

# Bill of Materials

TI DESIGNS

TIDC-CQ2650STK

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number
1	1	A1	DNM	MECHANIC, 2.4GHZ INVERTED F ANTENNA, SMD	TEXAS INSTRUMENTS	DN007
2	2	ANT1 ANT4	2nH	INDUCTOR, CHIP, 2nH, -0.3nH/+0.3nH, 0.3A, -55DEGC/+125DEGC, 0402, SMD	MURATA	LQG15HS2N0502D
3	4	ANT2 C17 C18 C31	DNM	CAPACITOR, CERAMIC, N/A VALUE, -55DEGC/+125DEGC, 0402, SMD	MANUFACTURER SELECTION	CAPACITOR_0402_DNM_N/A_M
4	3	ANT3 C11 C13	1pF	CAPACITOR, CERAMIC COG/NP0, 1pF, 50V, -0.25pF/+0.25pF, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM1555C1H1R0CA01D
5	3	ANTS R12 R26	0	RESISTOR, THICK FILM, 0, -5%/+5%, 0.063W, 50V, -55DEGC/+155DEGC, 0402, SMD	MANUFACTURER SELECTION	RESISTOR_0402_0_+/-5%_50V_0.063W_M_+/-200PPM
6	1	ANT6	0.5pF	CAPACITOR, CERAMIC COG/NP0, 0.5pF, 50V, -0.1pF/+0.1pF, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM1555C1HR50BA01D
7	1	BAT+	DNM	NON COMPONENT, BATTERY + PAD, SMD		
8	1	BAT-	DNM	NON COMPONENT, BATTERY - PAD, SMD		
9	1	BT1	BAT-HLD-001	BATTERY, HOLDER FOR CR2032 AND CR2025 BATTERIES, SMD	LINK	BAT-HLD-001
10	1	BZ1	HCS0503B	ACOUSTIC, BUZZER, 3V, -40DEGC/+85DEGC, SMD	CHANGZHOU TIANYIN	HCS0503B
11	1	C1	DNM	CAPACITOR, CERAMIC X5R, 2.2uF, 10V, -20%/+20%, -55DEGC/+85DEGC, 0603, SMD	MURATA	GRM188R61A225ME34D
12	7	C2 C3 C4 C6 C8 C9 C12	100nF	CAPACITOR, CERAMIC X7R, 100nF, 6.3V, -10%/+10%, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM155R70J104KA01D
13	1	C5	22uF	CAPACITOR, CERAMIC X5R, 22uF, 4V, -20%/+20%, -55DEGC/+85DEGC, 0603, SMD	MURATA	GRM188R60G226MEA0D
14	1	C7	10uF	CAPACITOR, CERAMIC X5R, 10uF, 6.3V, -20%/+20%, -55DEGC/+85DEGC, 0603, SMD	MURATA	GRM188R60J106ME47D
15	2	C14 C15	12pF	CAPACITOR, CERAMIC COG/NP0, 12pF, 50V, -5%/+5%, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM1555C1H120JA01D
16	1	C16	1uF	CAPACITOR, CERAMIC X5R, 1uF, 10V, -10%/+10%, -55DEGC/+85DEGC, 0402, SMD	MURATA	GRM155R61A105KE15D
17	9	C19 C20 C21 C22 C23 C24 C25 C27 C28	100nF	CAPACITOR, CERAMIC X5R, 100nF, 10V, -10%/+10%, -55DEGC/+85DEGC, 0201, SMD	MANUFACTURER SELECTION	CAPACITOR_0201_100nF_X5R_1_+/-10%_10V
18	1	C26	10nF	CAPACITOR, CERAMIC X5R, 10nF, 10V, -10%/+10%, -55DEGC/+125DEGC, 0201, SMD	MURATA	GRM033R71A103KA01D
19	1	C29	DNM	CAPACITOR, DO NOT MOUNT	DO NOT MOUNT	DNM
20	2	C32 C33	15pF	CAPACITOR, CERAMIC, 15pF, 50V, -5%/+5%, -55DEGC/+125DEGC, 0201, SMD	MURATA	GRM0332C1H150JA01D
21	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
22	1	CR3	LPL296-J2L2-25	OPTO, LED, GREEN COLOR, 562nm, 0.02A, 0.08W, 0603, SMD	OSRAM	LPL296-J2L2-25
23	6	FIDU1 FIDU2 FIDU3 FIDU4 FIDU5 FIDU6	DNM	FIDUCIAL MARK, ROUND 1.27MM		
24	1	FL1	BLM18HE152SN1	FILTER, EMI, 1500@100MHz, -55DEGC/+125DEGC, 0603, SMD	MURATA	BLM18HE152SN1D
25	1	J1	MS-156HF	CONNECTOR COAX RF, STRAIGHT, FEMALE, SMD	HIROSE	MS-156HF
26	1	J2	LSS-110-01-F-DV-A-TR	CONNECTOR, HEADER, HI-SPEED SOCKET, FEMALE, STRAIGHT, 2 ROWS, 20 PINS, PITCH 0.635mm, SMD	SAMTEC	LSS-110-01-F-DV-A-TR
27	1	L1	10uH	INDUCTOR, CHIP, 10uH, -20%/+20%, 0.11A, -40DEGC/+85DEGC, 0805, SMD	TAIYO YUDEN	CKS2125100M-T
28	2	L2 L3	2.4nH	INDUCTOR, CHIP, 2.4nH, -0.3nH/+0.3nH, 0.3A, -55DEGC/+125DEGC, 0402, SMD	MURATA	LQG15HS2N4502D
29	1	P1	BB02-BS101-KA8-025B00	CONNECTOR, HEADER, MALE, 2 ROWS, 10 PINS, PITCH 1.27mm, SMD	GRADCONN	BB02-BS101-KA8-025B00
30	1	Q1	BC846B	TRANSISTOR, BIPOLAR NPN, 65V, 0.1A, 0.25W, SOT-23, SMD	NXP	BC846B,215
31	1	R1	100k	RESISTOR, THICK FILM, 100k, -5%/+5%, 0.063W, 50V, -55DEGC/+155DEGC, 0402, SMD	MANUFACTURER SELECTION	RESISTOR_0402_100k_+/-5%_50V_0.063W_M_+/-200PPM
32	7	R2 R3 R4 R5 R7 R17 R18	10k	RESISTOR, THICK FILM, 10k, -5%/+5%, 0.05W, 30V, -55DEGC/+125DEGC, 0201, SMD	MANUFACTURER SELECTION	RESISTOR_0201_10k_+/-5%_30V_0.05W_M_+/-200ppm
33	1	R6	200k	RESISTOR, THICK FILM, 200k, -1%/+1%, 0.05W, 30V, -55DEGC/+125DEGC, 0201, SMD	VISHAY DALE	CRCW0201200KFED
34	1	R8	5.1	RESISTOR, THICK FILM, 5R1, -5%/+5%, 0.05W, 25V, -55DEGC/+125DEGC, 0201, SMD	KAMAYA	RMCI205R1JPA
35	1	R9	2Meg	RESISTOR, THICK FILM, 2M, -1%/+1%, 0.063W, 50V, -55DEGC/+155DEGC, 0402, SMD	YAGEO	RC0402FR-072ML
36	1	R10	680	RESISTOR, THICK FILM, 680, -5%/+5%, 0.063W, 50V, -55DEGC/+155DEGC, 0402, SMD	MANUFACTURER SELECTION	RESISTOR_0402_680_+/-5%_50V_0.063W_M_+/-200PPM
37	3	R11 R31 R32	0	RESISTOR, THICK FILM, 0, -1%/+1%, 0.05W, 30V, -55DEGC/+155DEGC, 0201, SMD	Manufacturer selection	RESISTOR_0201_0_+/-1%_30V_0.05W_M_+/-100PPM
38	2	R16 R50	2.2k	RESISTOR, THICK FILM, 2K2, -5%/+5%, 0.05W, 30V, -55DEGC/+125DEGC, 0201, SMD	VISHAY	CRCW02012K20JNED
39	2	R21 R22	270	RESISTOR, THIN FILM, 270, -5%/+5%, 0.0625W, 50V, -55DEGC/+125DEGC, 0402, SMD	MANUFACTURER SELECTION	RESISTOR_0402_270_+/-1%_50V_0.063W_M_+/-200PPM
40	1	R23	DNM	RESISTOR, DO NOT MOUNT, 0402, SMD	DO NOT MOUNT	DNM
41	1	R27	150	RESISTOR, THICK FILM, 150, -5%/+5%, 0.063W, 50V, -55DEGC/+155DEGC, 0402, SMD	MANUFACTURER SELECTION	RESISTOR_0402_150_+/-5%_50V_0.063W_M_+/-200PPM
42	2	SW1 SW2	MTA2-WNC	SWITCH, TACT SWITCH, RIGHT ANGLE, 0.05A@12VDC, SMD	DIPTRONICS	MTA2-WNC-V-T/R
43	1	SW3	MK24-A	SWITCH, OTHER, REED SENSOR, SPST-NO, PULL-IN:23AT TO 50AT, 0.3A@60V, 0.3A, 60V, SMD	MEDER	MK24-A-3
44	1	U1	CQ26xx-7x7	IC, DIGITAL, TEXAS INSTRUMENTS CUSTOM 26xx, QFN48, SMD	TEXAS INSTRUMENTS	CC26xx_7x7_QFN48
45	1	U2	TSSA3159AYZPR	IC, ANALOG, SPDT SWITCH SINGLE CHANNEL 2:1 MULTIPLEXER/DEMULTIPLEXER, 4.5V TO 5.5V, DSBGA6, SMD	TEXAS INSTRUMENTS	TSSA3159AYZPR
46	1	U3	BMP280	IC, TRANSDUCER PRESSURE, 300 to 110 hPa, 1.71V TO 3.6V, LGA8, SMD	BOSCH	BMP280
47	1	U4	TMP007	IC, TRANSDUCER, INFRARED THERMOPILE SENSOR, 2.5V TO 5.5V, DSBGA8, SMD	TEXAS INSTRUMENTS	TMP007AIYZFR
48	1	U6	SPH0641LU4H	IC, DIGITAL, MICROPHONE WITH MULTIPLE PERFORMANCE MODE, 1.62V TO 3.6V, SMD	KNOWLES	SPH0641LU4H
49	1	U7	OPT3001	IC, ANALOG, OPT3001, S0N6, SMD	TEXAS INSTRUMENTS	OPT3001
50	1	U8	MPU-9250	IC, TRANSDUCER, 3-AXIS ACCELEROMETER, 3-AXIS GYROSCOPE, 2.4V TO 3.6V, QFN24, SMD	INVENSENSE	MPU-9250
51	1	U9	HDC1000YPA	IC, TRANSDUCER, LOW POWER, HIGH ACCURACY DIGITAL HUMIDITY SENSOR WITH INTEGRATED TEMPERATURE SENSOR, 2.7V TO 5.5V, DSBGA8, SMD	TEXAS INSTRUMENTS	HDC1000YPAR
52	1	U10	W25X40CLUXIG	IC, MEMORY, 4M-BIT SERIAL FLASH MEMORY, 2.3V TO 3.6V, US0N8, SMD	WINBOND	W25X40CLUXIG
53	1	U11	DNM	IC, DO NOT MOUNT	DO NOT MOUNT	DNM
54	1	Y1	32.768kHz	CRYSTAL, RESONATOR, 32.768kHz, -20PPM/+20PPM, -40DEGC/+85DEGC, SMD	EPSON	FC-135 32.7680KA-AG0
55	1	Y2	24MHz	CRYSTAL, CRYSTAL OSCILLATOR, 24MHz, -15PPM/DEGC/+15PPM/DEGC, -40DEGC/+85DEGC, SMD	EPSON	TSX-3225 24.0000MFX15-AC3

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