

# Bill of Materials

**TI DESIGNS**

ITEM	MANU PART NUM	QTY	REF DESIGNATORS	VENDOR PARTNUM	DESCRIPTION	VENDOR	MANU
1	DRV8312DDW	1	U1	DRV8312DDW	MOTOR DRIVE POWER AMP HTSSOP44-DDW ROHS	TEXAS INSTRUMENTS	TEXAS INSTRUMENTS
2	TXB0106PWR	1	U2	296-23759-1	6-BIT BIDIR LEVEL TRANSLATOR TSSOP16- PW ROHS	DIGI-KEY	TEXAS INSTRUMENTS
3	DCH010505SN7	1	U3	296-20638	1W 3KV ISOLATED UNREGULATED DC-DC CONVERTER SIP7-EDJ4 ROHS	DIGI-KEY	TEXAS INSTRUMENTS
4	ISO1050DUBR	1	U4	595-ISO1050DUBR	ISOLATED CAN TRANSCEIVER SOP8-DUB ROHS	MOUSER	TEXAS INSTRUMENTS
5	ISO7241ADW	1	U5	595-ISO7241ADW	HIGH SPEED QUAD ISOLATORS SOP16-DW ROHS	MOUSER	TEXAS INSTRUMENTS
6	SN74LVC2G17DBVR	1	BUF1	296-13012-1-ND	DUAL SCHMITT-TRIGGER BUFFER SOT23-DBV6 ROHS	MOUSER	TEXAS INSTRUMENTS
7	OPA365AIDBVR	4	OA1,OA2,OA3,OA4	296-20645-1	OPAMP LOW DISTORTION 50MHz HI CMRR RR/O SOT23-DBV ROHS	DIGI-KEY	TEXAS INSTRUMENTS
8	TPS54160DGQ	1	VR1	296-23864-5	1.5A 60V SETP DOWN SWIFT DC/DC CONV ECO MODE MSOP10-DGQ ROHS	DIGI-KEY	TEXAS INSTRUMENTS
9	UA78M05CDCYR	1	VR2	296-12290-1	VOLT REG 5.0V 500mA SOT223-DCY ROHS	DIGI-KEY	TEXAS INSTRUMENTS

10	REF3025AIDBZT	1	VR4	REF3025AIDBZTCT	CMOS VOLTAGE REFERENCE 50PPM/C 2.5V/25mA SOT23-DBZ3 ROHS	DIGI-KEY	TEXAS INSTRUMENTS
11	TPS73633MDBVREP	1	VR5	296-21283-1	VOLT REG 3.3V 400MA LDO CAP FREE NMOS SOT23-DBV5 ROHS	DIGI-KEY	TEXAS INSTRUMENTS
12	TL1963A-33DCYR	1	VR3	296-24897-2	VOLT REG 3.3V 1.5A SOT223-DCY ROHS	DIGI-KEY	TEXAS INSTRUMENTS
13	ZXM62P03E6TA	2	Q1,Q2	ZXM62P03E6CT	MOSFET, P-Chan 30V 2.6A, SOT23-DBV6 ROHS	DIGI-KEY	ZETEX
14	VS-30BQ100TRPBF	1	CR1	VS-30BQ100PBFCT	SCHOTTKY RECTIFIER 790mV@3A SMC ROHS	DIGI-KEY	VISHAY
15	SML-LXT0805GW-TR	6	LED1, LED2, LED3, LED10, LED11, STATUS	67-1553-1	LED, GREEN 2.0V SMD0805 ROHS	DIGI-KEY	LUMEX OPTO
16	SML-LXT0805YW-TR	1	LED5	67-1554-1	LED, YELLOW 2.0V SMD0805 ROHS	DIGI-KEY	LUMEX OPTO
17	SML-LXT0805SRW-TR	1	LED6	67-1555-1	LED, RED 2.0V SMD0805 ROHS	DIGI-KEY	LUMEX OPTO
18	06035A120JAT2A	1	C9	478-1164-1	CAP SMD0603 CERM 12PFD 50V 5% C0G ROHS	DIGI-KEY	AVX
19	06035A181JAT2A	1	C8	478-1178-1	CAP SMD0603 CERM 180PFD 50V 5% C0G ROHS	DIGI-KEY	AVX
20	C1608C0G1H102J	10	C47, C48, C49, C51, C52, C54, C57, C58, C59, C60	445-1293-1	CAP SMD0603 CERM 1000PFD 50V 5% COG ROHS	DIGI-KEY	TDK CORP.
21	GRM21BR72A103KA01L	1	C3	490-1652-1	CAP SMD0805 CERM 0.01UFD 100V 10% X7R ROHS	DIGI-KEY	MURATA
22	C1608X7R2A153K	2	C5,C6	445-4426-1-ND	CAP SMD0603 CERM 0.015UFD 100V 10% X7R ROHS	DIGI-KEY	TDK
23	C1608X7R1H473K	3	C50,C55,C56	445-1313-1-ND	CAP SMD0603 CERM 0.047UFD 50V 10% X7R ROHS	DIGI-KEY	TDK
24	C0603C104K8RACTU	17	C14, C16, C23, C24, C29, C33, C39, C41, C44, C70, C71, C73, C102, C104, C106, C107, C108	399-1095-1	CAP SMD0603 CERM 0.1UFD 10V 5% X7R ROHS	DIGI-KEY	KEMET

25	06033D104KAT2A	2	C7,C12	478-1244-1	CAP SMD0603 CERM 0.1UF 25V 10% X5R ROHS	DIGI-KEY	AVX
26	C2012X7R2A104K	7	C2, C36, C37, C42, C43, C45, C46	445-1418-1	CAP SMD0805 CERM 0.1UF 100V 10% X7R ROHS	DIGI-KEY	TDK
27	0603YD474KAT2A	1	C38	478-1248-1	CAP SMD0603 CERM 0.47UF 16V 10% X5R ROHS	DIGI-KEY	AVX
28	HMK325B7474KN-T	3	C17,C18,C40	587-1364-1	CAP SMD1210 CERM 0.47UF 100V 10% X7R ROHS	DIGI-KEY	TAIYO YUDEN
29	C1608X7R1C105K	7	C30, C32, C34, C35, C72, C100, C105	445-1604-1	CAP SMD0603 CERM 1.0UF 16V 10% X7R ROHS	DIGI-KEY	TDK
30	GRM188R61A225KE 34D	2	C101,C103	490-1545-1	CAP SMD0603 CERM 2.2UF 10V 10% X5R ROHS	DIGI-KEY	MURATA
31	ECA-2AM220	1	C4	P5310-ND	CAP ALUM ELEC M RADIAL 22UF 100V 20% ROHS	DIGI-KEY	PANASONIC
32	ECA-1CM470	1	C31	P5137	CAP ALUM ELEC M RADIAL 47UF 16V 20% ROHS	DIGI-KEY	PANASONIC
33	EEU-FC1C470	2	C13,C15	P11196	CAP 47UF 16V RAD ALUM ELEC FC ROHS	DIGI-KEY	PANASONIC
34	ECA-1EM101	1	C10	P5152	CAP ALUM ELEC M RADIAL 100UF 25V 20% ROHS	DIGI-KEY	PANASONIC
35	EEU-FC1J331	2	C1,C11	P10349	CAP ALUM ELEC FC RADIAL 330UF 63V 20% ROHS	DIGI-KEY	PANASONIC
36	ERJ-3GEY0R00V	4	R20,R21,R22,R23	P0.0GCT	RESISTOR SMD0603 0.0 OHM 5% THICK FILM 1/10W ROHS	DIGI-KEY	PANASONIC
37	MCS1632R005FER	1	R51	MCS1632R005FERCT	RESISTOR SMD1206 5mOHMS 1% 1W ROHS	DIGI-KEY	OHMITE
38	WSLP1206R0100FE A	3	R50,R52,R53	WSLP-.01CT	RESISTOR SMD1206 0.01 OHMS 1% 1W ROHS	DIGI-KEY	VISHAY
39	ERJ-3GEYJ1R0V	1	R100	P1.0GCT	RESISTOR SMD0603 1.0 OHMS 1% THICK FILM 1/10W ROHS	DIGI-KEY	PANASONIC
40	ESR10EZPJ1R0	1	R36	RHM1KCT	RESISTOR SMD0805 1.0 OHM 1/4W 1% ROHS	DIGI-KEY	ROHM

41	ERJ-6GEYJ330V	4	R18,R19,R63,R64	P33ACT	RESISTOR SMD0805 33 OHMS 5% 1/8W ROHS	DIGI-KEY	PANASONIC
42	ERJ-8RQJ3R3V	1	R1	P3.3PCT	RESISTOR SMD1206 3.3 OHMS 5% 1/4W ROHS	DIGI-KEY	PANASONIC
43	RMCF0603FT120R	1	R101	RMCF0603FT120RCT	RESISTOR SMD0603 120 OHMS 5% 1/10W ROHS	DIGI-KEY	STACKPOLE ELECTRONICS
44	ERJ-3GEYJ331V	2	R72,R73	P330GCT	RESISTOR SMD0603 330 OHMS 5% 1/10W ROHS	DIGI-KEY	PANASONIC
45	ERJ-3EKF3920V	2	R46,R47	P392HCT	RESISTOR SMD0603 392 OHM 1% THICK FILM 1/10W ROHS	DIGI-KEY	PANASONIC
46	ERJ-3GEYJ471V	4	R14,R15,R17,R65	P470GCT	RESISTOR SMD0603 470 OHMS 5% 1/10W ROHS	DIGI-KEY	PANASONIC
47	CRCW0603681RFKEA	1	R11	541-681HCT	RESISTOR SMD0603 681 OHMS 1% 1/10W ROHS	DIGI-KEY	VISHAY
48	RC0603FR-071KL	14	R28, R29, R30, R31, R32, R33, R34, R35, R56, R57, R58, R59, R60, R61	311-1.00KHRCT	RESISTOR SMD0603 THICK FILM 1.00K OHM 1% 1/10W ROHS	DIGI-KEY	YAGEO
49	RMCF0603FT2K49	1	R4	RMCF0603FT2K49CT	RESISTOR SMD0603 2.49K OHMS 1% 1/10W ROHS	DIGI-KEY	STACKPOLE ELECTRONICS
50	ERJ-3EKF4991V	8	R2, R3, R13, R39, R43, R45, R70, R71	P4.99KHCT	RESISTOR SMD0603 4.99K OHM 1% THICK FILM 1/10W ROHS	DIGI-KEY	PANASONIC
51	3303W-3-103E	1	R66	3303W-103ECT	POT SMD CERMET 10K OHMS 25% SINGLE TURN TOP ADJ ROHS	DIGI-KEY	BOURNS
52	ERJ-3EKF1002V	2	R9,R10	P10.0KHCT	RESISTOR SMD0603 10.0K 1% THICK FILM 1/10W ROHS	DIGI-KEY	PANASONIC
53	ERJ-3EKF1912V	3	R25,R26,R27	P19.1KHCT-ND	RESISTOR SMD0603 19.1K OHMS 1% THICK FILM 1/10W ROHS	DIGI-KEY	PANASONIC
54	ERJ-3EKF2872V	3	R49,R54,R55	P28.7KHCT-ND	RESISTOR SMD0603 28.7K OHMS 1% THICK FILM 1/10W ROHS	DIGI-KEY	PANASONIC
55	RC0603FR-0730KL	1	R37	311-30.0KHRCT	RESISTOR SMD0603 THICK FILM 30.0K 1% 1/10W ROHS	DIGI-KEY	YAGEO
56	RMCF0603FT33K2	1	R6	RMCF0603FT33K2CT	RESISTOR SMD0603 33.2K OHMS 1% 1/10W ROHS	DIGI-KEY	STACKPOLE ELECTRONICS

57	RMCF0603FT38K3	1	R24	RMCF0603FT38K3CT	RESISTOR SMD0603 38.3K OHMS 1% 1/10W ROHS	DIGI-KEY	STACKPOLE ELECTRONICS
58	ERJ-3EKF4992V	4	R16,R40,R41,R62	P49.9KHCT	RESISTOR SMD0603 49.9K OHMS 1% THICK FILM 1/10W ROHS	DIGI-KEY	PANASONIC
59	ERJ-3EKF5762V	1	R48	P57.6KHCT-ND	RESISTOR SMD0603 57.6K OHMS 1% THICK FILM 1/10W ROHS	DIGI-KEY	PANASONIC
60	ERJ-3EKF9532V	4	R12,R38,R42,R44	P95.3KHCT	RESISTOR SMD0603 95.3K 1% THICK FILM 1/10W ROHS	DIGI-KEY	PANASONIC
61	MCR03EZPFX2053	1	R7	RHM205KHCT	RESISTOR SMD0603 205K OHMS 1% 1/10W ROHS	DIGI-KEY	ROHM
62	CRCW0603348KFKE A	1	R5	541-348KHCT	RESISTOR SMD0603 348K OHMS 1% 1/10W ROHS	DIGI-KEY	VISHAY
63	CRCW0603442KFKE A	1	R8	541-442KHCT	RESISTOR SMD0603 442K OHMS 1% 1/10W ROHS	DIGI-KEY	VISHAY
64	ELL-CTV390M	1	L1	PCD2159CT	POWER CHOKE SMD 39uH 2.1A 61mOHMS 20% ROHS	DIGI-KEY	PANASONIC
65	MPZ2012S300A	3	L2,L3,L4	445-1566-1	FERRITE BEAD, 30 Ohms 6A 100MHz SM0805 ROHS	DIGI-KEY	TDK
66	PBC02SAAN	8	J2, J3, J12, JP2, JP3, JP4, JP5, AUX-12V	S1011E-02	HEADER THRU MALE 2 PIN 100LS GOLD ROHS	DIGI-KEY	SULLINS
67	PBC03SAAN	3	J7,M1,JP1	S1011E-03-ND	HEADER THRU MALE 3 PIN 100LS GOLD ROHS	DIGI-KEY	SULLINS
68	PBC04SAAN	1	J6	S1011E-04	HEADER THRU MALE 4 PIN 100LS GOLD ROHS	DIGI-KEY	SULLINS
69	PBC05SAAN	3	J4,J8,J10	S1011E-05	HEADER THRU MALE 1X5 100LS GOLD ROHS	DIGI-KEY	SULLINS
70	PBC07DAAN	1	JTAG	S2011E-07	HEADER THRU MALE 2X7 PIN 100LS GOLD ROHS	DIGI-KEY	SULLINS
71	PBC20DAAN	1	J5	S2011E-20	HEADER THRU MALE 2X20 100LS GOLD ROHS	DIGI-KEY	SULLINS
72	87630-1001	1	J1	538-87630-1001	CONNECTOR THRU DIM100 FEMALE 1A ROHS	MOUSER	MOLEX

73	RAPC722X	1	J9	SC1313	JACK MINI-PWR THRU-RA 2,1ID/5.5OD 5A ROHS	DIGI-KEY	SWITCHCRAFT
74	ED500/4DS	1	MOTOR	ED2221	TERMINAL BLOCK 4PIN 15A/250V BLUE 5mm PITCH 14-22AWG ROHS	DIGI-KEY	ON SHORE TECHNOLOGY
75	ED500/2DS	1	PVDDIN	ED1623	TERMINAL BLOCK 2PIN 15A/250V BLUE 5mm PITCH 14-22AWG ROHS	DIGI-KEY	ON SHORE TECHNOLOGY
76	5001	4	GNDx4	5001K	PC TESTPOINT, BLACK, ROHS	DIGI-KEY	KEYSTONE ELECTRONICS
77	5003	12	/OTW, PWMA, PWMB, PWMC, IA-FB, IB-FB, IC- FB, OUT_A, OUT_B, OUT_C, /FAULT, I-TOTAL	5003K	PC TESTPOINT, ORANGE, ROHS	DIGI-KEY	KEYSTONE ELECTRONICS
78	TL1015AF160QG	2	STOP,START	EG4344CT	SWITCH, MOM, 160G SMT 4X3MM ROHS	DIGI-KEY	E-SWITCH
79	ATE1E-2M3-10-Z	3	RSTA,RSTB,RSTC	563-1159	SWITCH,SPST VERT-PCB ON-OFF-ON MINIATURE TOGGLE ROHS	DIGI-KEY	COPAL ELECTRONICS
80	SPC02SYAN	3	JP1(VR1), JP2, M1(L)	S9001	SHUNT, BLACK AU FLASH	DIGI-KEY	SULLINS
81	2030	8	NA	2030K	STANDOF ,4-40 0.875IN 3/16IN DIA ALUM RND F-F	DIGI-KEY	KEYSTONE ELECTRONICS
82	PMS 440 0025 PH	8	NA	H342	4-40 SCREW, STEEL 0.250 IN	DIGI-KEY	BUILDING FASTENERS

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