

Bill of Materials

TI DESIGNS
TIDM-THREEPHASE-BLDC-HC-SPI

Item	P/N	ION Footprint	Qty	Unit	Type	Rev	Stat	Title	Detail	Mfr P/N	Reference(m)	Reference(t)	Mfr Name
1	515501-0001R		1	each	DWG	D	U	PWB,DRV830X-HC-C2 MOTOR BOARD	CSTM				
2	515502-0001		1	each	DOC	D	U	LOGIC,DRV830X-HC-C2 MOTOR BOARD	SCH				
4	103742-0001R	pw16-14x70	1	each	PS		U	IC,TSSOP16,TRANSLATOR,6-BIT BIDIRECTIONAL,VOLTAGE-LEVEL	MATL	TXB0106PWR	U7		Texas Instruments
5	103808-0001R		1	each	PS		U	IC,TSSOP56,THREE PHASE PRE-DRIVER	MATL	DRV8301DCA	U1		Texas Instruments
7	103805-0001R	dbv-20x60-5	2	each	PS		U	IC,SOT23-5,OP AMP	MATL	OPA365AIDBVR	U13, U9		Texas Instruments
8	103806-0001R	dw16-25x75-375	1	each	PS		U	IC,SOIC,HIGH SPEED QUAD DIGITAL ISOLATORS,1Mbps	MATL	ISO7241ADW	U5		Texas Instruments
9	103518-0001R	dub8-35x90	1	each	PS		U	IC,SMT8,ISOLATED CAN TRANSCEIVER	MATL	ISO1050DUBR	U4		Texas Instruments
10	103743-0001R	dbv6-27x39-6	1	each	PS		U	IC,DBV6,DUAL SCHMITT-TRIGGER BUFFER	MATL	SN74LVC2G17DBVR	U6		Texas Instruments
11	103807-0033R	dbv-20x60-5	2	each	PS		U	IC,DBV5,LDO REGULATOR,3.3V,400mA	MATL	TPS73633MDBVR EP	U3, U8		Texas Instruments
12	103739-0005R	edj4-6040	1	each	PS		U	POWER MODULE,5V,1W,ADJU STABLE	MATL	DCH010505SN7	U2		Texas Instruments
15	103825-0001R		2	each	PS		U	TRANSISTOR,SOT23,MOSFET,150V,530mA	MATL	SI2325DS-T1-E3	Q1, Q2		Vishay Intertechnology
16	103824-0001R	SOT23-28X44-GSD	1	each	PS		U	TRANSISTOR,SOT23,MOSFET,N CHANNEL	MATL	2N7002E,215	Q3		NXP Semiconductors
17	103810-0001R		6	each	PS		U	TRANSISTOR,TO263,MOSFET,60V,110A	MATL	SUM110N06-3M9H-E3	Q4, Q5, Q6, Q7, Q8, Q9		Vishay Intertechnology

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18	103952-0001R	dbv5-27x39	3	each	PS		U	IC,SO5,OP AMP,1.8V	MATL	TLV2781IDBVR	U10, U11, U12		Texas Instruments
20	103820-0001R		1	each	PS		U	DIODE,SMT,SCHOTTK Y,2A,100V	MATL	CDBB2100-G	D1		Comchip Technology
25	103827-0002R	led2-47sq	5	each	PS		U	LED,SMT 0805,GREEN	MATL	LTST-C170KGKT	LED1, LED10, LED11, LED12, LED3		LITEON
26	103827-0001R	led2-47sq	1	each	PS		U	LED,SMT 0805,SUPER RED	MATL	LTST-C170KRKT	LED6		LITEON
27	103330-0003R		1	each	PS		U	LED,SMT 0805,YELLOW	MATL	LTST-C171YKT	LED5		LITEON
30	103135-0331R	dr74-98x126	1	each	PS		U	INDUCTOR,SMT,33uH	MATL	DR74-330-R	L1		Coiltronics Incorporated
40	103818-0222R		1	each	PS		U	CAP,ELEC,SMT,220uF,10V	MATL	EEE-1AA221XP	C57		Panasonic
45	103819-0332R		2	each	PS		U	CAP,ELEC,RADIAL,330uF,100V,20%	MATL	UVZ2A331MHD	C93, C94		Nichicon Corporation
46	103817-0103R		1	each	PS		U	CAP,ELEC,RADIAL,1000uF,100V,20%	MATL	ECA-2AHG102	C50		Panasonic
50	103815-0471R	c1210-70x102	1	each	PS		U	CAP,CER,SMT 1210,47uF,16V,X5R,+/-20%	MATL	EMK325BJ476MM-T	C11		Taiyo Yuden
51	103814-0220R	c1210-70x102	5	each	PS		U	CAP,CER,SMT 1210,2.2uF,100V,X7R,+/-10%	MATL	C3225X7R2A225K	C6, C7, C81, C82, C83		TDK Corporation
55	101415-0220R	c805-35x60	1	each	PS		U	CAP,CER,SMT 0805,2.2uF,25V,X7R,10%	MATL	08053C225KAT2A	C14		AVX Corporation
56	103813-1100R	c805-35x60	3	each	PS		U	CAP,CER,SMT 0805,.1uF,100V,+10/-10%,X7R	MATL	C0805C104K1RACTU	C5, C51, C8		Kemet Electronics Corporation
58	100993-1682R	c603-35x45	1	each	PS		U	CAP,CER,SMT 0603,6800pF,50V,+/-10%,X7R	MATL	ECJ-1VB1H682K	C1		Panasonic
59	101002-1394R	c603-35x45	1	each	PS		U	CAP,CER,SMT 0603,39pF,50V,+/-5%,NPO	MATL	ECJ-1VC1H390J	C2		Panasonic
60	102965-0220R	c603-35x45	5	each	PS		U	CAP,CER,SMT 0603,2.2uF,10V,+/-10%,X7R	MATL	GRM188R71A225KE15D	C20, C22, C44, C46, C48		Murata Electronics

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61	103594-0100R	c603-35x45	5	each	PS		U	CAP,CER,SMT 0603,1uF,25V,+/- 10%,X5R	MATL	GRM188R61E105 KA12D	C10, C12, C15, C19, C23		Murata Electronics
62	103816-1470R	c603-35x45	4	each	PS		U	CAP,CER,SMT 0603,.47uF,25V,+/- 10%,X7R	MATL	GRM188R71E474 KA12D	C29, C30, C31, C33		Murata Electronics
63	100993-1100R	c603-35x45	29	each	PS		U	CAP,CER,SMT 0603,.1uF,50V,+/- 10%,X7R	MATL	06035C104KAT2A	C13, C16, C17, C18, C21, C24, C25, C26, C27, C28, C32, C34, C35, C42, C43, C45, C47, C58, C59, C67, C68, C69, C72, C73, C74, C76, C77, C85, C9		AVX Corporation
64	100993-1221R	c603-35x45	1	each	PS		U	CAP,CER,SMT 0603,.022uF,50V,+/- 10%,X7R	MATL	GRM188R71H223 KA01D	C3		Murata Electronics
65	102482-1101R	c603-35x45	1	each	PS		U	CAP,CER,SMT 0603,.01uF,100V,+/- 10%,X7R	MATL	C1608X7R2A103K	C53		TDK Corporation
66	100993-1151R	c603-35x45	1	each	PS		U	CAP,CER,SMT 0603,.015uF,50V,+/- 10%,X7R	MATL	ECJ-1VB1H153K	C4		Panasonic
67	100993-1102R	c603-35x45	12	each	PS		U	CAP,CER,SMT 0603,.001uF,50V,+/- 10%,X7R	MATL	06035C102KAT2A	C36, C37, C38, C39, C40, C41, C75, C78, C79, C80, C84, C98		AVX Corporation
75	103811-1003R		1	each	PS		U	POT,12mm SQ,10K,1/8 WATT,SINGLE TURN	MATL	296UD103B1N	R28		CTS Electronics Corporation

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80	100687-0001R	r603-35X45	16	each	PS		U	RES,SMT 0603,0 OHM,1/16 WATT	MATL	ERJ-3GEY0R00V	R109, R110, R111, R112, R117, R119, R130, R132, R133, R134, R135, R5, R50, R91, R97, R98		Panasonic
81	100687-0100R	r603-35X45	7	each	PS		U	RES,SMT 0603,1 OHM,5%,1/16 WATT	MATL	ERJ-3RQJ1R0V	R66, R67, R68, R69, R70, R71, R8		Panasonic
82	100642-1000R	r603-35x45	1	each	PS		U	RES,SMT 0603,10 OHM,1%,1/16 WATT	MATL	ERJ-3EKF10R0V	R87		Panasonic
84	100687-1201R	r603-35X45	1	each	PS		U	RES,SMT 0603,120 OHM,5%,1/16 WATT	MATL	ERJ-3GEYJ121V	R17		Panasonic
85	100687-1002R	r603-35X45	9	each	PS		U	RES,SMT 0603,1K OHM,5%,1/16 WATT	MATL	RC0603JR-071KL	R12, R13, R21, R29, R30, R31, R32, R33, R34		Yageo
86	100687-8201R	r603-35X45	1	each	PS		U	RES,SMT 0603,820 OHM,5%,1/16 WATT	MATL	ERJ-3GEYJ821V	R49		Panasonic
87	100687-4701R	r603-35X45	4	each	PS		U	RES,SMT 0603,470 OHM,5%,1/16 WATT	MATL	ERJ-3GEYJ471V	R20, R22, R23, R26		Panasonic
88	100687-3301R	r603-35X45	5	each	PS		U	RES,SMT 0603,330 OHM,5%,1/16 WATT	MATL	ERJ-3GEYJ331V	R14, R15, R18, R24, R27		Panasonic
93	100642-1003R	r603-35x45	4	each	PS		U	RES,SMT 0603,10K OHM,1%,1/16 WATT	MATL	ERJ-3EKF1002V	R10, R11, R7, R9		Panasonic
94	100642-2054R	r603-35x45	1	each	PS		U	RES,SMT 0603,205K OHM,1%,1/16 WATT	MATL	ERJ-3EKF2053V	R1		Panasonic
95	100642-2803R	r603-35x45	1	each	PS		U	RES,SMT 0603,28K OHM,1%,1/16 WATT	MATL	ERJ-3EKF2802V	R4		Panasonic
96	100642-4992R	r603-35x45	13	each	PS		U	RES,SMT 0603,4.99K OHM,1%,1/16 WATT	MATL	ERJ-3EKF4991V	R122, R123, R124, R125, R126, R127, R19, R25, R36, R48, R62, R64, R65		Panasonic

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97	100642-4993R	r603-35x45	2	each	PS		U	RES,SMT 0603,49.9K OHM,1%,1/16 WATT	MATL	ERJ-3EKF4992V	R128, R129		Panasonic
98	100642-5363R	r603-35x45	1	each	PS		U	RES,SMT 0603,53.6K OHM,1%,1/16 WATT	MATL	ERJ-3EKF5362V	R6		Panasonic
99	100642-9533R	r603-35x45	4	each	PS		U	RES,SMT 0603,95.3K OHM,1%,1/16 WATT	MATL	ERJ-3EKF9532V	R35, R60, R61, R63		Panasonic
101	103951-2003R	r603-35x45	6	each	PS		U	RES,SMT 0603,20K OHM, .1%,1/10 WATT	MATL	ERA-3AEB203V	R103, R105, R107, R108, R113, R95		Panasonic
102	103951-1003R	r603-35x45	2	each	PS		U	RES,SMT 0603,10K OHM, .1%,1/10 WATT	MATL	ERA-3AEB103V	R37, R38		Panasonic
103	103951-1002R	r603-35x45	6	each	PS		U	RES,SMT 0603,1K OHM, .1%,1/10 WATT	MATL	ERA-3AEB102V	R99, R101, R104, R92, R94, R102		Panasonic
106	100155-0100R	r1206-40x70	1	each	PS		U	RES,SMT 1206,1 OHM,5%,1/4 WATT	MATL	ERJ-8GEYJ1R0V	R16		Panasonic
108	100155-0330R	r1206-40x70	1	each	PS		U	RES,SMT 1206,3.3 OHM,5%,1/4 WATT	MATL	ERJ-8GEYJ3R3V	R39		Panasonic
110	103809-0002R		3	each	PS		U	RES,SMT 4527,.002 OHM,1%,5W	MATL	WSR52L000FEA	R80, R81, R82		Vishay Intertechnology
115	102984-0001R	sw4-50x70-7914J	2	each	PS		U	SWITCH,SMT,PUSHBU TTON,MOMENTARY,4 mm	MATL	7914J-1-000E	SW1, SW2		Bourns
120	103823-0002R		2	each	PS		U	TERMINAL BLOCK,2 POS.,VERT.,15mm SPC.,90A	MATL	39920-0502	J25, J26		Molex
121	103821-0002R		1	each	PS		U	TERMINAL BLOCK,2 POS.,VERT.,5mm SPC.	MATL	ED500/2DS	J2		On-Shore Technology, Inc.
122	103823-0004R		1	each	PS		U	TERMINAL BLOCK,4 POS.,VERT.,15mm SPC.,90A	MATL	39920-0504	J11		Molex
125	102232-0100R	molex100-71251-5101	1	each	PS		U	CONN,100 PIN,DIMM SOCKET,W/EXTRACT ORS	MATL	87630-1001	J1		Molex
129	100115-0002R	JUMP1X2-6040	6	each	PL		U	HEADER,2 X 1,VERTICAL,PIN	SUBA		J12, J13, J23, J24, JP2, JP4		
130	100115-0003R	JUMP1X3-6040	1	each	PL		U	HEADER,3 X 1,VERTICAL,PIN	SUBA		J7		
133	100115-0005R	JUMP1X5-6040	4	each	PL		U	HEADER,5 X 1,VERTICAL,PIN	SUBA		J10, J4, J6, J8		

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134	100116-0005R	JUMP2X5-6040	1	each	PL		U	HEADER,5 X 2,VERTICAL,PIN	SUBA	2011-2X05G00SB/SN	J20		Oupiin
135	100116-0007R	JUMP2X7-6040	1	each	PL		U	HEADER,7 X 2,VERTICAL,PIN	SUBA	2011-2X07G00SB/SN	J21		Oupiin
136	100116-0020R	conn40-5638	1	each	PL		U	HEADER,20 X 2,VERTICAL,PIN	SUBA		J5		
145	103020-5003R		10	each	PS		U	TEST POINT,ORANGE	MATL	5003	TP12, TP13, TP14, TP16, TP17, TP19, TP23, TP24, TP25, TP3		Keystone Electronics Corp.
146	103020-5000R		4	each	PS		U	TEST POINT,RED	MATL	5000	TP11, TP4, TP5, TP6		Keystone Electronics Corp.
147	103020-5001R		5	each	PS		U	TEST POINT,BLACK	MATL	5001	TP10, TP20, TP7, TP8, TP9		Keystone Electronics Corp.
150	100123-0001R		2	each	PS		U	JUMPER,SHUNT,2 POS	MATL	SPC02SYAN	JP2, JP4		Sullins Electronics, Corp.
151	100329-0250R		8	each	PS		U	SCREW,PHILLIPS,PAN,SS,4-40 X .250	MATL	0440X0250PNPHS SPS	XXMH1, XXMH2, XXMH3, XXMH4, XXMH5, XXMH6, XXMH7, XXMH8		Above Board Electronics,Inc.
152	103812-0875R		8	each	PS		U	SPACER,ROUND,ALUM,4-40,.187 O.D. X .875L	MATL	2030	XXMH1, XXMH2, XXMH3, XXMH4, XXMH5, XXMH6, XXMH7, XXMH8		Keystone Electronics Corp.
155	C0603-NOPOP	c603-35x45	7	each	PS		U		NP		C52, C86, C87, C88, C95, C96, C97		
160	R0603-NOPOP	r603-35X45	10	each	PS		U		NP		R2, R3, R40, R41, R42, R43, R44, R45, R46, R47		
170	NO-POP		1	each	PS		U		NP		D2		

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200	TP-27SQ15-NO-POP		6	each	PS		U		NP		TP1, TP15, TP18, TP2, TP21, TP22		

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