

Variant: 001
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 TID #: TIDA-020027



TIDA-020027 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPCB1	1		TIDA-020027	Any	Printed Circuit Board	
2	C1, C2, C8	3	1uF	UMK107AB7105KA-T	Taiyo Yuden	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, 0603	0603
3	C3, C6	2	0.1uF	C0603C104J5RACTU	Kemet	CAP, CERM, 0.1 uF, 50 V, +/- 5%, X7R, 0603	0603
4	C4	1	0.01uF	GRM188R70J103KA01D	MuRata	CAP, CERM, 0.01 uF, 6.3 V, +/- 10%, X7R, 0603	0603
5	C7	1	1uF	GRM185R60J105KE26D	MuRata	CAP, CERM, 1 uF, 6.3 V, +/- 10%, X5R, 0603	0603
6	C9	1	0.047uF	C1005X5R1H473K050BB	TDK	CAP, CERM, 0.047 uF, 50 V, +/- 10%, X5R, 0402	0402
7	C14	1	0.1uF	GRM188R71H104KA93D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
8	C15	1	0.22uF	GRM188R71H224KAC4D	MuRata	CAP, CERM, 0.22 uF, 50 V, +/- 10%, X7R, 0603	0603
9	C16	1	0.022uF	C0603X223K5RACTU	Kemet	CAP, CERM, 0.022 uF, 50 V, +/- 10%, X7R, 0603	0603
10	C17	1	1uF	GRM21BR71H105KA12L	MuRata	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, 0805	0805
11	C18, C25	2	0.1uF	C1608X7R1H104K080AA	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
12	C19	1	47uF	EEE-FK1J470P	Panasonic	CAP, AL, 47 uF, 63 V, +/- 20%, 0.65 ohm, AEC-Q200 Grade 2, SMD	SMT Radial F
13	C20	1	0.01uF	C1608X7R1H103K080AA	TDK	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, 0603	0603
14	C21	1	100pF	0603ZC101KAT2A	AVX	CAP, CERM, 100 pF, 10 V, +/- 10%, X7R, 0603	0603
15	C22	1	10pF	0603ZC100KAT2A	AVX	CAP, CERM, 10 pF, 10 V, +/- 10%, X7R, 0603	0603
16	C23	1	10uF	GRM188Z71A106MA73D	MuRata	CAP, CERM, 10 uF, 10 V, +/- 20%, X7R, 0603	0603
17	C24	1	0.1uF	C0603C104K4RACTU	Kemet	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, 0603	0603
18	C26	1	10uF	CGA5L3X5R1H106M160AB	TDK	CAP, CERM, 10 uF, 50 V, +/- 20%, X5R, AEC-Q200 Grade 3, 1206	1206
19	C27	1	4.7uF	GRM188Z71C475KE21D	MuRata	CAP, CERM, 4.7 uF, 16 V, +/- 10%, X7R, 0603	0603
20	C28	1	0.1uF	GCM188R71C104KA37J	MuRata	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
21	C29	1	220pF	C0603C221K5RACTU	Kemet	CAP, CERM, 220 pF, 50 V, +/- 10%, X7R, 0603	0603
22	C30	1	4700pF	GCM188R71H472KA37D	MuRata	CAP, CERM, 4700 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
23	C31	1	100pF	06033C101KAT2A	AVX	CAP, CERM, 100 pF, 25 V, +/- 10%, X7R, 0603	0603
24	C32	1	0.01uF	CGA2B3X8R1H103K050BB	TDK	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X8R, AEC-Q200 Grade 0, 0402	0402
25	C33	1	0.022uF	GRM155R71H223KA12D	MuRata	CAP, CERM, 0.022 uF, 50 V, +/- 10%, X7R, 0402	0402
26	D1	1	75V	1N4148WS-7-F	Diodes Inc.	Diode, Switching, 75 V, 0.15 A, AEC-Q101, SOD-323	SOD-323
27	D2	1	36V	SMAJ36CA	Littelfuse	Diode, TVS, Bi, 36 V, 58.1 Vc, 400 W, 6.9 A, SMA (non-polarized)	SMA (non-polarized)
28	J1	1		TSW-108-08-G-D-RA	Samtec	Header, 100mil, 8x2, Gold, R/A, TH	8x2 R/A Header
29	J2, J3	2		SSQ-110-23-F-D	Samtec	Receptacle, 2.54mm, 10x2, Gold, TH	Receptacle, 2.54mm, 10x2, TH
30	J4	1		1770898	Phoenix Contact	Terminal Block, 3 Pos, 2.5mm, R/A, TH	Terminal Block, 3 Pos, 2.5mm, R/A, TH
31	L1	1	2.2uH	SRP6540-2R2M	Bourns	Inductor, Shielded, Ferrite, 2.2 uH, 9 A, 0.0155 ohm, SMD	Inductor, 7.2x4x6.5mm
32	Q1	1	65 V	BC846BLT1G	ON Semiconductor	Transistor, NPN, 65 V, 0.1 A, SOT-23	SOT-23
33	Q2	1	30V	SI7634BDP-T1-E3	Vishay-Siliconix	MOSFET, N-CH, 30 V, 40 A, PowerPAK SO-8	PowerPAK SO-8
34	Q3	1	150 V	FMMT495TA	Diodes Inc.	Transistor, NPN, 150 V, 1 A, AEC-Q101, SOT-23	SOT-23
35	Q4	1	100 V	NJVMJD122T4G	ON Semiconductor	Transistor, NPN, 100 V, 8 A, AEC-Q101, DPAK	DPAK
36	R1, R3, R5	3	200	CRCW0603200RJNEA	Vishay-Dale	RES, 200, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
37	R2, R4, R19	3	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
38	R6, R7	2	680	RC0603FR-07680RL	Yageo	RES, 680, 1%, 0.1 W, 0603	0603
39	R8, R9	2	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10 k, 5%, 0.063 W, 0402	0402
40	R10, R11, R12, R13, R15	5	15.0k	CRCW060315K0FKEA	Vishay-Dale	RES, 15.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
41	R14	1	20.0k	CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
42	R16	1	10.1k	RT0603DRE0710K1L	Yageo America	RES, 10.1 k, 0.5%, 0.1 W, 0603	0603
43	R17	1	4.70k	RC0603FR-074K7L	Yageo America	RES, 4.70 k, 1%, 0.1 W, 0603	0603
44	R18	1	499	CRCW0603499RFKEA	Vishay-Dale	RES, 499, 1%, 0.1 W, 0603	0603
45	R20	1	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
46	R21	1	78.7k	CRCW060378K7FKEA	Vishay-Dale	RES, 78.7 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
47	R22	1	14.7k	CRCW060314K7FKEA	Vishay-Dale	RES, 14.7 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
48	R23	1	1.00k	ERJ-3EKF1001V	Panasonic	RES, 1.00 k, 1%, 0.1 W, 0603	0603
49	U1	1		DRV8906QPWPQRQ1	Texas Instruments	DRV8906QPWPQRQ1, PWP0024N (HTSSOP-24)	PWP0024N
50	U2	1		DRV8873SPWPQRQ1	Texas Instruments	Automotive H-Bridge Motor Driver, PWP0024J (TSSOP-24)	PWP0024J
51	U3	1		TPS1HB16BQPWPQRQ1	Texas Instruments	TPS1HB16BQPWPQRQ1, PWP0016M (TSSOP-16)	PWP0016M
52	U4	1		TLIN10283DDARQ1	Texas Instruments	Automotive Local Interconnect Network Transceiver, DDA0008G (SOIC-8)	DDA0008G
53	U5	1		LM2904QDRQ1	Texas Instruments	Automotive Catalog Dual Operational Amplifier, D0008A (SOIC-8)	D0008A
54	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A

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