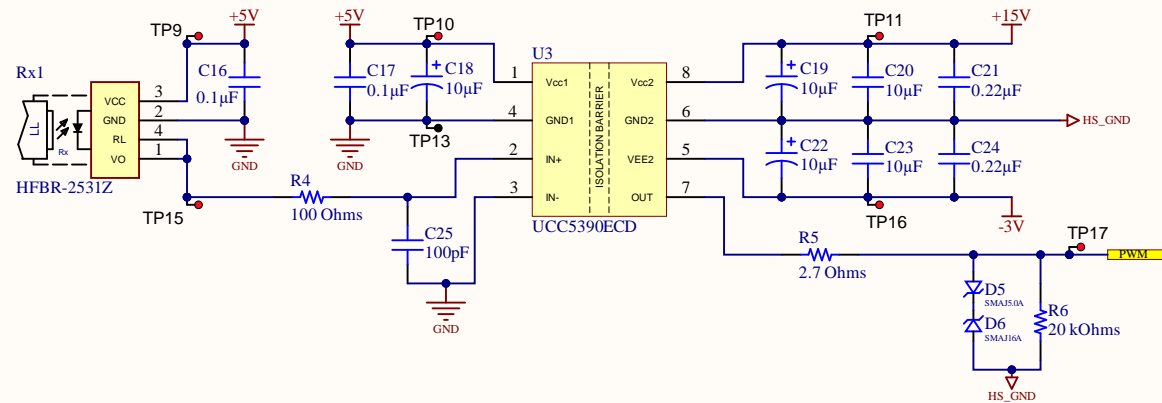


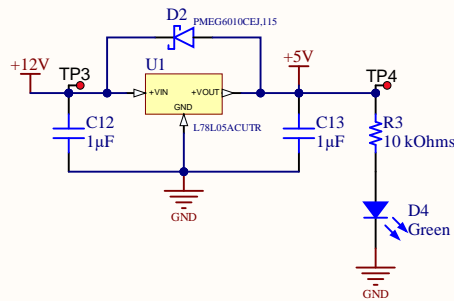
^A El inductor L1 solo se muestra en el esquemático, pero no va montado en la PCB. Sino que se conectará externamente mediante sus cables a la entrada J4.

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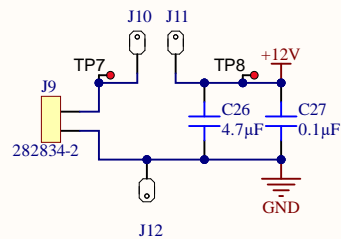
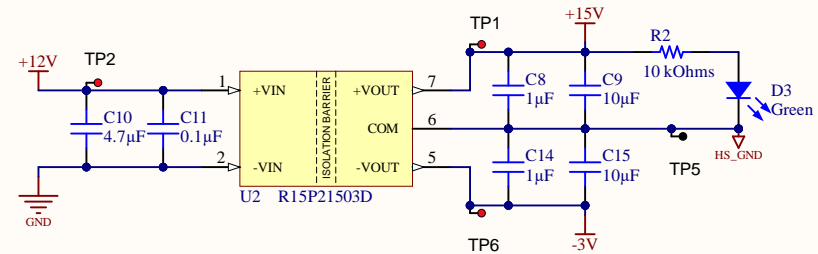
Isolated Gate Driver



Gate Driver 5V Regulator




Gate Driver ISO power supply 15V/-3V

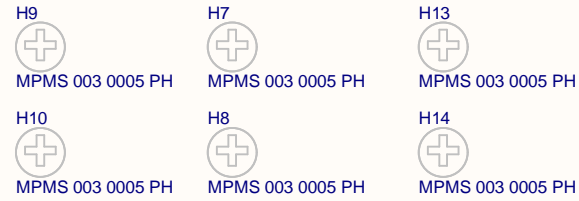
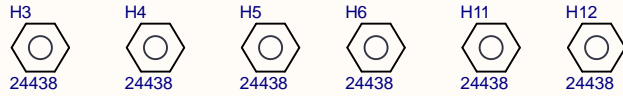


Nota

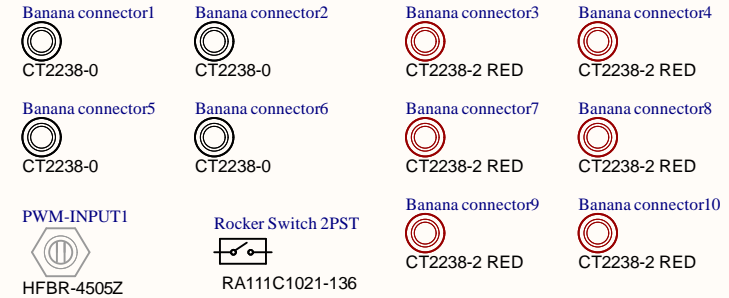
La entrada de 12V va hacia unos conectores faston de .133", esta entrada es para el uso de un rocker switch que permite que el módulo tenga interruptor de alimentación para los circuitos de 12V. Usando la hoja de datos, una entrada del switch va a J10, y la salida a J10, el interruptor también tiene led, por lo que el tercer conector va a J12 (GND)

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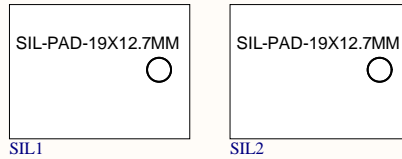
PCB Screw



Front panel input connectors



Thermal Pad




NOTAS

- Los "thermal pads" van entre el MOSFET/Diodo y el disipador.
- El rocker switch se conectar entre los conectores J10 a J11, y J12 va a tierra GND revisar la hoja del fabricante para ver como va la conexión.

10A Fuse, Fast acting



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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



Part Number	Description	Designator	Manufacture	Manufacture Part Number	Supplier	Supplier Part Number	Supplier Unit Price	Quantity
R15P21503D	2W DC/DC Converter ECONOLINE® SIP7 6.4kV unreg. V. In: 15 V, Out: +15/-03. mA, Out: +93/-185	U2	Recom	R15P21503D	Digi-Key	945-3070-5-ND	\$8.47	1
UCC5390ECD	10-A/10-A, 3-k/5-kVRMS single-channel isolated gate driver with 12-V UVLO, bipolar supply 8-50IC -40 to 125	U3	Texas Instruments	UCC5390ECD	Digi-Key	296-48101-ND	\$2.81	1
6399BG	AAVID THERMALLOY 6399BG Heat Sink, TO- 220/218, TO-220, 3.3 C/W, 50 mm, 41.91 mm, 25.4 mm	H1, H2	Aavid Thermalloy	6399BG	Digi-Key	H5528-ND	\$6.20	2
8PCV-02-006	Barrier Terminal Blocks VERTICAL RAISED 2P	J4	TE Connectivity	8PCV-02-006	Digi-Key	A98460-ND	\$1.84	1
SMAJ5.0A	BOURNS - SMAJ5.0A - TVS Diode, SMAJ Series, Unidirectional, 5 V, 9.2 V, DO-214AC (SMA), 2 Pins	D5	Bourns	SMAJ5.0A	Digi-Key	SMAJ5.0ABCT-ND	\$0.49	1
CT2238-0	Cable Assembly 4MM Safety Jack, Panel W/ .25 Fast on Terminal Black		Cal Test Electronics	CT2238-0	Digi-Key	BKCT2238-0-ND	\$2.00	4
CT2238-2	Cable Assembly 4MM Safety Jack, Panel W/ .25 Fast on Terminal Red		Cal Test Electronics	CT2238-0	Digi-Key	BKCT2238-0-ND	\$2.00	6
475MKH100MEF	Cap Aluminum Lytic 100uF 475V 20% (22 X 35mm) Snap In 10mm 880mA 2000h 105C	C4, C5	Rubycon	475MH0100MEFCSN22X35	Digi-Key	1189-3424-ND	\$3.65	2
OD603C104M5RA	CAP CER 0.1UF 50V X7R 6035	C11, C16, C17, C27	KEMET	OD603C104M5RACTU	Digi-Key	399-7845-1-ND	\$0.10	4
UMK312B7224KCG	CAP CER 0.22UF 50V X7R 6035	C21, C24	Taiyo Yuden	UMK312B7224KGT	Digi-Key	587-1287-1-ND	\$0.14	2
CD603C3RX7R7B	CAP CER 1UF 16V X7R 0603	C13	Yageo	CD603C3RX7R7B105	Digi-Key	311-1446-1-ND	\$0.15	1
TMK107B7105KA	CAP CER 1UF 25V X7R 0603	C12	Taiyo Yuden	TMK107B7105KA-T	Digi-Key	587-2984-1-ND	\$0.11	1
UMK107AB7105K	CAP CER 1UF 50V X7R 0603	C8, C14	Taiyo Yuden	UMK107AB7105KA-T	Digi-Key	587-3247-1-ND	\$0.28	2
UMK316AB7475K	CAP CER 4.7UF 50V X7R 1206	C10, C26	Taiyo Yuden	CEUMK316AB7475KL-T	Digi-Key	587-2994-1-ND	\$0.33	2
TMK316AB7106K	CAP CER 10UF 25V X7R 1206	C9, C15	Taiyo Yuden	TMK316AB7106KL-T	Digi-Key	587-3486-1-ND	\$0.33	2
UMK325C7106MM	CAP CER 10UF 50V X7S 1210	C20, C23	Taiyo Yuden	CEUMK325C7106MM-T	Digi-Key	587-1818-1-ND	\$0.61	2
06035A1101FAT2	CAP CER 100PF 50V ODG/NPO 0603	C25	Kyocera AVX	06035A1101FAT2A/4K	Digi-Key	478-6202-1-ND	\$0.20	1
T491D106K050AT	CAP TANT 10UF 10% 50V 2917	C18, C19, C22	KEMET	T491D106K050AT	Digi-Key	399-8361-1-ND	\$2.02	3
HFBR-4505Z	Conn POF Adapter Simplex F/F ST Panel Mount CONN OC TAB 0.187 SOLDER	PWM-INPUT1	Broadcom Avago	HFBR-4505Z	Digi-Key	516-1748-ND	\$1.88	1
1217133-1		J10, J11, J12	TE Connectivity	1217133-1	Digi-Key	A100449CT-ND	\$0.14	3
195J10	Fixed Inductors CHOKE	L1	Hammond Manufacturing	195J10	Digi-Key	HMZ135-ND	\$68.56	1
3101.004	Fuse Holder, 400 V, 16 A, TH	F1	Schurter	3101.004	Digi-Key	486-1159-ND	\$4.02	1
5SF 10-R	Fuse, 10 A, 250 VAC, N/A	F2	Bel	5SF10-R	Digi-Key	507-1235-ND	\$0.24	1
RA111C1021-136	Illuminated Rocker Switches 16A 125VAC 4.8mm Tab Off-On	Rocker Switch 2PST	E-Switch	RA111C1021-136	Digi-Key	RA111C1021-136-ND	\$1.18	1
R75P132204030J	KEMET R75P132204030J Film Capacitor, AEC-Q200 R75 Series, 0.22 F, 5% PP (Polypropylene), 630V	C1, C3, C6, C7	KEMET	R75P132204030J	Digi-Key	399-12761-ND	\$0.95	4
C4AQLBU5250A12K	KEMET C4AQLBU5250A12K CAP FILM 25UF 10% 500VDC RADIAL	C2	KEMET	C4AQLBU5250A12K	Digi-Key	399-16989-ND	\$7.00	1
150060GS75000	LED GREEN CLEAR 0603 SMD	D3, D4	Würth Electronics	150060GS75000	Digi-Key	732-4971-1-ND	\$0.14	2
CMP-0003646-1	MACHINE SCREW PAN PHILLIPS M3.5mm	H7, H8, H9, H10, H13, H14	Building Fasteners	MPMS 003 0005 PH	Digi-Key	H742-ND		6
PMIEG6010CEJ.11	PMIEG6010CEJ - 1 A very low VF MEGA Schottky barrier rectifiers	D2	Nexperia	PMIEG6010CEJ.115	Digi-Key	1727-3882-1-ND	\$0.35	1
62409-1	Quick Disconnect Terminal M 15.8mm 7.5mm Tin Over Copper Antimotive Bag	J1, J2, J3, J5, J6, J7, J8	TE Connectivity	62409-1	Digi-Key	A24742-ND	\$0.19	7
CRCW12062R0F1206	RES SMD 2.7 OHM 1% 3/4W	R5	Vishay Dale	CRCW12062R0FKEAHP	Digi-Key	541-2.70UCT-ND	\$0.43	1
RC0603FR-0710K	RES SMD 10K OHM 1% 1/10W 0603	R2, R3	Mepeco Philips	RC0603FR-0710KL	Digi-Key	311-10.0KHRCT-ND	\$0.10	2
RC0603FR-0720K	RES SMD 20K OHM 1% 1/10W 0603	R6	Yageo	RC0603FR-0720KL	Digi-Key	311-20.0KHRCT-ND	\$0.10	1
CRCW0603100RF	RES SMD 100 OHM 1% 1/10W 0603	R4	Vishay	CRCW0603100RFEAC	Digi-Key	541-3951-1-ND	\$0.10	1
HFBR-2531Z	RX Optical Fiber 5MbD 6- Pin	Rx1	Broadcom Avago	HFBR-2531Z	Digi-Key	516-2067-ND	\$12.98	1
C3MD045065K	Sic MOSFET 650V	Q1			Digi-Key	1697-C3MD045065K-ND		1
C6D06065A	Sic Schottky Diode, VRRM = 650V, IF = 6A	D1	Oree Wolfsspeed	C6D06065A	Digi-Key	1697-C6D06065A-ND	\$1.80	1
SP900S-0.009-AC	Silicon Thermal Pad	SIL1, SIL2	Bergquist	SP900S-0.009-AC-58	Digi-Key	BER183-ND		2
CMP-0003640-1	Standoff, Hex, 25mm Length, M3, Aluminum	H3, H4, H5, H6, H11, H12	Keystone Electronics	24438	Digi-Key	36-24438-ND	\$0.68	6
282834-2	TE CONNECTIVITY / BUCHANAN - 282834 - 2 - TERMINAL BLOCK, WIRE TO BRD, 2POS, 16AWG	J9	BUCHANAN - TE CONNECTIVITY	282834-2	Digi-Key	A98333-ND	\$1.27	1
5011	Test Point, Multipurpose, Black, TH	TP5, TP13, TP22, TP23	Keystone Electronics	5011	Digi-Key	36-5011-ND	\$0.40	4
5010	Test Point, Multipurpose, Red, TH	TP1, TP2, TP3, TP4, TP6, TP7, TP8, TP9, TP10, TP11, TP15, TP16, TP17, TP19, TP20, TP21	Ohmite	5010	Digi-Key	36-5010-ND	\$0.34	16
SMAJ16A	TVS DIODE 16VWM 26VC DO214AC	D6	Bourns	SMAJ16A	Digi-Key	SMAJ16ABCT-ND	\$0.49	1
L78L05ACUTR	Voltage regulator; linear, fixed: 5V, 0.1A, SOT189, SMD, 0+125°C	U1	STMicroelectronics	L78L05ACUTR	Digi-Key	497-1183-1-ND	\$0.53	1
SQMW747RJ	Wirewound Resistors 47 Ohms 7W 300PPM	R1	TE Connectivity	1-1623789-5	Digi-Key	A102485-ND	\$0.69	1
							\$136.29	107
Approved		Notes						