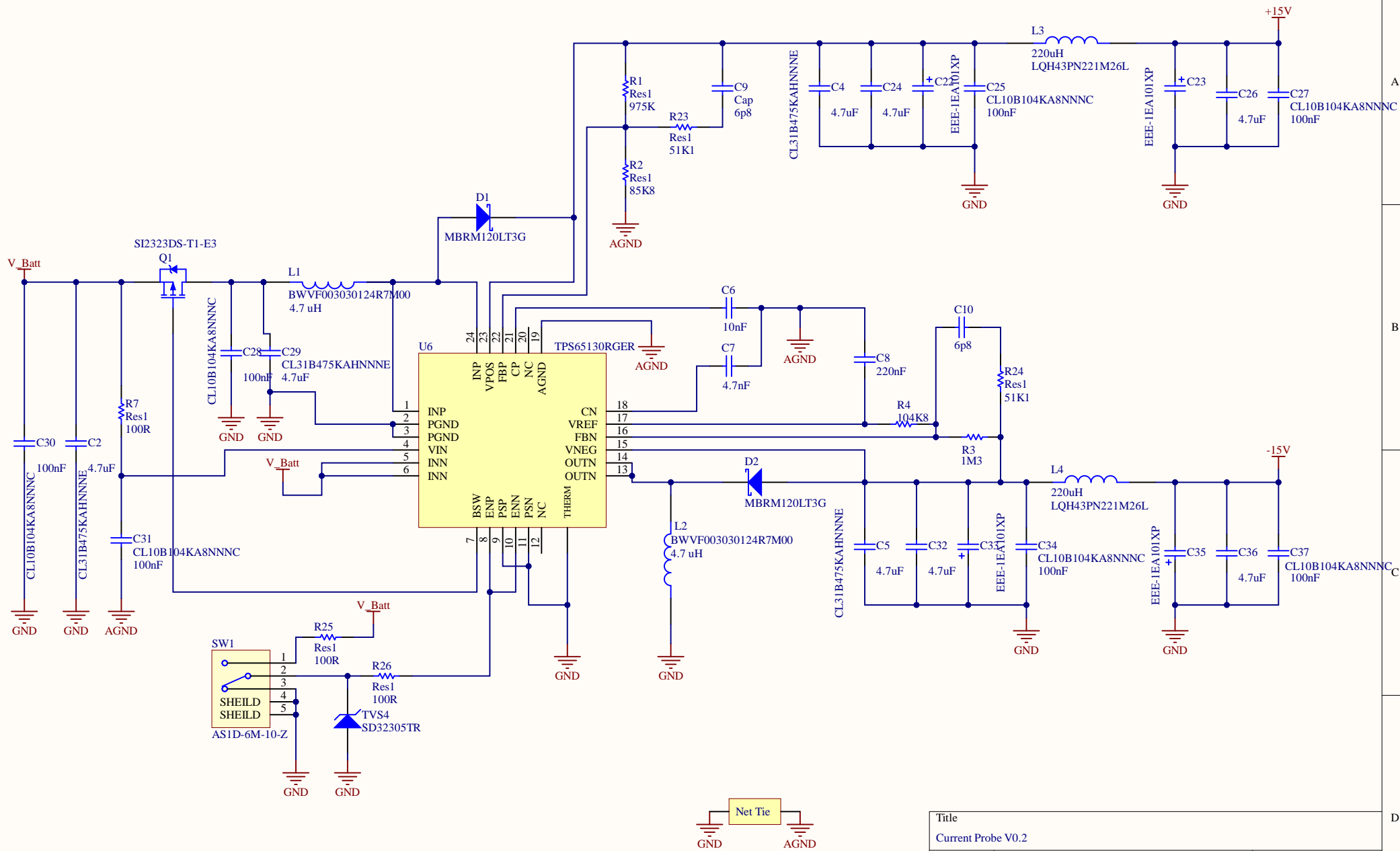


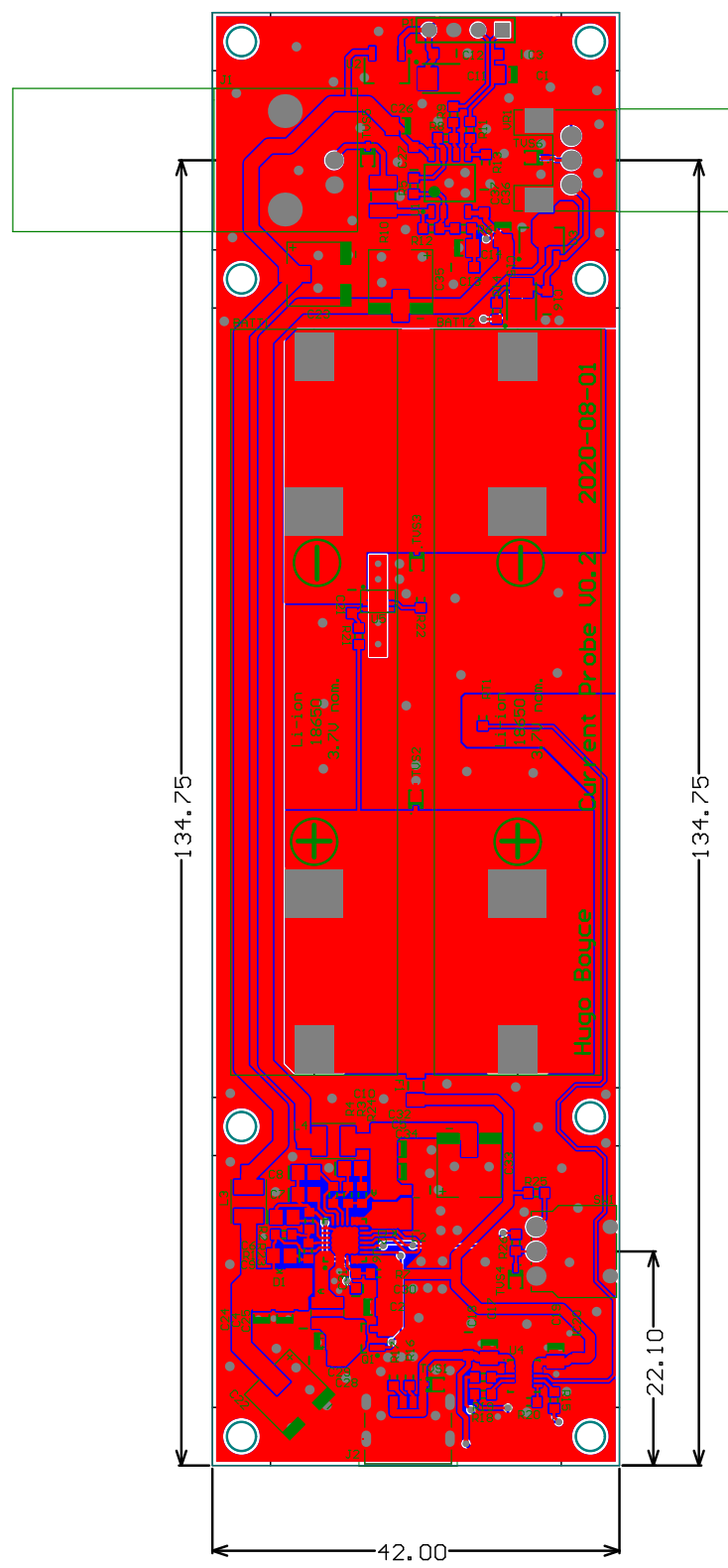
All resistors are 1% thin film 0603 unless otherwise noted
All capacitors are 0603 X7R ceramic unless otherwise noted
For educational purposes only

Title		
Current Probe V0.2		
Size	Number	Revision
A4		A
Date:	12-20-2020	Sheet of
File:	C:\Users\...\Analog - Current_Probe_V0.2	Doc By: Hugo Boyce



All resistors are 1% thin film 0603 unless otherwise noted
 All capacitors are 0603 X7R ceramic unless otherwise noted
For educational purposes only

Title		
Current Probe V0.2		
Size	Number	Revision
A4		A
Date:	12-20-2020	Sheet of
File:	C:\Users\...Power - Current_Probe_V0.2.SchDoc	Drawn By: Hugo Boyce



Comment	Description	Designator	Footprint	LibRef	Quantity	Value
Li-ion_18650_Generi c_Keystone_254_ Clips	Generic 18650 battery with Keystone 254 clips	BATT1	Li-ion_18650_Generi c_Keystone_254_ Clips	Li-ion_18650_Generi c_Keystone_254_ Clips	1	
Li-ion_18650_Generi c_Keystone_254_ Clips	Generic 18650 battery with Keystone 254 clips	BATT2	Li-ion_18650_Generi c_Keystone_254_ Clips	Li-ion_18650_Generi c_Keystone_254_ Clips	1	
CL31B475KAHNN NE	Cap Ceramic 4.7uF 25V X7R 10% SMD 1206 125C Embossed T/R		C1, C2, C4, C5, C14, C17, C19, C24, C26, C29, C32, C36	CAPC3216N	CL31B475KAHNN NE	12 4.7uF
CL10B104KABNN C	CAP CER 0.1uF 25V X7R 0603		C3, C12, C13, C16, C18, C20, C21, C25, C27, C28, C30, C31, C34, C37	CAPC1608N	CL10B104KABNN C	14 100nF
Cap	Capacitor	C6	CAPC2012N	Cap		1 10nF
Cap	Capacitor	C7	CAPC2012N	Cap		1 4.7nF
Cap	Capacitor	C8	CAPC2012N	Cap		1 22nF
Cap	Capacitor	C9, C10	CAPC2012N	Cap		2 4uF
TPS8107M006R02 50	CAP TANT 100uF 20% 6.3V 1411	C11, C15	CAPMP352W21N	TPS8107M006R02 50		2
EEE-1EA101XP	Cap Aluminum Lytic 100uF 25V 20% (6.3 X 7.7mm) SMD 143mA 2000h 85C T/R		SMD_Electrolytic_8 Panasonic_Size_D	EEE-1EA101XP		4
MBRM120LT3G	Diode Schottky 20V 1A 2- Pin(1-Tab) Power Mfrs T/R	D1, D2	DO-216AA	MBRM120LT3G		2
150120RS75000	LED RED CLEAR 1206 SMD	D3, D4, D5, D6	150120RS75000	150120RS75000		4
C1F3	FUSE 3.0A 125VAC FAST 1206	F1	BEL_FUSE_C1F	C1F3		1
1-1337543-0	Conn ZDC/BNC RCP 0Hz to 4GHz 900hm Solder RA Thru-Hole Gold Over Nickel Over Copper Individual	J1	1-1337543-0	1-1337543-0		1
USB-C	USB-C Female NO DATA	J2	UJC-HP-3-SMT-TR	UJC-HP-3-SMT-TR		1
BWVF003030124R 7M00	Ind. Pwr Ferrite Inductor Ww	L1, L2	BWVF00303012	BWVF003030124R 7M00		2 4.7 uH
LQH43PN221M26L	Inductor with Inductance: 220uH Tol: +/- 20%, Package: 1812_4532	L3, L4	IND_LQH43PN221 M26L	LQH43PN221M26L		2 220uH
254	Battery Contact Clip 18650 SMD	MECH1, MECH2, MECH3, MECH4		254		4
Header 4	Header, 4-Pin	F1	HDR1X4	Header 4		1
SI2323DS-T1-E3	MOSFET P-CH 20V 3.7A SOT23-3	Q1	SOT23-3N	SI2323DS-T1-E3		1
Res1	Resistor	R1	RES01608N	Res1		1 975K
Res1	Resistor	R2	RES01608N	Res1		1 85K8
Res1	Resistor	R3	RES01608N	Res1		1 1M3
Res1	Resistor	R4	RES01608N	Res1		1 104K8
Res1	Resistor	R5, R9, R11, R12	RES01608N	Res1		4 15K
Res1	Resistor	R6	RES01608N	Res1		1 390K
Res1	Resistor	R7, R25, R26	RES01608N	Res1		3 100R
Res1	Resistor	R8, R13	RES01608N	Res1		2 120K
Res1	Resistor	R10	RES03225N	Res1		1 51R
Res1	Resistor	R14, R15, R18, R19, R21	RES01608N	Res1		5 470R
Res1	Resistor	R16, R17	RES01608N	Res1		2 9K1
Res1	Resistor	R20, R22	RES01608N	Res1		2 2K
Res1	Resistor	R23, R24	RES01608N	Res1		2 51K1
NCU18XH103F60R B	THERMISTOR NTC 10KOHM 3380K 0603	RT1	RES01608N	NCU18XH103F60R B		1
AS1D-6M-10-Z	Switch Slide SPDT 30mA 48V	SW1	AS1D-6M-10-Z	AS1D-6M-10-Z		1
SD32305TR	TVS DIODE 5V 9.8V SOD323	TVS1, TVS2, TVS3, TVS4	SODFL260X100-2N	SD32305TR		4
PESD12VL1BA,115	TVS DIODE 12V 87V SOD323	TVS5, TVS6	SODFL260X100-2N	PESD12VL1BA,115		2
LM4565F-GE2	Op Amp Dual Low Noise Amplifier ±18V 8-Pin SOP T/R	U1	SOIC8_LM4565	LM4565F-GE2		1
AS78L05RTR-E1	IC REG LINEAR 5V 100mA SOT89-3	U2	SOT89N	AS78L05RTR-E1		1
L79L05ABUTR	ST/MCROELECTRO NICS - L79L05ABUTR - Régulateur de tension Linéaire, 7905, Fixe, -20V à 89V In, -5V à 0.1A Out, SOT-89-3	U3	SOT89N	L79L05ABUTR		1
MCP73833T-AM/NF	IC LI-ION/LI-POLY CTRL 100FN	U4	MCP73833_DF10	MCP73833T-AM/NF		1
AP92115A-AA-HAC-7	IC BATT PROTECTION LI- ION 6UDFN	U5	U-DFM2030- 6_AP9211	AP92115A-AA-HAC-7		1
TPS65130RGER	IC DC-DC CONVERTER Pos & Neg Rail	U6	TPS65130RGER	TPS65130RGER		1
PTV09A-2020F- B503	Potentiometers 50K LINEAR 20%	VR1	PTV09A-2k20F	PTV09A-2020F- B503		1