

Bill of Materials

TI DESIGNS TIDA-00447

24V Dual Brushless DC Motor Drive Reference Design for Dishwasher Pumps

Qty	Reference	Part Description	Manufacturer	Manufacturer Part Number	Note
1	!PCB	Printed Circuit Board	Any	Printed Circuit Board	Fitted
3	C1, C11, C12	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X8R, 0603	TDK	C1608X8R1E104K	Fitted
1	C2	CAP, CERM, 10 uF, 10 V, +/- 20%, X5R, 0603	TDK	C1608X5R1A106M	Fitted
1	C3	CAP, CERM, 10 uF, 50 V, +/- 10%, X5R, 1210	MuRata	GRM32ER61H106KA12L	Fitted
2	C4, C5	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	TDK	C1608X7R1H104K	Fitted
2	C6, C7	CAP, CERM, 1 uF, 6.3 V, +/- 10%, X5R, 0603	TDK	C1608X5R0J105K	Fitted
1	C8	CAP, AL, 100uF, 6.3V, +/-20%, 0.027 ohm, SMD	Nippon Chemi-Con	APXA6R3ARA101MF60G	Fitted
1	C13	CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, 0603	TDK	C1608X7R1H222K	Fitted
4	C14, C22, C25, C26	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	AVX	06035C104KAT2A	Fitted
1	C15	CAP, CERM, 4.7 uF, 50 V, +/- 10%, X5R, 0805	TDK	C2012X5R1H475K125AB	Fitted
3	C16, C17, C18	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, 0805	TDK	C2012X7R1H105K125AB	Fitted
1	C19	CAP, CERM, 0.022 uF, 50 V, +/- 10%, X8R, 0603	TDK	C1608X8R1H223K	Fitted
1	C20	CAP, CERM, 2.2 uF, 35 V, +/- 10%, X7R, 0805	TDK	C2012X7R1V225K085AC	Fitted
2	C21, C28	CAP, AL, 270 uF, 35 V, +/- 20%, 20 ohm, SMD	Panasonic	EEHZA1V271P	Fitted
1	C24	CAP, CERM, 0.1 uF, 10 V, +/- 10%, X7R, 0603	Kemet	C0603X104K8RACTU	Fitted
1	C27	CAP, CERM, 1000 pF, 50 V, +/- 5%, COG/NPO, 0603	TDK	C1608COG1H102J	Fitted
1	C29	CAP, CERM, 0.01 uF, 50 V, +/- 5%, X7R, 0805	AVX	08055C103JAT2A	Fitted
2	C30, C31	CAP, CERM, 0.01 uF, 25 V, +/- 5%, COG/NPO, 0603	TDK	C1608COG1E103J	Fitted
2	C32, C33	CAP, CERM, 1 uF, 25 V, +/- 10%, X5R, 0603	TDK	C1608X5R1E105K080AC	Fitted
1	C37	CAP, CERM, 0.47 uF, 10 V, +/- 10%, X5R, 0603	TDK	C1608X5R1A474K	Fitted
3	D1, D9, D10	Diode, LED, [Color], x-V, 20-mA, y-mcd	Lite On	D_LED_603	Fitted
1	D2	Diode, Zener, 3.6 V, 500 mW, SOD-123	Diodes Inc.	MMSZ5227B-7-F	Fitted
2	D3, D4	Diode, Zener, 5.6 V, 200 mW, SOD-323	Diodes Inc.	MMSZ5232BS-7-F	Fitted
1	D5	Diode, TVS, Bi, 30 V, 400 W, SMA	Littelfuse	SMAJ30CA	Fitted
1	D7	Diode, Zener, 16 V, 300 mW, SOD-523	Diodes Inc.	BZT52C16T-7	Fitted
1	D8	Diode, TVS, Uni, 3.3 V, 350 W, SOD-323	Protek Devices	GBLC03-LF-T7	Fitted
1	J1	Header, 2.54 mm, 3x1, Gold, TH	Würth Elektronik	61300311121	Fitted
2	J2, J8	TERMINAL BLOCK 5.08MM VERT 3POS, TH	On-Shore Technology	ED120/3DS	Fitted
2	J4, J5	Header, 2.54 mm, 4x1, Gold, TH	Würth Elektronik	61300411121	Fitted
1	J9	TERMINAL BLOCK 5.08MM VERT 2POS, TH	Molex	ED1817-ND	Fitted
1	J10	Header, Male 2-pin, 100mil spacing,	Sullins	JUMPER_2X100MIL	Fitted
1	L1	Inductor, Wirewound, Ferrite, 47 ??H, 0.11 A, 1.235 ohm, SMD	Taiyo Yuden	CB2518T470K	Fitted
3	L2, L3, L4	Ferrite Bead, 100 ohm @ 100 MHz, 4 A, 0805	TDK	MPZ2012S300A	Fitted
3	L5, L6, L7	Inductor, Shielded, Composite, 470 nH, 3.5 A, 0.0076 ohm, SMD	Coilcraft	XFL4015-471MEC	Fitted
3	Q1, Q2, Q3	MOSFET, N-CH, 60 V, 6.3 A, SO-8	Texas Instruments	CSD88539ND	Fitted
1	Q4	MOSFET, N-CH, 30 V, 56 A, SON 3.3x3.3mm	Texas Instruments	CSD17304Q3	Fitted

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