## HILDS INSTRUMENTS Bill of Materials TI Designs

## TIDM-TM4C129XBLE

Part Reference	Quantity	Value	PCB Package	Description	MPN	Manufacturer	Part Number	RoHS Status
				CC2650EM-7ID Rev 1.2.6				
C2	1	DNM		CAPACITOR, DO NOT MOUNT, 0603, SMD			02-01324	
C3 C4 C5 C9 C16 C20	6	100nF	0402	CAPACITOR, CERAMIC X7R, 100nF, 6.3V, -10%/+10%, -55DEGC/+125DEGC, 0402, SMD		MURATA	02-02323	ROHS_COMPLIANT
C6 C8	2	10uF	0603	CAPACITOR, CERAMIC X5R, 10uF, 6.3V, -20%/+20%, -55DEGC/+85DEGC, 0603. SMD	GRM188R60J106ME47D	MURATA	02-02419	ROHS_COMPLIANT
C7	1	100nF	0603	CAPACITOR, CERAMIC X7R, 100nF, 25V, -10%/+10%, -55DEGC/+125DEGC, 0603, SMD	GRM188R71E104KA01D	MURATA	02-01992	ROHS_COMPLIANT
C10 C12 C15 C22 C23 C24	6	DNM	0402	CAPACITOR, CERAMIC, N/A VALUE, -55DEGC/+125DEGC, 0402, SMD	CAPACITOR_0402_DNM_N/A_M	Manufacturer selection	02-04164	PART NOT KNOWN
C11 C13 C21	3	1pF	0402	CAPACITOR, CERAMIC COG/NPO, 1pF, 50V, -0.25pF/ +0.25pF, - 55DEGC/+125DEGC, 0402, SMD	GRM1555C1H1R0CA01D	MURATA	02-04672	ROHS_COMPLIANT
C14	1	12pF	0402	CAPACITOR, CERAMIC COG/NPO, 12pF, 50V, -5%/+5%, -55DEGC/+125DEGC, 0402, SMD		MURATA	02-04168	ROHS_COMPLIANT
C17 C18	2	12pF	0402	CAPACITOR, CERAMIC COG/NPO, 12pF, 50V, -5%/+5%, -55DEGC/+125DEGC, 0402. SMD	,	MANUFACTURER SELECTION	02-03030	ROHS_COMPLIANT
C19	1	1uF	0402	CAPACITOR, CERAMIC X5R, 1uF, 10V, -10%/+10%, -55DEGC/+85DEGC, 0402, SMD	GRM155R61A105KE15D	MURATA	02-02381	ROHS_COMPLIANT
C31	1	6.8pF	0402	CAPACITOR, CERAMIC COG/NPO, 6.8pF, 50V, -0.25pF, +0.25pF, - 55DEGC/+125DEGC. 0402. SMD	GRM1555C1H6R8CA01D	MURATA	02-04169	ROHS_COMPLIANT
FL1	1	BLM18HE152SN1	0603	FILTER, EMI, 1500@100MHz, -55DEGC/+125DEGC, 0603, SMD	BLM18HE152SN1D	MURATA	04-00470	ROHS_COMPLIANT
J1	1	DNM		CONNECTOR, COAX RF, STRAIGHT, FEMALE, 1 PIN, SMD	SMA-10V21-TGG	HUS-TSAN	06-02188	N/A
L1	1	10uH	0805	INDUCTOR, CHIP, 10uH, -20%/+20%, 0.11A, -40DEGC/+85DEGC, 0805, SMD	CKS2125100M-T	TAIYO YUDEN	03-06514	ROHS_COMPLIANT
L11 L21	2	2.4nH	0402	INDUCTOR, CHIP, 2.4nH, -0.3nH/+0.3nH, 0.3A, -55DEGC/+125DEGC, 0402, SMD	LQG15HN2N4S02D	MURATA	03-06554	ROHS_COMPLIANT
L12 L13	2	2nH	0402	INDUCTOR, CHIP, 2nH, -0.3nH/ +0.3nH, 0.3A, -55DEGC/+125DEGC, 0402, SMD	LQG15HS2N0S02D	MURATA	03-06525	ROHS_COMPLIANT
P1 P2	2	SFM-110-02-S-D-A-K-TR		CONNECTOR, HEADER, FEMALE, STRAIGHT, 2 ROWS, 20 PINS, PITCH 1.27mm, SMD	SFM-110-02-SM-D-A-K-TR	SAMTEC	06-02251	ROHS_COMPLIANT
R1	1	100k	0402	RESISTOR, THICK FILM, 100k, -1%/+1%, 0.063W, 50V, - 55DEGC/+155DEGC, 0402, SMD	RESISTOR_0402_100k_+/- 1% 50V 0.063W M +/-100PPM	MANUFACTURER SELECTION	01-12837	ROHS_COMPLIANT
R12	1	0	0402	RESISTOR, JUMPER, -55DEGC/+155DEGC, 0402, SMD	RK73Z1ETTP	KOA SPEER	01-01784	ROHS_COMPLIANT
U1	1	CC2650F128RGZ	QFN48	IC, DIGITAL, 2.4GHZ SIMPLELINK WIRELESS MCU, PITCH 0,5MM, QFN48, SMD	CC2650F128RGZT	TEXAS INSTRUMENTS	18-28499	ROHS_COMPLIANT
Y1	1	32.768kHz		CRYSTAL, RESONATOR, 32.768kHz, -20PPM/+20PPM, -40DEGC/+85DEGC, SMD	FC-135 32.7680KA-AG0	EPSON	12-00546	ROHS_COMPLIANT
Y2	1	24MHz		CRYSTAL, CRYSTAL OSCILLATOR, 24MHz, -15PPM/DEGC/+15PPM/DEGC, -40DEGC/+85DEGC, SMD	TSX-3225 24.0000MF15X-AC3	EPSON	12-00757	ROHS_COMPLIANT

# TEXAS INSTRUMENTS Bill of Materials TI Designs

## TIDM-TM4C129XBLE

em Numbe	Quantity	Part Reference	Value	Mfr Name	Mfr Part Number	Description	
				EK-TM4C1294X			
1	1	C1	1000pF	Kemet	C1210C102MGRACTU	Capacitor, 1000pF, 2kV, 20%, X7R, 1210	
2	26	C3, C4, C5, C10, C11, C12, C13, C16, C17, C18, C19, C21, C22, C23, C24, C25, C26, C27, C28, C29, C30, C40, C41, C42, C43, C46		Taiyo Yuden	EMK105B7104KV-F	Capacitor, 0.1uF 16V, 10% 0402 X7R	
3	1	C31	0.1uF	AVX	1812GC472KAT1A	Capacitor, 4700pF, 2kV, 10%, X7R, 1812	
4	2	C32, C33	4700pF	TDK	C1608X7R1H332K	Capacitor, 4700pF, 5RV, 10%, X7R, 1612	
		· ·	3300pF				
5	2	C6, C14	1uF	Johanson Dielectrics Inc	100R07X105KV4T	Capacitor, 1uF , X5R, 10V, Low ESR, 0402	
6	3	C7, C15, C20	2.2uF	Murata	GRM188R61C225KE15D	Capacitor, 2.2uF, 16V, 10%, 0603, X5R	
7	6	C8, C9, C44, C45, C47, C48	12pF	Murata	GRM1555C1H120JZ01D	Capacitor, 12pF, 50V 5%, 0402, COG	
8	5	D0, D1, D2, D3, D4	LED	Everlight	19-217/G7C-AL1M2B/3T	Green LED 0603	
9	7	31, 32, 33, 34, 35, 36, 37	Jumper	3M	969102-0000-DA	Jumper, 0.100, Gold, Black, Open	
10	1	JP1	Header 2x3	FCI	67996-206HLF	Header, 2x3, 0.100, T-Hole, Vertical Unshrouded, 0.230 Mate, gold	
11 2	2	JP2, JP3	Header 1x2	3M	961102-6404-AR	Header, 1x2, 0.100, T-Hole, Vertical Unshrouded, 0.220 Mate	
				FCI	68001-102HLF		
	304 305		Anyone	1x2-head	W. J. 2.2.0400 TWJ. W. J. J. J. J. 222 M.		
12	2	JP4, JP5	Header 2x2	FCI	67997-104HLF	Header, 2x2, 0.100, T-Hole, Vertical Unshrouded, 0.230 Mate	
4.0		D4 D2 D2 D4 D5 D20 D25 D44		4UCON	00998	D : 1 401 1 4/40W F0/ 0402 T1: 1 5:1	
13	8	R1, R2, R3, R4, R5, R29, R35, R44	10K	Yageo	RC0402FR-0710KL	Resistor, 10k ohm, 1/10W, 5%, 0402 Thick Film	
14	3	R17, R26, R36	100K	Rohm	MCR01MRTJ104	100k 5% 0402 resistor smd	
15	2	R18, R51	100 ohm	Rohm	MCR1MRTJ101	Resistor 0402 100 ohm 5%	
16	4	R23, R21, R22, R24	49.9 ohm	Rohm	MCR01MRTF49R9	Resistor 49.9 ohm 0402. 1 %	
17	1	R25	4.87K	Rohm	MCR01MRTF4871	Resistor 4.87k 1% 0402 smd	
18	1	R28	5.6K	Panasonic	ERJ-2GEJ562X	Resistor, 5.6k ohm, 1/10W, 5%, 0402	
19	4	R32, R43, R45, R46	75 ohm	Rohm	MCR01MRTJ750	resistor 75 ohm 0402 5%	
20	2	R34, R52	1 M	Panasonic	ERJ-3GEYJ105V	Resistor, 1M OHM 1/10W 5% 0603 SMD	
21	1	R38	51 ohm	Panasonic	ERJ-2GEJ510X	Resistor, 51 ohm, 1/10W, 5%, 0402	
22	1	R42	1 M	Rohm	MCR01MRTF1004	Resistor, 1M Ohm 1/10W, 5%, 0402	
23	1	R47	1 M	Panasonic	ERJ-8GEYJ105V	RES 1M OHM 5% 1206 TF	
24	2	R49, R50	2.0K	Panasonic	ERJ-3GEYJ202V	Resistor, 2.0k ohm, 1/10W, 5%, 0402	
25	12	R6, R7, R8, R10, R11, R15, R16, R19, R20, R39, R40, R41	0 ohm	Panasonic	ERJ-2GE0R00X	Resistor, 0 ohm, 1/10W, 5%, 0402	
26	5	R9, R27, R30, R31, R33	330 ohm	Yageo	RC0402FR-07330RL	Resistor, 330 ohm, 1/10W, 5%, 0402	
27	4	RESET, USR_SW1, USR_SW2, WAKE	Switch	Omron	B3S-1000	Switch, Tact 6mm SMT, 160gf	
28	1	U1	TM4C1294	Texas Instruments	TM4C1294NCPDT	Tiva, MCU TM4C1294NCPDT 128 QFP with Ethernet MAC + PHY	
29	1	U10	Ethernet transformer	Pulse Electronics	HX1198FNL	Transformer, ethernet, 1 to 1. SOIC 16	
30	1	U13	Diod	Semtech	SLVU2.8-4.TBT	Diode, 8 chan, +/-15KV, ESD Protection Array, SO-8	
31	1	U14	Ethernet connector	TE Connectivity	1-406541-5	Connector, RJ45 NO MAG, shielded THRU HOLE	
32	2	U2, U3	TPD4S012	Texas Instruments	TPD4S012DRYR	IC 4CH ESD SOLUTION W/CLAMP 6SON	
33	1	U20	TM4C123	Texas Instruments	TM4C123GH6PMI	Stellaris TIVA MCU TM4C123GH6PMI	
34	1	U22	USB connector	FCI	10118194-0001LF	USB Micro B receptical right angle with guides	
35	1	U4	TPS2052	Texas Instruments	TPS2052BDRBR	Fault protected power switch, dual channel, 8-SON	
36	1	U5	TPS73733	Texas Instruments	TPS73733DRV	3.3V LDO TI TPS73733DRV fixed out 5V in	
37	1	U6	Header 2x5	Samtec	SHF-105-01-S-D-SM	Header 2x5, 0.050, SM, Vertical Shrouded	
				Don Connex Electronics	C44-10BSA1-G		
38	1	U7	USB connector	Hirose	ZX62D-AB-5P8	USB Micro AB receptacle. Right angle with through guides	
39	4	X6, X7, X8, X9	Header 2x10	Samtec	SSW-110-23-S-D	Header, 2x10, T-Hole Vertical unshrouded stacking	
40	1	Y1	Crystal	NDK	nx3225ga-25.000m-std-crg-2	Crystal 25 Mhz 3.2 x 2.5 mm	
41	1	Y2	Crystal	NDK	NX3225GA-16.000M-STD-CRG-2	crystal 16 mhz 3.2x2.5 mm 4 pin	

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