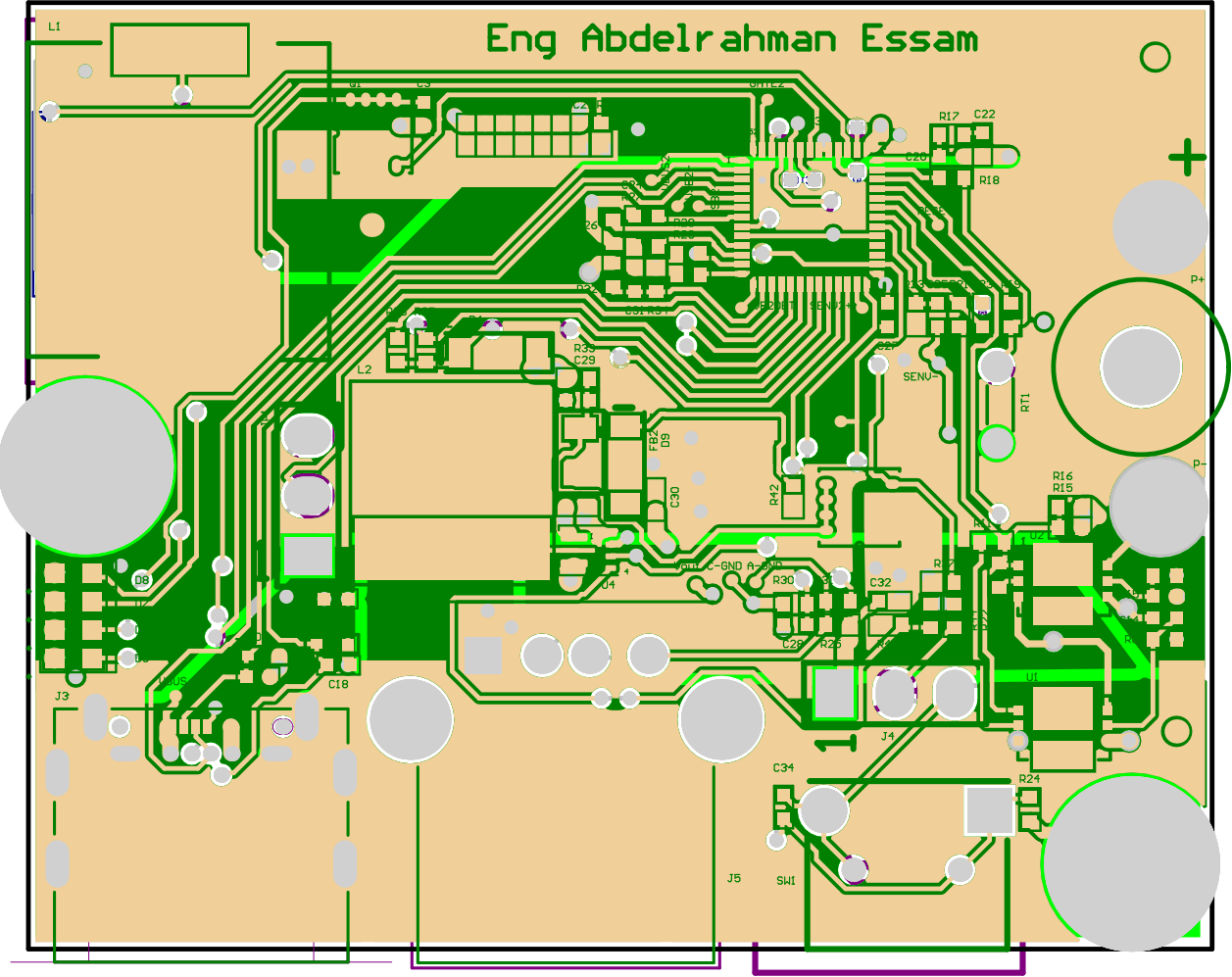


Eng Abdelrahman Essam



Bill of Materials

Bill of Materials for Project [Power_Bank.Prj]Pcb (No PCB Document Selected)

Source Data From:	Power_Bank.PrjPcb
Project:	Power_Bank.PrjPcb
Variant:	None

Creation Date:	04-Sep-20	4:31 PM
Print Date:	04-Sep-20	4:32:08 PM
Production Quantity:	1	
Currency:	USD	

Footprint	Comment	LibRef	Designator	Description	Quantity	Supplier 1	Supplier Part Number 1	Supplier Unit Price 1	Supplier Order Qty 1	Supplier Subtotal 1	Manufacturer 1	Manufacturer Part Number 1	Manufacturer Lifecycle 1
TEST_POINT	TEST_POINT4	TEST_POINT	A_GND		1	Digi-Key	311-100LRCT-ND						
C0402	1PF	CO0805CRNP09BN1R0	C1, C13	CAP CER 1PF 50V COGNP0 0402	2	Digi-Key	490-3199-1-ND						
C0402	100n	C2012X7R1H104K085AA	C2, C14, C15, C23, C30	CAP CER 0.1UF 16V Y5V 0402	5	Digi-Key	478-1138-1-ND						
C0402	22uF	GRM21BR61A226ME44L	C3, C4, C5, C6, C7, C8, C9, C29, C32	CAP CER 22UF 6.3V X5R 0402	9	Digi-Key	1276-7090-1-ND						
C0402	1u	C2012X5R1E105K125AA	C10, C16, C19, C21, C24, C25, C26	CAP CER 1UF 6.3V X5R 0402	7	Digi-Key	478-1249-1-ND						
C0603	47U	CO0805MKX5R5BB476	C11, C12	CAP CER 47UF 4V X5R 0603	2	Digi-Key	490-13246-1-ND						
C0402	390PF	CO0805KRX7R9BB391	C17, C18	CAP CER 390PF 50V X7R 0402	2	Digi-Key	311-1724-1-ND						
C0402	1000PF	CO2011KRX5R8BB102	C20, C31, C34	CAP CER 1000PF 16V X7R 0402	3	Digi-Key	311-1352-1-ND						
C0402	0.022UF	CO0805C22K5RACTU	C22	CAP CER 0.022UF 6.3V X5R 0402	1	Digi-Key	490-3252-1-ND						
C0402	0.01uF	CO0603C103MERACTU	C27, C28	CAP CER 0.01UF 16V X7R 0402	2	Digi-Key	399-17817-1-ND						
C0402	10uF / 16V	C2012X5R1C106M	C33	CAP CER 10UF 4V X5R 0402	1	Digi-Key	490-10693-1-ND						
TEST_POINT	TEST_POINT1	TEST_POINT	C-GND, USB2+		2	Digi-Key	311-100LRCT-ND						
SOD523	SZMM5Z5V1T1G	SZMM5Z5V1T1G	D1, D2	DIODE ZENER Single 5.1V 6% 200mW 2-Pin SOD-523 T/R	2	Digi-Key	SZMM5Z5V1T1GOSCT-ND						
SOT23	BAT54CLT1G	BAT54CLT1G	D3	DIODE SCHOTTKY 30V 0.2A 3-Pin SOT-23 T/R	1	Digi-Key	BAT54CLT1GOSCT-ND						
SOD123	BAT54T1G	BAT54T1G	D4, D9	DIODE SCHOTTKY 30V 600 mA - SOD-123 SMD	2	Digi-Key	BAT54T1GOSCT-ND						
LED_0603	Green	LG L29K-G2J1-24-Z	D6, D6, D7, D8	LED SMARTLED GREEN 570NM 0603	4	Digi-Key	475-2709-1-ND						
TEST_POINT	DVDD	TEST_POINT	DVDD		1	Digi-Key	311-100LRCT-ND						
FB0805	BLM21PG300SN1D	BLM21PG300SN1D	FB1, FB2	FERRITE CHIP BEAD 30 OHM SMD 100MHz 4A 14mOhm DCR 0805 T/R	2	Digi-Key	490-1052-1-ND						
TEST_POINT	TEST_POINT8	TEST_POINT	GATE2		1	Digi-Key	311-100LRCT-ND						
USB_TYPE_C1	USB_Type_C	2129691-1	J3	CONN USB TYPE-C, USB 3.1, USB 3.1 Gen 2, Superspeed+, Receptacle Connector 24 Position Surface Mount, Right Angle, Through Hole	1	Digi-Key	A122008CT-ND						
HDR_1X3 2.5mm	HDR 1X3	IL-G-3P-S3T2-SA	J4	CONN HEADER VERT 3POS 2.5MM	1	Digi-Key	670-2541-ND						
USB_Type_A	USB_Type_A	67643-0910	J5	CONN USB TYPE A 4POS R/A	1	Digi-Key	WMM4993-ND						
Hdr 1x3 2.54mm	HDR 1x3	68000-1034-LF	JP1	CONN HEADER SPOS, 100 STR 15AU	1	Digi-Key	609-3461-ND						
IND_NON STAND2X5.6 12 8P	4.6UH	ETQ-P6F4R8HFA	L1	FIXED IND 4.6UH 9.3A 6.48 MOHM	1	Quest	ETQ-P6F4R8HFA						
IND_NON STAND2.6X8.2 2 8P	1UH7.8A	SRN8040-1R0Y	L2	FIXED IND 1UH 7.8A 10 MOHM SMD	1	Digi-Key	SRN8040-1R0YCT-ND						
ECH08310	MOSFET Transistor P-CH	ECH8310-TL-H	Q1, Q2, Q3, Q6	MOSFET Transistor P-CH 30V 9A 8-Pin ECH T/R	4	Digi-Key	ECH8310-TL-HOSCT-ND						
WDFN8	NTTFS4H05NTAG	NTTFS4H05NTAG	Q4, Q5	MOSFET Transistor N-Channel Single Power 25V, 94A, 3.3mQ	2	Rochester Electronics	NTTFS4H05NTAG						
R0402	10K	RC0805FR-07100KL	R1, R3, R22, R44	RES SMD 100K OHM 1% 1/16W 0402	4	Digi-Key	311-100LRCT-ND						
R0402	510K	CPF0603B510KE1	R2, R37	RES SMD 510K OHM 5% 1/16W 0402	2	Digi-Key	YAG3305CT-ND						
R0402	0R	RC0805JR-070RL	R4, R5	RES SMD 0 OHM JUMPER 1/16W 0402	2	Digi-Key	311-0.0JRCT-ND						
R0402	10m	CSRPF0603FT10L0	R6, R7, R15, R16	RES 0.01 OHM 1% 1/5W 0402	4	Digi-Key	P19181CT-ND						
R0402	680R	CRGC0805F680R	R8, R9	RES SMD 680 OHM 1% 1/16W 0402 SMD	2	Digi-Key	A129625CT-ND						
R0402	100R	RC0402FR-07100RL	R10, R18, R20, R21, R23, R30, R31, R33	RES SMD 100 OHM 1% 1/16W 0402	8								
R0402	1k	RC0805FR-071KL	R11, R12	RES SMD 1K OHM 1% 1/16W 0402	2	Digi-Key	311-1.00LRCT-ND						
R0402	10k	RC0805FR-0710KL	R13, R19, R35, R36	RES SMD 10K OHM 1% 1/16W 0402	4	Digi-Key	311-10.0KLRCT-ND						
R0402	20mR	WSL0603R200FEA18	R14, R25	RES 0.02 OHM 1% 1/16W 0402	2	Digi-Key	YAG6081CT-ND						
R0402	2.2K	ERJ-3GEYJ222V	R17	RES SMD 2.2K OHM 1% 1/16W 0402	1	Digi-Key	311-2.20KLRCT-ND						
R0402	51K	ERA-2AEB513X	R24, R27, R28, R29	RES SMD 51K OHM 0.1% 1/16W 0402	4	Digi-Key	P51KDCCT-ND						
R0402	82K	RC0603JR-0782KL	R26	RES SMD 82K OHM 1% 1/16W 0402	1	Digi-Key	A129650CT-ND						
R0402	910K	CPF0603B910KE1	R32	RES SMD 910K OHM 5% 1/16W 0402	1	Digi-Key	YAG3319CT-ND						
R0402	180K	CRGC0603F180K	R34	RES SMD 180K OHM 1% 1/16W 0402	1	Digi-Key	A129654CT-ND						
R0402	330R	ERJ3EKF3300V	R38, R39, R40, R41	RES SMD 330 OHM 1% 1/16W 0402	4	Digi-Key	311-330LRCT-ND						
R0402	47K	ERJ-PB3D4702V	R42	RES SMD 47K OHM 0.1% 1/16W 0402	1	Digi-Key	P47KDCCT-ND						
R0402	768K	CRCW0402768KFKED	R43	RES SMD 768K OHM 1% 1/8W 0402 [1005 Metric] 50 V	1	Digi-Key	541-768KLCT-ND						
TEST_POINT	RESET	TEST_POINT	RESET		1	Digi-Key	311-100LRCT-ND						
NTC_50	THERMISTOR RL0503-5820-97-MS	RL0503-5820-97-MS	RT1	THERMISTOR NTC 10KOHM BEAD	1	Digi-Key	KC003T-ND						
TEST_POINT	TEST_POINT2	TEST_POINT	SEN2+		1	Digi-Key	311-100LRCT-ND						
TEST_POINT	TEST_POINT7	TEST_POINT	SENV-		1	Digi-Key	311-100LRCT-ND						
DIP4_PushButton2	EVQ-PF206K	EVQ-PF206K	SW1	SWITCH TACTILE SPST-NO 0.02A 15V	1	Arnet	EVO-PF206K						
WDFN6 2.6x4.0, 0.65P	BATT PROTECTION	LC05111C02MTTIG	U1, U2	BATT PROTECTION Li-ION 6WDFN	2	Digi-Key	LC05111C02MTTIGOSCT-ND						
QFN52_6x6_0.4P	Power Bank Controller	LC709511FQD-A00TWG	U3	Power Bank Controller, USB Type-C & Quick Charge™ 3.0, for 1-Cell Li-Ion and Li-Poly Battery	1	Digi-Key	LC709511FQD-A00TWG-ND						
VQFN-HR	boost converter	TPS61022RWUR	U4	boost converter -8-A with 0.5-V ultra-low input voltage 7-VQFN-HR -40 to 125	1	Arrow Electronics	TPS61022RWUR						
TEST_POINT	TEST_POINT9	TEST_POINT	USB2-		1	Digi-Key	311-100LRCT-ND						
TEST_POINT	TEST_POINT3	TEST_POINT	VB2DET		1	Digi-Key	311-100LRCT-ND						
TEST_POINT	TEST_POINT6	TEST_POINT	VBUS2		1	Digi-Key	311-100LRCT-ND						
TEST_POINT	VBUS1	TEST_POINT	VBUS_C		1	Digi-Key	311-100LRCT-ND						
TEST_POINT	2NDBOOST	TEST_POINT	Vout		1	Digi-Key	311-100LRCT-ND						
Approved		Notes			120					\$ -			