













Line #	Name	Description	Designator	Revision ID	Revision Status	Revision Status	Quantity	Manufacturer 1	Manufacturer Part Number 1	Manufacturer Lifecycle 1	Supplier 1	Supplier Part Number 1	Supplier Unit Price 1	Supplier Subtotal 1
	current transducer		C1, C2		Not managed		2							
	BU1		BU1, BU2		Not managed		2							
	2.2u		C1, C4, C11, C14, C21, C24, C31, C34, C41, C44, C51, C54		Not managed		12							
	4.7uF	Cap120K 4.7uF	C2, C3, C10, C12, C13, C20, C22, C23, C30, C32, C33, C40, C42, C43, C50, C52, C53, C60, C112, C113		Not managed		20							
	100n		C5, C9, C19, C19, C25, C29, C35, C39, C45, C49, C55, C59		Not managed		12							
	4.7uF	Cap120K 4.7uF	C6, C7, C16, C17, C26, C27, C36, C37, C46, C47, C56, C57		Not managed		12							
	10n		C8, C18, C28, C38, C48, C58		Not managed		8							
	22pF		C61, C62		Not managed		2							
	1uF		C63, C64, C65, C66, C67, C68, C69, C71, C73, C75, C80, C104, C105, C110, C117, C118, C119, C120, C121, C122, C123, C124, C125, C127, C129		Not managed		25							
	1uF		C78, C107, C108, C115, C125, C128		Not managed		6							
	470uF		C72		Not managed		1							
	22uF		C74, C77, C78, C79, C81, C82		Not managed		6							
	10uF		C76, C83, C103		Not managed		6							
	150uF		C84, C85, C86, C87, C88, C89		Not managed		8							
	12uF		C90, C94, C100, C101		Not managed		4							
	130uF	CAP ALUM 330uF 20% 16V SMD	C91, C92		Not managed		2							
	10uF		C93, C97, C98, C99, C102		Not managed		4							
	51uF		C95		Not managed		1							
	10uF		C96		Not managed		1							
	1uF		C106, C109, C116		Not managed		3							
	4.7uF		C111		Not managed		1							
	C-0603		C114		Not managed		1							
	10uF	2220	C130, C131, C132, C133, C134, C135, C136, C138, C139, C141, C143, C144, C147, C149, C150, C151, C152, C153		Not managed		18							
	22uF 500V		C137, C140, C148		Not managed		1							
	400V 1000uF		C142, C145, C146		Not managed		3	Nichicon	LK51472ME32	Volume Production	Mouser	647-LK51472ME32		
	4pinCon		CoN1, CoN2, CoN3, CoN4		Not managed		4							
	4o214	DIODE FAST SWITCHING Single 150mA 75V SMT SOD323	D1, D2, D3, D4, D5, D6		Not managed		6							
	ALIVE	Green LED Indication - Discrete 1.7V 9805 (2012 Metric)	D7, D11		Not managed		2							
		Diode - SMD DIODE - SMA Surface Mount Package: 20V 1A Schottky Diode Digkey: 641-1014-6-ND DO-1N4148 Through Hole Small Current Diode SOD-123 20V 1A (.5mV VF) Schottky Diode - Digkey: MBR0120TPM5CT-ND SOD-323 10V 570mA (.38mV VF, .3m) Schottky Diode - Digkey: ZLS541CT-ND SOD-523 30V 30mA Schottky Diode (R87515-40T61) - Digkey: R87515-40T61CT-ND SOT23 R/W - SOT23 Package (R - Solder Paste/Reflow Ovens, W - Hand Soldering) BAT54filim 40V 300mA - Digkey: 497-7162-1-ND	D8		Not managed		1							
	95C4	Diode Schottky 40V 5A Surface Mount DO-214AAA (SMD)	D9, D10		Not managed		2							
	1n4148	Diode Small Signal Switching 100V 0.15A 2-Pin SOD-123 T/R	D12, D13, D14, D15, D16, D17, D18, D19, D20, D21, D22, D23, D24, D25, D26, D27, D28, D29, D30, D31, D32, D33, D34, D35, D36, D37, D38, D39, D40, D41		Not managed		30	Volney	1N4148W E3-18	Volume Production	Allied Electronics	70061597		
	NC7SZ10PW	3-Input NAND gate	IC1		Not managed		1							
	LMC2021AUCDRO1	Integrated Circuit	IC2		Not managed		1							
	IDA2822D	OP AMP	IC3		Not managed		1							
	LMC228BYD5	800mA and 1A Low Dropout (LDO) Positive Regulator 1.8V, 2.5V, 2.85V, 3.3V, 5V, and Adj	IC4		Not managed		1							
	REG1117	DRIVER ARRAY	IC5		Not managed		1							
	ULN2003AD	CAN Transceiver	IC6		Not managed		1							
	SN65HVD230DR	Integrated Circuit	IC7		Not managed		1							
	SN720BC-IP	Integrated Circuit	IC8		Not managed		1							
	OPA344NA_750C4	Integrated Circuit	IC9		Not managed		1							
	IRF1101PBF	Integrated Circuit	IC10, IC11, IC12, IC13, IC14, IC15, IC16, IC17, IC18, IC19, IC20, IC21, IC22, IC23, IC24, IC25, IC26, IC27, IC28, IC29, IC30, IC31, IC32, IC33, IC34, IC35, IC36, IC37, IC38, IC39		Not managed		30							
	Coren Power HDR 35 POS	Coren Power HDR 35 POS 4mm Solder ST Thru-Hole 35 Terminal 1 Port Automotive Loose	J1		Not managed		1							
	47uH	IND 100 10uH 300MA 894 MOHM	L1, L2, L3, L4, L5, L6, L12		Not managed		7							
	10uH	INDUCTOR, European symbol	L2, L11		Not managed		2							
	220uH	Inductor Power Shielded Wirewound 220uH 20% 1000Hz Ferrite 1.1A 0.325Ohm DCR 5049 Automotive T/R	L5, L10		Not managed		2							
	RT2P21503D	2W DC/DC Converter "ECONOLINE" SPT 6.4W 4Vin	P51		Not managed		1							
	Crystal BMH	32MHz Au30ppm Crystal 18pf 40 Ohms HC-49/US	Q1		Not managed		1							
	Sic Mosfet To247	Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12, Q13, Q14, Q15, Q16, Q17, Q18, Q19, Q20, Q21, Q22, Q23, Q24, Q25, Q26, Q27, Q28, Q29, Q30, Q31			Not managed		30							
	10 1w	R-2512 10R 1W	R1, R3, R9, R11, R15, R17, R23, R25		Not managed		8							
	47k	Res0805 47K R	R2, R5, R10, R14		Not managed		4							
	0	Res0805 0R	R4, R6, R7, R8, R12, R13, R18, R20, R21, R22, R26, R28, R32, R34, R35, R36, R40, R42		Not managed		8							
	47k	R15 (2012) 0805 47K Ohms 5% 1/8W S 100PPM	R16, R19, R24, R27, R30, R33, R38, R41		Not managed		8							
	10 1w	0201 10R 1W	R29, R31, R37, R39, R70, R71, R129, R146, R166, R177, R188, R199		Not managed		12							
	510R		R43		Not managed		1							
	10K		R44, R45, R46, R47, R50, R54, R81, R82, R119, R127, R123, R124, R126, R127, R128		Not managed		15							
	3K30		R48, R51, R52, R63, R86, R96, R99, R102, R103, R104, R106, R107, R108, R109		Not managed		14							
	510K		R49, R53, R79, R118, R120, R122		Not managed		6							
	10K		R55		Not managed		1							
	R-0603		R56, R57, R133, R134, R135, R136, R137, R153, R154, R155, R156, R157, R167, R168, R169, R170, R171, R176, R179, R180, R181, R182, R189, R190, R191, R192, R193, R200, R201, R202, R203, R204		Not managed		32							
	1K2		R58, R59, R60, R64, R65, R66		Not managed		6							
	10K		R61, R62, R63, R67, R68, R69, R74, R87, R89, R90, R93, R95, R101		Not managed		13							
	100K		R72		Not managed		1							
	6.8K		R73		Not managed		1							
	RES SMD 1K OHM 1% 1/8W 0805	1 Kohms ±1% 0.125W, 1/8W Chip Resistor 0805 (2012 Metric) Moisture Resistant Thick Film	R75		Not managed		1							
	11K	THICK FILM RESISTOR, 11KOHM, 125mW, 5%	R76		Not managed		1							
	1.3K		R77		Not managed		1							
	5K	10 1w	R78, R80		Not managed		2							
	1K2		R84, R97, R110, R111, R112, R113, R114, R115, R116, R117		Not managed		10							
	4K7		R85, R98, R105		Not managed		3							
	1K2		R88, R100		Not managed		2							
	48K	Res1206	R91, R92		Not managed		2							
	500K	Res1206	R94		Not managed		1							
	10K		R125		Not managed		1							
	100K 1w	10 1w	R130, R131, R132, R142, R144, R145, R147, R148, R149, R150, R151, R152, R156, R159, R160		Not managed		16							
	11K	CRS1206 1% 11R	R138, R139, R140, R141, R142, R161, R162, R163, R164, R165, R172, R173, R174, R175, R176, R183, R184, R185, R186, R187, R194, R195, R196, R197, R198, R205, R206, R207, R208, R209		Not managed		30							
	SOLDERJUMPERTRACE	Solder Jumper/Standard SMD solder jumper. Used to automate production. Two variants: Normally Open and Normally Closed are the same, but have different paste layers. NC will have a large amount of paste and should jumper during reflow.	S11		Not managed		1							
	SOLDERJUMPERTRACE	Solder Jumper/Standard SMD solder jumper. Used to automate production. Two variants: Normally Open and Normally Closed are the same, but have different paste layers. NC will have a large amount of paste and should jumper during reflow.	S12		Not managed		1							
	SOLDERJUMPERNO	Solder Jumper/Standard SMD solder jumper. Used to automate production. Two variants: Normally Open and Normally Closed are the same, but have different paste layers. NC will have a large amount of paste and should jumper during reflow.	S13, S14		Not managed		2							
	AP0718GH-HF		T1		Not managed		1							
	PNH-D-1X2	PIN HEADER	TMPS1		Not managed		1							
	IXDN614	14A RSOC EXP MTL NON INVERTING	U1, U3, U5, U7, U9, U11		Not managed		6	Keys Clare	IXDN614S1TR	Volume Production	Mouser	849-IXDN614S1TR		
	1LP152	OPTOSD 3.75V GATE DRIVER 450-S	U2, U4, U6, U8, U10, U12		Not managed		6	Toshiba	1LP152TPLE	Volume Production	Mouser	757-1LP152TPLE		
	STM32F1038BT6	ARMv7-M Cortex-M4F 32-Bit STM32F1038BT6 Microcontroller IC 32-Bit 72MHz 128KB (128K x 8) FLASH	U13		Not managed		1							
	LMC2565-12/NOPB	SIMPLE SWITCHER® 40V, 3A Low Component Count Step-Down Regulator 5-DOPAK/TO-263-40 to 125	U14		Not managed		1							
	SR2803	330KHZ, 3A SYNCHRONOUS BUCK CONTROLLER	U15		Not managed		1							
	ESP8266-12E/ESP-12E	The W8266 module has a 32-bit MCU micro and clock speeds supporting 80 MHz or 160 MHz. Supports the RTOS and integrated Wi-Fi MAC/BIB/RP/PA/LNA, and has an on-board antenna.	U16		Not managed		1							
	R24P21503D		X1, X2, X3, X4, X5, X6		Not managed		6	Recom	R24P21503D		Digi-Key	945-3071-5-ND		