## **Bill of Materials**

Project Title: Bill of Materials for Project [Buck-Boost-Converter.PrjPcb] (No PCB Document Selected)
Project File Name: Buck-Boost-Converter.PrjPcb

Assembly Variant: None

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Part Number	Description	Designator			Sunnlier		Supplier Unit Price	Quar
Part Number	2W DC/DC-Converter	Designator	Manufacture	Manufacture Part Number	Supplier	Supplier Part Number	Supplier Unit Price	Quar
	'ECONOLINE' SIP7 6.4kV							
	unreg; V. In: 15; V. Out: +15/- 03; mA. Out: +93/-185	112	Recom	R15P21503D	Digi-Key	945-3070-5-ND	\$8,47	1
	10-A/10-A, 3-k/5-kVRMS	OL .			-6)		70,71	
	single-channel isolated gate							
	driver with 12-V UVLO, bipolar supply 8-SOIC -40 to							
CC5390ECD	125	U3	Texas Instruments	UCC5390ECD	Digi-Key	296-48101-ND	\$2,81	1
	AAVID THERMALLOY 6399BG Heat Sink, TO-							
	220/218, TO-220, 3.3 C/W, 50							
399BG	mm, 41.91 mm, 25.4 mm	H1, H2	Aavid Thermalloy	6399BG	Digi-Key	HS528-ND	\$6,20	
	Barrier Terminal Blocks							
SPCV-02-006	VERTICAL RAISED 2P BOURNS - SMAJ5.0A - TVS	J4	TE Connectivity	8PCV-02-006	Digi-Key	A98460-ND	\$1,84	-
	Diode, SMAJ Series,							
	Unidirectional, 5 V, 9.2 V, DO-							
MAJ5.0A	214AC (SMA), 2 Pins	Banana connector1,	Bourns	SMAJ5.0A	Digi-Key	SMAJ5.0ABCT-ND	\$0,49	-
	Cable Assembly 4MM Safety	Banana connector2,						
T2238-0	Jack, Panel W/.25 Fast on Terminal Black	Banana connector5, Banana connector6		CT2238-0		BKCT2238-0-ND	\$2.00	
.12238-0	Terminal Black	Banana connectors,	Cal Test Electronics	C12238-0	Digi-Key	BKC12238-U-ND	\$2,00	- 4
		Banana connector4,						
		Banana connector7,						
	Cable Assembly 4MM Safety Jack, Panel W/.25 Fast on	Banana connector8, Banana connector9,						
	Terminal Red	Banana connector10	Cal Test Electronics	CT2238-0	Digi-Key	BKCT2238-0-ND	\$2,00	
	Cap Aluminum Lytic 100uF 475V 20% (22 X 35mm) Snap-							
75MXH100MEFC	In 10mm 880mA 2000h 105C	C4, C5	Rubycon	475MXH100MEFCSN22X35	Digi-Key	1189-3424-ND	\$3,65	_ :
	CAP CER 0.1UF 50V X7R 0603 CAP CER 0.22UF 50V X7R	C11, C16, C17, C27	KEMET	C0603C104M5RACTU	Digi-Key	399-7845-1-ND	\$0,10	
JMK212B7224KG-	0805	C21, C24	Taiyo Yuden	UMK212B7224KG-T	Digi-Key	587-1287-1-ND	\$0,14	
CO603KRX7R7BB	CAP CER 1UF 16V X7R 0603	C13	Yageo	CC0603KRX7R7BB105	Digi-Key	311-1446-1-ND	\$0,15	
	CAP CER 1UF 25V X7R 0603 CAP CER 1UF 50V X7R 0603	C12	Taiyo Yuden	TMK107B7105KA-T	Digi-Key	587-2984-1-ND	\$0,11	
NVINTO/AB/105KA	COL CEN TOL DON Y\K 0003	C8, C14	Taiyo Yuden	UMK107AB7105KA-T	Digi-Key	587-3247-1-ND	\$0,28	
JMK316AB7475KI	CAP CER 4.7UF 50V X7R 1206	C10, C26	Taiyo Yuden	CEUMK316AB7475KL-T	Digi-Key	587-2994-1-ND	\$0,33	
TANDAC . D	CAR CER ACT S CO.							
IVIK316AB7106KL	CAP CER 10UF 25V X7R 1206	C9, C15	Taiyo Yuden	TMK316AB7106KL-T	Digi-Key	587-3486-1-ND	\$0,33	_
JMK325C7106MN	CAP CER 10UF 50V X7S 1210	C20, C23	Taiyo Yuden	CEUMK325C7106MM-T	Digi-Key	587-1818-1-ND	\$0,61	
	CAP CER 100PF 50V COG/NP0							
06035A101FAT2A	0603 CAP TANT 10UF 10% 50V	C25	Kyocera AVX	06035A101FAT2A/4K	Digi-Key	478-6202-1-ND	\$0,20	
491D106K050AT	2917	C18, C19, C22	KEMET	T491D106K050AT	Digi-Key	399-8361-1-ND	\$2,02	
	Conn POF Adapter Simplex F/F ST Panel Mount	PWM-INPUT1	Broadcom Avago	HFBR-4505Z	Digi-Key	516-1748-ND	\$1,88	
1FBR-43U3Z	r/r 31 railei Moulit	PWWIINFOIT	BI O BUCO III AWAGO	HFBR*43032	Digi-Key	310-1748-ND	\$1,88	
1217133-1	CONN QC TAB 0.187 SOLDER	J10, J11, J12	TE Connectivity	1217133-1	Digi-Key	A100449CT-ND	\$0,14	
195J10	Fixed Inductors CHOKE	L1	Hammond Manufacturing	195J10	Digi-Key	HM2135-ND	\$68,56	
3101,004	Fuse Holder, 400 V, 16 A, TH	F1	Schurter	3101,004	Digi-Key	486-1159-ND	\$4,02	
SSF 10-R	Fuse, 10 A, 250 VAC, N/A Illuminated Rocker Switches	F2	Bel	5SF10-R	Digi-Key	507-1235-ND	\$0,24	
	16A 125VAC 4.8mm Tab Off-							
RA111C1021-136	On	Rocker Switch 2PST	E-Switch	RA111C1021-136	Digi-Key	RA111C1021-136-ND	\$1,18	
	KEMET R75PI32204030J Film Capacitor, AEC-Q200 R75							
	Series, 0.22 F, 5%, PP							
R75PI32204030J	(Polypropylene), 630 V	C1, C3, C6, C7	KEMET	R75PI32204030J	Digi-Key	399-12761-ND	\$0,95	
	KEMET C4AQLBU5250A12K.							
	CAP FILM 25UF 10% 500VDC							
C4AQLBU5250A12	RADIAL	C2	KEMET	C4AQLBU5250A12K	Digi-Key	399-16989-ND	\$7,00	
			Wurth Electronics	150060GS75000				
	LED GREEN CLEAR 0603 SMD MACHINE SCREW PAN	D3, D4	Wurth Electronics	1500606575000	Digi-Key	732-4971-1-ND	\$0,14	
	PHILLIPS M3 5mm	H7, H8, H9, H10, H13, H14	Building Fasteners	MPMS 003 0005 PH	Digi-Key	H742-ND	\$0.63	
	PMEG6010CEH;							
	PMEG6010CEJ - 1 A very low VF MEGA Schottky barrier							
	rectifiers	D2	Nexperia	PMEG6010CEJ,115	Digi-Key	1727-3882-1-ND	\$0,35	
	Quick Disconnect Terminal M	-						
	15.8mm 7.5mm Tin Over Copper Automotive Bag	J1, J2, J3, J5, J6, J7, J8	TE Connectivity	62409-1	Digi-Key	A24742-ND	\$0,19	
	RES SMD 2.7 OHM 1% 3/4W	۵۱, ۱۲, ۱۵, ۱۵, در <sub>ب</sub> در <sub>ب</sub> در	connectivity		Br mcy		\$0,19	
	1206	R5	Vishay Dale	CRCW12062R70FKEAHP	Digi-Key	541-2.70UCT-ND	\$0,43	
C0603FR-0710KL	RES SMD 10K OHM 1% 1/10W 0603	R2, R3	Mepco Philips	RC0603FR-0710KL	Digi-Key	311-10 OKHRCT-ND		
.cooosrn-u/10KL	RES SMD 20K OHM 1%	(ne, 10)	epco i iiiips		Br mcy	20.0m/RC1*WD	\$0,10	
C0603FR-0720KL	1/10W 0603	R6	Yageo	RC0603FR-0720KL	Digi-Key	311-20.0KHRCT-ND	\$0,10	
RCW0603100RFK	RES SMD 100 OHM 1% 1/10W 0603	R4	Vishay	CRCW0603100RFKEAC	Digi-Key	541-3951-1-ND	\$0,10	
CVVOUOSIUURFR	A, AO W 0003	104			-gr mry	3332 2 110	50,10	
IFBR-2531Z	RX Optical Fiber 5MBd 6-Pin	Rx1	Broadcom Avago	HFBR-2531Z	Digi-Key	516-2067-ND	\$12,98	
3M0045065K	Sic MOSFET 650V Sic Schottky Diode, VRRM =	Q1	WolfSpeed	C3M0045065K	DigiKey	1697-C3M0045065K-ND	\$10,25	
6D06065A	650V. IF= 6A	D1	Cree Wolfspeed	C6D06065A	Digi-Key	1697-C6D06065A-ND	\$1,80	
	Silcon Thermal Pad	SIL1, SIL2	Bergquist	SP900S-0.009-AC-58	Digi-Key	BER183-ND		
	Standoff, Hex,25mm Length, M3, Aluminum	H3, H4, H5, H6, H11, H12	Keystone Electronics	24438	Digi-Key	36-24438-ND	\$0,68	
	TE CONNECTIVITY /	,,			1		40,00	
	BUCHANAN - 282834-2 -							
82834-2	TERMINAL BLOCK, WIRE TO BRD, 2POS, 16AWG	19	BUCHANAN - TE CONNECTIVITY	282834-2	Digi-Key	A98333-ND	\$1.27	
034.7	Test Point, Multipurpose,				, p,		\$1,47	
5011	Black, TH	TP5, TP13, TP22, TP23	Keystone Electronics	5011	Digi-Key	36-5011-ND	\$0,40	
		TP1, TP2, TP3, TP4, TP6, TP7, TP8, TP9, TP10, TP11,						
	Test Point, Multipurpose,	TP15, TP16, TP17, TP19,						
5010	Red, TH	TP20, TP21	Keystone Electronics	5010	Digi-Key	36-5010-ND	\$0,40	
	TVS DIODE 16VWM 26VC DO214AC	D6	Bourns	SMAJ16A	Digi-Key	SMAJ16ABCT-ND	\$0,49	
	Voltage regulator; linear,		soullis	JANALUM	<sub>B</sub> rπcy	SANGTONDC 1-MD	\$U,49	
	fixed; 5V; 0.1A; SOT89; SMD;							
78L05ACUTR	0÷125°C Wirewound Resistors 47	U1	STMicroelectronics	L78L05ACUTR	Digi-Key	497-1183-1-ND	\$0,53	
	Wirewound Resistors 47 Ohms 7W 300PPM	R1	TE Connectivity	1-1623789-5	Digi-Key	A102485-ND	\$0.69	
MW747RI					- C		20,09	
QMW747RJ	OIIIIS 7W SOUPPIVI		•					