



Bill of Materials

TI Designs

TIDM-TM4C123IOTSTEPPER MOTOR

DRV8833 EVM

Item	Ref	Qty	Description	Mfg	Part Number
1	C1	1	Capacitor	TDK Corporation	C2012X5R1C106M
2	C2, C4	2	Capacitor	TDK Corporation	C1608X5R0J225K
3	C3, C5	2	Capacitor	Murata Electronics North Americ, Murata Electronics North America	GRM188R71E103KA01D
4	C6	1	Capacitor	TDK Corporation	C1608Y5V1C105Z
5	C9	1	Capacitor	TDK Corporation	C1608X7R1E104K
6	C11	1	Polarized Capacitor (Radial)	Nichicon	RNE1C101MDS1PX
7	D1	1	LED RED CLEAR 1206 SMD	Stanley Electric & Co	HBR1105W-TR
8	J1	1	Header, 8-Pin	Phoenix Contact	1945151
9	J2	1	Header, 4-Pin	Phoenix Contact	1945119
10	JP1, JP2, JP3, JP4	4	Three Pin Jumper	Phoenix Contact	1945106
11	JP5, JP6	2	Two Pin Jumper	Phoenix Contact	1945096
12	R5, R6	2	Resistor	Vishay/Dale (VA)	WSL2512R1500FEA
13	R9	1	Resistor	Stackpole Electronics Inc	RNCP0805FTD499R
14	REG1	1	VoltageRegulator	Texas Instruments	LP2985-50DBVR
15	S1, S2, S3, S4	4	SPDT ON OFF ON	NKK Switches	B13AP
16	TP1, TP2, TP3, TP4, TP6, TP7, TP8, TP10, TP11, TP13, TP14, TP15, TP16, TP17	14	Glass Beaded Test Point	Kobiconn	151-101-RC
17	TP5, TP9	2	Glass Beaded Test Point	Kobiconn	151-103-RC
18	TP12	1	Glass Beaded Test Point	Kobiconn	151-107-RC
19	U1	1	Dual H Bridge	Texas Instruments	DRV8833PWP



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TIDM-TM4C123IOTSTEPPER MOTOR

EK-TM4C123GXL

Item	Ref	Qty	Description	Mfg	Part Number
1	C1 C2 C7 C12, C14	5	Capacitor, 0402, X5R, 10V, Low ESR	Johanson Dielectrics Inc	100R07X105KV4T
2	C25 C26 C31 C32	4	Capacitor, 10pF, 50V, 5%, NPO/COG, 0402	Murata	GRM1555C1H100JZ01D
3	C28 C29	2	Capacitor, 24pF, 50V, 5%, NPO/COG, 0402	TDK	C1005C0G1H240J
4	C3 C5 C8 C15 C18 C19 C21	7	Capacitor, 0.01uF 25V, 10% 0402 X7R	Taiyo Yuden	TMK105B7103KV-F
5	C4 C6 C10 C11 C17 C20 C23 C24	8	Capacitor, 0.1uF 16V, 10% 0402 X7R	Taiyo Yuden	EMK105B7104KV-F
6	C9 C22	2	Capacitor, 2.2uF, 16V, 10%, 0603, X5R	Murata	GRM188R61C225KE15D
7	D1	1	LED, Tri-Color RGB, 0404 SMD Common Anode	Everlight	18-038/RSGHBHC1-S02/2T
8	D4	1	LED, Green 565nm, Clear 0805 SMD	Lite-On	LTST-C171GKT
				Lite-On	LTST-C171GKT
9	H24	1	Header, 1x2, 0.100, T-Hole, Vertical Unshrouded, 0.220 Mate	FCI	68001-102HLF
				Anyone	1x2-head
10	H25	1	Jumper, 0.100, Gold, Black, Closed	Sullins	SPC02SYAN
11	J1 J3	2	Header, 2x10, T-Hole Vertical unshrouded stacking	Samtec	SSW-110-23-S-D
12	J11	1		Hirose	ZX62-B-5PA
13	J2 J4	2	Header, 2x10, 0.100, SMT, Horizontal Unshrouded, 0.230 Mate	Samtec	TSM-110-01-S-DH-A-P-TR
				4UCON	10995
				Major League Electronics	TSHSM-110-D-02-T-H-AP-TR-P-LF
14	J9	1	Connector, USB micro AB Receptacle SMD	Hirose	ZX62-AB-5PA(11)
				Hirose	ZX62-AB-5PA
15	Q1 Q2 Q3	3	NPN SC70 pre-biased	Diodes Inc	DTC114EET1G
16	R1 R2 R9 R10 R11 R12 R13 R14 R16, R20 R26	11	Resistor, 0 OHM 1/10W 0603 SMD	Panasonic	ERJ-3GEY0R00V
17	R18 R19 R21 R22 R23 R28	6	Resistor, 10k ohm, 1/10W, 5%, 0402 Thick Film	Yageo	RC0402FR-0710KL
18	R3 R4 R5 R8 R27	5	Resistor, 330 ohm, 1/10W, 5%, 0402	Yageo	RC0402FR-07330RL
19	R31	1	Resistor, 1M Ohm 1/10W, 5%, 0402	Rohm	MCR01MRTF1004
20	RESET SW1 SW2	3	Switch, Tact 6mm SMT, 160gf	Omron	B3S-1000
21	SW3	1	Switch, DPDT, SMT 300 mA*2 @ 6V	C&K Components	JS202011SCQN

Item Number	Quantity	Part Reference	Value	Mfr_Name	Mfr_Part_Number	Description
1	1	C1	1.0pF	Murata Electronics North America	GJM1555C1H1R0BB01D	CAP CER 1PF 50V NPO 0402
2	1	C2	10pF	AVX Corporation	04025U100CAT2A	CAP CER 10PF 50V NPO 0402
3	2	C3 C4	6.2pF	Murata Electronics North America	GRM1555C1H6R2BA01D	CAP CER 6.2PF 50V NPO 0402
4	12	C5 C6 C7 C10 C12 C14 C16 C20 C21 C22 C23 C27	0.1uF	Taiyo Yuden	LMK105BJ104KV-F	CAP CER 0.1UF 10V 10% X5R 0402
5	3	C8 C19 C24	10uF	Murata Electronics North America	GRM188R60J106ME47D	CAP CER 10UF 6.3V 20% X5R 0603
6	1	C9	1.0uF	Murata Electronics North America	GRM155R61A105ME15D	CAP CER 1UF 10V 20% X5R 0402
7	3	C11 C13 C18	4.7uF	Samsung Electro-Mechanics America, Inc	CL05A475MQ5NRNC	CAP CER 4.7UF 6.3V 20% X5R 0402
8	2	C15 C17	22uF	Taiyo Yuden	AMK107BBJ226MAHT	CAP CER 22UF 4V 20% X5R 0603
9	2	C25 C26	10pF	Murata Electronics North America	GRM1555C1H100FA01D	CAP CER 10PF 50V 1% NPO 0402
10	2	C28 C31	10uF	Murata	GRM21BR61A106KE19L	CAP CER 10UF 10V 10% X5R 0805
11	1	C29	15pF	Murata Electronics North America	GRM1555C1H150JA01D	CAP CER 15PF 50V 5% NPO 0402
12	2	C30 C32	100uF	TDK Corporation	C3216X5R0J107M160AB	CAP CER 100UF 6.3V 20% X5R 1206
13	1	D1	LED	OSRAM Opto Semiconductors Inc	LY Q976-P1S2-36	LED CHIPLED 587NM YLW 0603 SMD
14	1	D2	CD0603-B00340	Bourns Inc	CD0603-B00340	DIODE SCHOTTKY 40V 0.03A 0603
15	2	D3 D4		ON Semiconductor	MBR130T1G	DIODE SCHOTTKY 30V 1A SOD123
16	1	D5	LED	Lumex Opto/Components Inc.	SML-LX0603SRW-TR	LED SUPR RED DIFF 660NM SMD 0603
17	1	D6	LED	OSRAM Opto Semiconductors Inc	LG Q971-KN-1	LED CHIPLED 570NM GREEN 0603 SMD
18	1	E1	2.45GHz Ant	Taiyo Yuden	AH316M245001-T	ANT BLUETOOTH W-LAN ZIGBEE WIMAX
19	1	FL1	2.4GHz Filter	TDK-Epcos	DEA202450BT-1294C1-H	FILTER BANDPASS 2.45GHZ WLAN SMD
20	1	J2	CONN_U.FL	Emerson Network Power Connectivity Johnson	128-0711-201	CONN UMC RCPT STR 50 OHM SMD
21	1	J3	RF SWITCH	Murata	MM8030-2610RJ3	CONN SWG JACK STR 50 OHM SMD
22	2	J5 J6	HEADER_2	TE Connectivity	5-146285-2	CONN HEADR BRKWAY .100 2POS STR
23	1	J7	CONN_MICRO_USB	FCI	10118194-0001LF	CONN USB MICRO B RECPT SMT R/A
24	1	J8	HEADER_3	TE Connectivity	5-146282-3	CONN HDR BRKWAY .100 3POS VERT
25	2	J9 J10	CONN_RCPT_10x2	Samtec	SSQ-110-03-G-D	CONN RCPT .100" 20POS DUAL GOLD
26	1	L1	3.6nH	Murata Electronics North America	LQP15MN3N6B02D	INDUCTOR 3.6NH 0.1NH 0402
27	2	L3 L5	2.2uH	Murata Electronics North America	LQM2HPN2R2MG0L	INDUCTOR 2.2UH 20% 1300MA 1008
28	1	L4	1uH	Murata	LQM2HPN1R0MJ0L	INDUCTOR POWER 1.0UH 1007
29	2	L7 L8	BEAD_FERRITE	Laird-Signal Integrity Products	MI0805K400R-10	FERRITE 1.5A 40 OHM 0805 SMD
30	2	Q1 Q2	BSS138LT3G	On Semi	BSS138LT3G	MOSFET N-CH 50V 200MA SOT-23

31	3	R1 R47 R49	270	Panasonic Electronic Components	ERJ-3GEYJ271V	RES 270 OHM 1/10W 5% 0603 SMD
32	5	R2 R10 R13 R19 R296	10k	Yageo	RC0402JR-0710KL	RES 10K OHM 1/16W 5% 0402 SMD
33	2	R3 R48	100R	Panasonic - ECG	ERJ-2GEJ101X	RES 100 OHM 1/10W 5% 0402 SMD
34	14	R4 R6 R11 R14 R16 R20 R21 R23 R24 R25 R26 R29 R36 R41	0 R	Panasonic Electronic Components	ERJ-2GE0R00X	RES 0.0 OHM 1/10W JUMP 0402 SMD
35	8	R12 R17 R18 R286 R287 R288 R290 R295	100k	Yageo	RC0402JR-07100KL	RES 100K OHM 1/16W 5% 0402 SMD
36	2	R15 R44	1k	Yageo	RC0402JR-071KL	RES 1.0K OHM 1/16W 5% 0402 SMD
37	1	R22	1k	TE Connectivity	1-1622826-8	RES 1.00K OHM 1/16W 5% 0402
38	2	R31 R46	33k	Yageo	RC0402FR-0733KL	RES 33.0K OHM 1/16W 1% 0402 SMD
39	1	R35	0.1	Panasonic Electronic Components	ERJ-3RSJR10V	RES 0.1 OHM 1/10W 5% 0603 SMD
40	1	R43	30.1K	Yageo	RC0402FR-0730K1L	RES 30.1K OHM 1/16W 1% 0402 SMD
41	1	R45	51K	Samsung	RC1005F513CS	RES 51K OHM 1/16W 1% 0402
42	1	R51	DNP	DNP	DNP	DO NOT MOUNT
43	3	SW1 SW2 SW3	SW TACT	Panasonic	EVQ-11A04M	SWITCH TACTILE SPST-NO 0.02A 15V
44	1	TP1	TP_1206	TE Connectivity	1625854-4	1206 PROBE PAD
45	1	U1	8M (1M x 8)	Winbond	W25Q80BLSNIG	IC FLASH 8MBIT 75MHZ 8SO
46	1	U3	CC3100	Texas Instruments	CC3100R	802.11bg Wifi Processor
47	1	U4	TPS79601	TEXAS INSTRUMENTS INC	TPS79601DCQR	IC,VREG,LDO,1.2V-5.5V,2.7V-5.5V,6PIN,SOT-223
48	1	Y1	Crystal	Epson	Q24FA20H00396	CRYSTAL 40MHZ 8PF SMD
49	1	Y3	Crystal	Abrakon Corporation	ABS07-32.768KHZ-T	CRYSTAL 32.768KHZ 12.5PF SMD

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