Variant: 001
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TID #: TIDA-00638

TIDA-00638 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	!PCB1	1		TIDA-00638	Any	Printed Circuit Board	
2	C1	1	10uF	GRM219R61E106KA12D	MuRata	CAP, CERM, 10 µF, 25 V, +/- 10%, X5R, 0805	0805
3	C2	1	22uF	GRM31CR61A226KE19L	MuRata	CAP, CERM, 22 µF, 10 V, +/- 10%, X5R, 1206	1206
4	C3, C5	2	0.1uF	C1608X7R1H104K080AA	TDK	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603	0603
5	C4	1	1uF	C1608X7R1V105K080AC	TDK	CAP, CERM, 1 µF, 35 V, +/- 10%, X7R, 0603	0603
6	C6	1	3300pF	GRM188R71E332KA01D	MuRata	CAP, CERM, 3300 pF, 25 V, +/- 10%, X7R, 0603	0603
7	C8	1	22pF	06035A220JAT2A	AVX	CAP, CERM, 22 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
8	C9	1	1uF	CL10B105KQ8NNNC	Samsung Electro-Mechanics	CAP, CERM, 1 µF, 6.3 V, +/- 10%, X7R, 0603	0603
9	C10	1	2.2uF	CL05A225KQ5NNNC	Samsung	CAP, CERM, 2.2 µF, 6.3 V, +/- 10%, X5R, 0402	0402
10	C11, C12	2	10uF	GRM21BR6YA106KE43L	MuRata	CAP, CERM, 10 µF, 35 V, +/- 10%, X5R, 0805	0805
11	C13	1	0.1uF	GRM188R71H104KA93D	MuRata	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603	0603
12	C14	1	10uF	C1608X5R1A106M080AC	TDK	CAP, CERM, 10 µF, 10 V, +/- 20%, X5R, 0603	0603
13	D1	1	40V	1N5819HW-7-F	Diodes Inc.	Diode, Schottky, 40 V, 1 A, SOD-123	SOD-123
14	D2, D3	2	40V	MBR0540T1G	ON Semiconductor	Diode, Schottky, 40 V, 0.5 A, SOD-123	SOD-123
15	J1	1		TSW-104-08-G-S-RA	Samtec	Header, 100mil, 4x1, Gold, R/A, TH	4x1 R/A Header
16	J2	1		TSW-102-08-G-S-RA	Samtec	Header, 100mil, 2x1, Gold, R/A, TH	2x1 R/A Header
17	L1	1	2.2uH	SDR0403-2R2ML	Bourns	Inductor, Drum Core, Ferrite, 2.2 µH, 2.6 A, 0.047 ohm, SMD	4.5x3.2x4mm
18	Q1	1		ISO5451DWR	Texas Instruments	High-CMTI 2.5-A / 5-A Isolated IGBT, MOSFET Gate Driver with Active Safety Features, DW0016B (SOIC-16)	DW0016B
19	R1	1	10.0	RC0603FR-0710RL	Yageo America	RES, 10.0, 1%, 0.1 W, 0603	0603
20	R2	1	100k	CRCW0603100KJNEA	Vishay-Dale	RES, 100 k, 5%, 0.1 W, 0603	0603
21	R3, R5	2	1.0k	CRCW06031K00JNEA	Vishay-Dale	RES, 1.0 k, 5%, 0.1 W, 0603	0603
22	R4	1	4.70	RC1206FR-074R7L	Yageo America	RES, 4.70, 1%, 0.25 W, 1206	1206
23	R6	1	4.7	RC0805JR-074R7L	Yageo America	RES, 4.7, 5%, 0.125 W, 0805	0805
24	R7	1	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
25	T1	1	50uH	750342879	Wurth Elektronik	Transformer, 50 uH, SMT	9.14x8mm
26	U1	1		TPS62143RGTT	Texas Instruments	Buck Step Down Regulator with 3 to 17 V Input and 5 V Output, -40 to 85 degC, 16-Pin QFN (RGT), Green (RoHS & no Sb/Br)	RGT0016C
27	U2	1		TPS70633DBVR	Texas Instruments	150-mA, 6.5-V, 1-uA IQ Voltage Regulators with Enable, DBV0005A (SOT-5)	DBV0005A
28	U3	1		SN6505BDBVR	Texas Instruments	Low-Noise 1 A, 420 kHz Transformer Driver, DBV0006A (SOT-23-6)	DBV0006A
29	C7	0	0.1uF	GRM188R71H104KA93D	MuRata	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603	0603
30	R8	0	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603

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