

Variant: 001
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 TID #: TIDA-020026



TIDA-020026 REV A Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	PCB	1		TIDA-020026	Any	Printed Circuit Board	
2	C1, C2	2	47uF	EEEF1H470AP	Panasonic	CAP, AL, 47 uF, 50 V, +/- 20%, 0.68 ohm, AEC-Q200 Grade 2, SMD	D6.3xL5.8mm
3	C3, C4, C5, C6	4	0.01uF	GCM188R71H103KA37D	MuRata	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
4	C7, C8	2	0.47uF	GCM188R71C474KA55D	MuRata	CAP, CERM, 0.47 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
5	C9, C10	2	0.22uF	GRM188R71E224KA88D	MuRata	CAP, CERM, 0.22 uF, 25 V, +/- 10%, X7R, 0603	0603
6	C11, C12	2	0.022uF	CGA3E2X7R2A223K080AA	TDK	CAP, CERM, 0.022 uF, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
7	C13, C14, C15	3	0.1uF	GCM188R71C104KA37J	MuRata	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
8	C16, C28, C29, C30, C31, C32, C33, C34	8	1000pF	C0603C102J5RACAUTO	Kemet	CAP, CERM, 1000 pF, 50 V, +/- 5%, X7R, AEC-Q200 Grade 1, 0603	0603
9	C17	1	2.2uF	UMK212BB7225KG-T	Taiyo Yuden	CAP, CERM, 2.2 uF, 50 V, +/- 10%, X7R, 0805	0805
10	C18	1	0.1uF	C0603C104K5RACAUTO	Kemet	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
11	C19, C24	2	0.047uF	CGA3E3X7S2A473K080AB	TDK	CAP, CERM, 0.047 uF, 100 V, +/- 10%, X7S, AEC-Q200 Grade 1, 0603	0603
12	C20, C21	2	10uF	GRT31CR61H106KE01L	MuRata	CAP, CERM, 10 uF, 50 V, +/- 10%, X5R, AEC-Q200 Grade 1, 1206	1206
13	C25	1	10uF	GRT188C81A106ME13D	MuRata	CAP, CERM, 10 uF, 10 V, +/- 20%, X6S, AEC-Q200 Grade 2, 0603	0603
14	C26	1	220pF	CGA3E2C0G1H221J080AA	TDK	CAP, CERM, 220 pF, 20 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0603	0603
15	C27	1	100pF	CGA3E2NP01H101J080AA	TDK	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 0, 0603	0603
16	D1	1	26V	TPSMD26A	Littelfuse	Diode, TVS, Uni, 26 V, 42.1 Vc, AEC-Q101, SMC	SMC
17	D2	1	75V	1N4148WS-7-F	Diodes Inc.	Diode, Switching, 75 V, 0.15 A, AEC-Q101, SOD-323	SOD-323
18	D3	1	15V	PESD1LIN,115	NXP Semiconductor	Diode, TVS, Bi, 15 V, SOD-323	SOD-323
19	J1, J2	2		1725672	Phoenix Contact	Terminal Block, 4x1, 2.54 mm, Green, TH	Terminal Block, 4x1, 2.54 mm, TH
20	J3, J4	2		PEC10DAAN	Sullins Connector Solutions	Header, 2.54mm, 10x2, Tin, TH	Header, 10x2, 2.54mm, TH
21	J5, J7	2		1727010	Phoenix Contact	Conn Term Block, 2POS, 3.81mm, TH	2POS Terminal Block
22	L1	1	3.3uH	DFE252012P-3R3M=P2	MuRata	Inductor, Shielded, Metal Composite, 3.3 uH, 1.7 A, 0.14 ohm, SMD	1008
23	L2	1		ACM70V-701-2PL-TL00	TDK	Coupled inductor, 0.015 ohm, AEC-Q200 Grade 1, SMD	6x3.5x7 mm
24	Q1, Q2	2	45 V	MMBT6429LT1G	ON Semiconductor	Transistor, NPN, 45 V, 0.2 A, AEC-Q101, SOT-23	SOT-23
25	Q3	1	60 V	MMBTA05LT1G	ON Semiconductor	Transistor, NPN, 60 V, 0.5 A, AEC-Q101, SOT-23	SOT-23
26	Q4	1	60V	SQ7414AEN-T1-GE3	Vishay-Siliconix	MOSFET, N-CH, 60 V, 16 A, AEC-Q101, PowerPAK 1212	PowerPAK 1212
27	R1, R2, R3, R4, R5, R6, R8, R10, R14, R15	10	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
28	R7	1	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
29	R9, R12, R13	3	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
30	U1, U2	2		DRV8889QWRGERQ1	Texas Instruments	Automotive Stepper Driver With Integrated Current Sense, 1/32 Microstepping, and Stall Detection, RGE0024J (VQFN-24)	RGE0024J
31	U3	1		TLIN1028DRB	Texas Instruments	Automotive Local Interconnect Network Transceiver, DRB0008J (VSON-8)	DRB0008J
32	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
33	R11	0	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
34	R16, R17	0	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603

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