



Bill of Materials

TI DESIGNS

TIDC-BLE-TO-WIFI-IOT-GATEWAY

Item	Quantity	Part Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Package
1	1	A3	2450AT42B100	ANTENNA, COMPONENT, HIGH FREQUENCY CERAMIC, 50R, 2.4GHz-2.5GHz, 1206, SMD	JOHANSON TECHNOLOGY	2450AT42B100	Nil	
2	1	A3	2450AT18D0100	MECHANIC, ANTENNA, 2.45 GHZ, DETUNING RESILIENT, EDGE MOUNT, 1206, SMD	JOHANSON TECHNOLOGY	2450AT18D0100E	Nil	1206
3	1	ANT1	1pF	CAPACITOR, CERAMIC COG/NP0, 1pF, 50V, -0.25pF/ +0.25pF, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM1555C1H1R0CA01D	Nil	0402
4	1	ANT2	22nH	INDUCTOR, STANDARD, CHIP, 22nH, -5%/+5%, 0.3A, -55DEGC/+125DEGC, 0402, SMD	MURATA	LQG15HS22NJ02D	Nil	0402
5	1	ANT3	DNM	RESISTOR, DO NOT MOUNT, 0402, SMD	DO NOT MOUNT	DNM	Nil	0402
6	4	C15 C25 C27 C40	DNM	CAPACITOR, CERAMIC, N/A VALUE, -55DEGC/+125DEGC, 0402, SMD	Manufacturer selection	CAPACITOR_0402_DNM_N/A_M	Nil	0402

7	2	C26 C331	1uF	CAPACITOR, CERAMIC X5R, 1uF, 10V, -10%/+10%, -55DEGC/+85DEGC, 0402, SMD	MURATA	GRM155R61A105KE15D	Nil	0402
8	5	C35 C322 C568 C576	100nF	CAPACITOR, CERAMIC X5R, 100nF, 10V, -10%/+10%, -55DEGC/+85DEGC, 0201, SMD	MANUFACTURE R SELECTION	CAPACITOR_0201_100nF_X5R_I_+/-10%_10V	Nil	0201
9	2	C36 C38	12pF	CAPACITOR, CERAMIC COG/NP0, 12pF, 50V, -5%/+5%, -55DEGC/+125DEGC, 0402, SMD	MANUFACTURE R SELECTION	CAPACITOR_0402_12pF_COG/NP0_M_+/-5%_50V	Nil	0402
10	14	C91 C101 C111 C191 C241 C251 C271 C281 C321 C361 C382 C491 C541 C561	100nF	CAPACITOR, CERAMIC X7R, 100nF, 6.3V, -10%/+10%, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM155R70J104KA01D	Nil	0402
11	5	C99 C564 C565 C566 C567	10uF	CAPACITOR, CERAMIC, X5R, 10uF, 4V, -20%/+20%, -55DEGC/+85DEGC, 0402, SMD	TDK	C1005X5R0G106M050BB	Nil	0402
12	5	C192 C432 C471 C481 C574	10uF	CAPACITOR, CERAMIC X5R, 10uF, 6.3V, -20%/+20%, -55DEGC/+85DEGC, 0603, SMD	MURATA	GRM188R60J106ME47D	Nil	0603
13	2	C221 C231	6.2pF	CAPACITOR, CERAMIC COG/NP0, 6.2pF, 50V, -0.25pF/+0.25pF, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM1555C1H6R2CA01D	Nil	0402
14	1	C311	10pF	CAPACITOR, CERAMIC COG/NP0, 10pF, 50V, -5%/+5%, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM1555C1H100JA01D	Nil	0402
15	4	C371 C391 C441 C562	4.7uF	CAPACITOR, CERAMIC X5R, 4.7uF, 6.3V, -20%/+20%, -55DEGC/+85DEGC, 0402, SMD	MURATA	GRM155R60J475ME87D	Nil	0402

16	2	C421 C422	22uF	CAPACITOR, CERAMIC X5R, 22uF, 4V, -20%/+20%, -55DEGC/+85DEGC, 0603, SMD	MURATA	GRM188R60G226MEA0D	Nil	0603
17	2	C511 C521	22pF	CAPACITOR, CERAMIC COG/NPO, 22pF, 50V, -5%/+5%, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM1555C1H220JA01D	Nil	0402
18	1	C563	15pF	CAPACITOR, CERAMIC RADIO FREQUENCY AND MICROWAVE, 15pF, -1%/+1%, NPO, 200V, 0402, SMD	ATC CERAMICS	600L150FT200T	Nil	0402
19	1	CR1	LS L296-P2Q2-1	OPTO, LED, SUPER RED COLOR, 630nm, 1.8V TO 2.3V, 0.06A, 0603, SMD	OSRAM	LS L296-P2Q2-1-Z	Nil	0603
20	1	CR2	LPL296-J2L2-25	OPTO, LED, GREEN COLOR, 562nm, 0.02A, 0.08W, 0603, SMD	OSRAM	LP L296-J2L2-25	Nil	0603
21	1	CR4	TPD2EUSB30DR	DIODE, PROTECTION, ESD ARRAY, 2 CHANNEL, 7V, -40DEGC/+85DEGC, SOT3, SMD	TEXAS INSTRUMENTS	TPD2EUSB30DRTR	Nil	SOT3
22	1	FL1	DEA202450BT-1294C1	FILTER, BANDPASS, 50@2448MHz, -40DEGC/+85DEGC, SMD	TDK	DEA202450BT-1294C1	Nil	
23	1	FL2	LFB182G	FILTER, LC, BAND PASS FILTER@50R, 2450MHz, -40DEGC/+85DEGC, 0603, SMD	MURATA	LFB182G45BG2D280	Nil	0603
24	1	FL3	BLM18HE152SN1	FILTER, EMI, 1500@100MHz, -55DEGC/+125DEGC, 0603, SMD	MURATA	BLM18HE152SN1D	Nil	0603
25	2	J1 J2	MS-156HF	CONNECTOR, COAX RF, FEMALE, STRAIGHT, 2 PINS, SMD	HIROSE	MS-156HF	Nil	

26	1	J3	47491-0001	CONNECTOR, MICRO-USB, 1 ROW, 5 PINS, PITCH 0.65mm, SMD	MOLEX	47491-0001	Nil	
27	2	L381 L431	2.2uH	INDUCTOR, CHIP, 2.2uH, - 20%/+20%, 1.2A, - 55DEGC/+125DEGC, 0806, SMD	MURATA	LQM2MPN2R2MGOL	Nil	0806
28	1	L401	1uH	INDUCTOR, CHIP, 1uH, - 20%/+20%, 1.5A, - 55DEGC/+125DEGC, 1008, SMD	MURATA	LQM2HPN1R0MJ0L	Nil	1008
29	1	L474	CIM10U800N	INDUCTOR, CHIP, 100Ohm@100MHz, -25%/+25%, 0.6A, -55DEGC/+125DEGC, 0603, SMD	SAMSUNG ELECTRO- MECHANICS	CIM10U800NC	Nil	0603
30	1	L475	10uH	INDUCTOR, CHIP, 10uH, - 20%/+20%, 0.11A, - 40DEGC/+85DEGC, 0805, SMD	TAIYO YUDEN	CKS2125100M-T	Nil	0805
31	2	P4 P5	TC2030-CTX-NL	NON COMPONENT, CONNECTOR CABLE, PLUG OF NAILS, 6 PINS, 2 ROWS, SMD				
32	1	Q1	CSD13381F4	TRANSISTOR, MOSFET N- CHANNEL, 12V, 2.1A, 0.5W, LGA3, SMD	TEXAS INSTRUMENTS	CSD13381F4	Nil	LGA3
33	6	R10 R21 R22 R24 R337 R338	270	RESISTOR, THICK FILM, 270R, - 5%/+5%, 0.05W, 30V, - 55DEGC/+155DEGC, 0201, SMD	VISHAY	CRCW0201270RJNED	Nil	0201
34	2	R12 R472	0	RESISTOR, THICK FILM, 0, - 5%/+5%, 0.063W, 50V, - 55DEGC/+155DEGC, 0402, SMD	MANUFACTURE R SELECTION	RESISTOR_0402_0_+/- 5%_50V_0.063W_M_+/-200ppm	Nil	0402
35	5	R25 R26 R341 R535 R541	100k	RESISTOR, THICK FILM, 100K, - 5%/+5%, 0.05W, 30V, - 55DEGC/+125DEGC, 0201, SMD	MANUFACTURE R SELECTION	RESISTOR_0201_100k_+/- 5%_30V_0.05W_M_+/-200ppm	Nil	0201

36	1	R55	30.1k	RESISTOR, THICK FILM, 30.1k, -1%/+1%, 0.063W, 50V, -55DEGC/+155DEGC, 0402, SMD	KOA SPEER	RK73H1ETTP3012F	Nil	0402
37	1	R56	51k	RESISTOR, THICK FILM, 51k, -1%/+1%, 0.063W, 50V, -55DEGC/+155DEGC, 0402, SMD	MANUFACTURE R SELECTION	RESISTOR_0402_51k_+/-1%_50V_0.063W_M_+/-100ppm	Nil	0402
38	15	R61 R321 R329 R330 R331 R332 R532 R533 R534 R537 R538 R548	10k	RESISTOR, THICK FILM, 10K, -5%/+5%, 0.05W, 30V, -55DEGC/+125DEGC, 0201, SMD	MANUFACTURE R SELECTION	RESISTOR_0201_10k_+/-5%_30V_0.05W_M_+/-200ppm	Nil	0201
39	1	R333	1Meg	RESISTOR, THICK FILM, 1Meg, -1%/+1%, 0.063W, 50V, -55DEGC/+155DEGC, 0402, SMD	MANUFACTURE R SELECTION	RESISTOR_0402_1M_+/-1%_50V_0.063W_M_+/-100ppm	Nil	0402
40	1	R339	4.7k	RESISTOR, THICK FILM, 4.7k, -1%/+1%, 0.05W, 30V, -55DEGC/+155DEGC, 0201, SMD	MANUFACTURE R SELECTION	RESISTOR_0201_4.7k_+/-1%_30V_0.05W_M_+/-100ppm	Nil	0201
41	1	R549	2.7k	RESISTOR, THICK FILM, 2.7k, -1%/+1%, 0.05W, 30V, -55DEGC/+125DEGC, 0201, SMD	MANUFACTURE R SELECTION	RESISTOR_0201_2.7k_+/-1%_30V_0.05W_M_+/-100ppm	Nil	0201
42	3	R550 R551 R552	0	RESISTOR, METAL FILM, 0, -40DEGC/+85DEGC, 0402, SMD	MANUFACTURE R SELECTION	RESISTOR_0402_0	Nil	0201
43	1	R553	100	RESISTOR, THICK FILM, 100R, -5%/+5%, 0.05W, 25V, -55DEGC/+125DEGC, 0201, SMD	MANUFACTURE R SELECTION	RESISTOR_0201_100_+/-5%_25V_0.05W_M_+/-200ppm	Nil	0201
44	2	SW3 SW4	TL3700AF160Q	SWITCH, TACT, 0.02A@15V, 0.02A, 15V, SMD	E-SWITCH	TL3700AF160Q	Nil	
45	1	U1	CC3200R1M2RGC	IC, MICROPROCESSOR, SIMPLELINK WI-FI AND INTERNET-OF-THINGS SOLUTION, A SINGLE-CHIP WIRELESS MCU, 2.1V TO 3.6V, VQFN64, SMD	TEXAS INSTRUMENTS	CC3200R1M2RGCR	Nil	VQFN64

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