

Bill of Material

TI DESIGNS

TIDM-BLE-KEYBOARD

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint	Note
1	3	C1, C5,C18	100nF	CAP CER 100nF 6V 10% 0402	N/A	N/A		0402	-
2	1	C6	2.2uF	CAP CER 2.2uF 6V 10% 0402	N/A	N/A		0402	
3	1	C7	2.2nF	CAP CER 2.2nF 6V 10% 0402	N/A	N/A		0402	
4	2	C8,C9	1uF	CAP CER 1uF 6V 10% 0402	N/A	N/A		0402	
5	1	C25	1nF	CAP CER 0.1uF 6V 10% 0603	N/A	N/A		0402	
6	2	C21,C22	12pF	Capacitor, 12p, 0402, NP0, 5%, 50V	Maruta	GRM1555C1H120JA01D		0402	
7	2	C23,C24	15pF	Capacitor, 15p, 0402, NP0, 5%, 50V	Maruta	GRM1555C1H150JA01D		0402	
8	2	C15,C16	18pF	Capacitor,18p,0402,NP0,5% 25V	Maruta	GRM1555C1H180JZ01D		0402	
9	3	C13,C14,C17	1pF	Capacitor,1p,0402,NP0,+/-0.25pF 50V	Maruta	GRM1555C1H1R0CZ01D		0402	
10	1	C12	220pF	Capacitor, 220p, 0402,N P0, 5%, 50V	Maruta	GRM1555C1H221JA01D		0402	
11	4	C10,C11,C19,C20	100nF	Capacitor,100n,0402,X5R,10%, 10V	Maruta	GRM1555R71A104KA01D		0402	
12	3	C2,C3,C4	2.2uF	CAP CER 2.2uF 6V 10% 0402	Maruta	GRM155R60J225ME15D		0603	
13	2	D1,D2		RED LED 0603	N/A	N/A		0603	
14	1	R1	10K ohm	Resistor, 10K ohm, 0402, 5%	N/A	N/A		0402	
15	1	R8	47K ohm	Resistor, 47K ohm, 0402, 5%	N/A	N/A		0402	
16	1	R9	56K ohm	Resistor, 56K ohm, 0402, 1%	N/A	N/A		0402	
17	1	R11	2.7K ohm	Resistor, 2.7K ohm, 0402, 5%	N/A	N/A		0402	
18	1	R5	0 ohm	Resistor, 0 ohm, 0402, 5%	N/A	N/A		0603	
19	2	R2,R4	1.1K ohm	Resistor, 1.1K ohm, 0402, 5%	N/A	N/A		0603	
20	1	R6	2K ohm	Resistor, 2K ohm, 0402, 5%	N/A	N/A		0603	
21	1	R3	20K ohm	Resistor, 20K ohm, 0402, 5%	N/A	N/A		0603	
22	1	R10	0 ohm	Resistor, 0 ohm, 0402, 5%	N/A	N/A		0603	
23	1	Q1	2N7002	N-Channel MOSFET	N/A	N/A		SOT23-3P	
24	1	L2	Bead	EMI filter bead, 0402 1k ohms tape GHz Band	Maruta	BLM15HG102SN1D		0603	
25	1	L3	1nH	Inductor,1n0,0402,Monolithic+/-0.3 nH	Maruta	LQG15HS1N0S02D		0402	
26	2	L5, L6	2nH	Inductor,3n0,0402,Monolithic+/-0.3 nH	Maruta	LQG15HS2N0S02D		0402	
27	1	L4	3nH	Inductor,2n0,0402,+/-0.3 nH	Maruta	LQG15HS3N0S02D		0402	
28	1	L1	2.2uH	Inductor, 2.2uH, 0603,500mA 30%	Maruta	LQM21PN2R2NGC		0603	

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29	1	U2	MSP430G2444	MCU	Texas Instruments	MSP430G2444IRHA40R		IC-QFN40-RHA-RTB	
30	1	U1	tps62730	DC-DC	Texas Instruments	TPS62730DRYR		DRY0006A	
31	1	U3	CC2541F128	BLE SOC	Texas Instruments	CC2541F128RHAR		IC-QFN40-RHA-RTB	
32	1	X2	XTAL32K	CRYSTAL, OSCILATOR, 32.768kHz, -20PPM/ + 20PPM, -40DEGC/ +85DEGC, 12.5pF, SMD	Epson Toyocom	12-00422		SSP-T-32768	
33	1	X1	XTAL32M	CRYSTAL, OSCILATOR, 32MHz, 10pF, -10PPM/+10PPM, -40DEGC/+85DEGC, SMD	Epson Toyocom	12-00430		XIAL4P-SMT3*2X5	
34	1	SW1	Button switch	button switch	N/A	N/A		SW-PB-SMT3*4*2	
35	1	P3	JTAG connector	JTAG connector for MSP430	N/A	N/A		MHDR1X4	
36	1	P2	Keyboard connector	25-pin connector	N/A	N/A		FFC-25-P1.0	
37	2	S1, S2	connector	2-pin connector	N/A	N/A		MHDR1X2	
38	1	P4	CCDEBUG	debug connector for CC2541	N/A	N/A		MHDR1X6	

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