

Bill of Materials

TI DESIGNS

TIDC-CC2650RC

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint	Note
1	1	BAT+	BAT+	Spring Battery connector, BATTERY +, custom		custom			
2	1	BAT-	BAT-	Spring Battery connector, BATTERY -, custom		custom			
3	1	CT12	0.8pF	CAPACITOR, CERAMIC COG/NPO, 0.8pF, 50V, -0.05pF/+0.05pF, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM1555C1HR80WA01D	0402		
4	1	BZ1	HCS0503B	ACOUSTIC BUZZER, 3V, -40DEGC/+85DEGC, SMD	CHANGZHOU TIANYIN	HCS0503B			
5	13	C3 C4 C5 C7 C9 C10 C20	100nF	CAPACITOR, CERAMIC X7R, 100nF, 6.3V, -10%/+10%, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM155R70J104KA01D	0402		
6	2	C6 C8	10uF	CAPACITOR, CERAMIC X5R, 10uF, 6.3V, -20%/+20%, -55DEGC/+85DEGC, 0603, SMD	MURATA	GRM188R60J106ME47D	0603		
7	3	C11 C13 C21	1pF	CAPACITOR, CERAMIC COG/NPO, 1pF, 50V, -0.25pF/+0.25pF, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM1555C1H1R0CA01D	0402		
8	2	C14 C31	15pF	CAPACITOR, CERAMIC COG/NPO, 15pF, 50V, -5%/+5%, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM1555C1H150JA01D	0402		
9	1	C15	0.4pF	CAPACITOR, CERAMIC COG/NPO, 0.4pF, 50V, -0.05pF/+0.05pF, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM1555C1HR40WA01D	0402		
10	2	C17 C18	12pF	CAPACITOR, CERAMIC COG/NPO, 12pF, 50V, -5%/+5%, -55DEGC/+125DEGC, 0402, SMD	MANUFACTURER SELECTION	CAPACITOR_0402_12pF_COG/NPO_M +/-5% 50V	0402		
11	1	C19	1uF	CAPACITOR, CERAMIC, 1uF, -20%/+80%, Y5V, 6.3V, 0402, SMD	MURATA	GRM155F50J105ZE01D	0402		
12	1	C22	100uF	CAPACITOR, ALUMINUM, 100uF, 10V, -20%/+20%, -40DEGC/+85DEGC, RADIAL, SMD	PANASONIC INDUSTRIAL	EEE1AA101WR		RADIAL	
13	2	C41 C51	15nF	CAPACITOR, CERAMIC X7R, 15nF, 16V, -5%/+5%, -55DEGC/+125DEGC, 0402, SMD	MANUFACTURER SELECTION	CAPACITOR_0402_15nF_X7R_M +/-5% 16V	0402		
14	1	C62	10pF	CAPACITOR, CERAMIC COG/NPO, 10pF, 50V, -5%/+5%, -55DEGC/+125DEGC, 0402, SMD	MANUFACTURER SELECTION	CAPACITOR_0402_10pF_COG/NPO_M +/-5% 50V	0402		
15	1	CR1	APHB1608SGEC	OPTO, LED, BI-COLOR, GREEN/RED, 565nm/625nm, 2.2V/2V, 0.025A/0.03A, 0.062W/0.075W, SMD	KINGBRIGHT	APHB1608SGEC		LED APHB1608SGECN	
16	1	D1	IR333-A	OPTO, LED, IR, 940nm, 0.1A, 0.15W, diameter 5MM,PTH, case T1-3/4,Horizontal mounting(right angle) , smd pad	KODENSHI	OPES694A		IR LED 5MM 4MOD1106 SMT	
17	1	FL1	BLM18HE152SN1	FILTER, EMI, 1500@100MHz, -55DEGC/+125DEGC, 0603, SMD	MURATA	BLM18HE152SN1D	0603		
18	1	J2	LSS-110-01-F-DV-A-T	CONNECTOR, HEADER, HI-SPEED SOCKET, FEMALE, STRAIGHT, 2 ROWS,20 PINS, PITCH 0.635mm, SMD	SAMTEC	LSS-110-01-F-DV-A-TR			
19	1	L1	10uH	INDUCTOR, CHIP, 10uH, -20%/+20%, 0.11A, -40DEGC/+85DEGC, 0805, SMD	TAIYO YUDEN	CKS2125100M-T	0805		
20	2	L11 L21	2.4nH	INDUCTOR, CHIP, 2.4nH, -0.3nH/+0.3nH, 0.3A, -55DEGC/+125DEGC, 0402, SMD	MURATA	LOG15HN2N4S02D	0402		
21	2	L12 L13	2nH	INDUCTOR, CHIP, 2nH, -0.3nH/+0.3nH, 0.3A, -55DEGC/+125DEGC, 0402, SMD	MURATA	LOG15HS2N0S02D	0402		
22	1	P1	BB02-BS101-KA8-025	CONNECTOR, HEADER, MALE, STRAIGHT, 10 PINS, 2 ROWS, PITCH 1.27mm, SMD	GRADCONN	BB02-BS101-KA8-025B00			
23	2	Q1 Q3	MMBT4401L	TRANSISTOR, BIPOLAR NPN, 40V, 0.6A, 0.3W, SOT23-3, SMD	ON SEMICONDUCTOR	MMBT4401LT1G		SOT23-3	
24	1	Q2	S2323DS	TRANSISTOR, MOSFET P-CHANNEL, -20V, -3.7A, 0.75W, SOT23-3, SMD	VISHAY	S2323DS-T1-E3		SOT23-3	
25	1	R1	100k	RESISTOR, THICK FILM, 100k, -1%/+1%, 0.063W, 50V, -55DEGC/+155DEGC, 0402, SMD	MANUFACTURER SELECTION	RESISTOR_0402_100k +/-1% 50V 0.063W_M +/-100PPM	0402		
26	1	R2	2Meg	RESISTOR, THICK FILM, 2M, -1%/+1%, 0.063W, 50V, -55DEGC/+155DEGC, 0402, SMD	YAGEO	RC0402FR-072M	0402		
27	4	R3 R4 R5 R6	2.2k	RESISTOR NETWORK, CHIP ARRAY - 4 RESISTORS, 2.2k, -5%/+5%, 0.031W, 50V, -55DEGC/+155DEGC, SMD	PANASONIC INDUSTRIAL	EXBNV222JX			
28	1	R7	200k	RESISTOR, THICK FILM, 200k, -5%/+5%, 0.063W, 50V, -55DEGC/+155DEGC, 0402, SMD	MANUFACTURER SELECTION	RESISTOR_0402_200k +/-5% 50V 0.063W_M +/-200PPM	0402		
29	1	R8	5.6	RESISTOR, THICK FILM, 5.6, -5%/+5%, 0.063W, 50V, -55DEGC/+155DEGC, 0402, SMD	MANUFACTURER SELECTION	RESISTOR_0402_5.6 +/-5% 50V 0.063W_M +/-200PPM	0402		
30	5	R9 R15 R16 R17 R18	10k	RESISTOR, THICK FILM, 10k, -5%/+5%, 0.063W, 50V, -55DEGC/+155DEGC, 0402, SMD	MANUFACTURER SELECTION	RESISTOR_0402_10k +/-5% 50V 0.063W_M +/-200PPM	0402		
31	1	R10	2.2	RESISTOR, THICK FILM, 2.2, -5%/+5%, 0.25W, 200V, -55DEGC/+155DEGC, 1206, SMD	MANUFACTURER SELECTION	RESISTOR_1206_2.2 +/-5% 200V 0.25W_M +/-200PPM	1206		
32	1	R11	1k	RESISTOR, THICK FILM, 1k, -1%/+1%, 0.1W, 50V, -55DEGC/+155DEGC, 0402, SMD	PANASONIC INDUSTRIAL	ERJ2RKF1001X	0402		
33	1	R20	0	RESISTOR, JUMPER, -55DEGC/+155DEGC, 0402, SMD	KOA SPEER	RK73Z1ETTP	0402		
34	1	R13	180	RESISTOR, THICK FILM, 180, -5%/+5%, 0.1W, 75V, -55DEGC/+155DEGC, 0603, SMD	MANUFACTURER SELECTION	RESISTOR_0603_180 +/-5% 75V 0.1W_M +/-200PPM	0603		
35	1	R14	150	RESISTOR, THICK FILM, 150, -5%/+5%, 0.1W, 75V, -55DEGC/+155DEGC, 0603, SMD	MANUFACTURER SELECTION	RESISTOR_0603_150 +/-5% 75V 0.1W_M +/-200PPM	0603		
36	1	R19	2.2k	RESISTOR, THICK FILM, 2.2k, -5%/+5%, 0.063W, 50V, -55DEGC/+155DEGC, 0402, SMD	MANUFACTURER SELECTION	RESISTOR_0402_2.2k +/-5% 50V 0.063W_M +/-200ppm	0402		
37	1	U1	CC2650-7x7	IC, DIGITAL, TEXAS INSTRUMENTS CUSTOM 26xx, QFN48, SMD	TEXAS INSTRUMENTS	CC2650F128RGZR		QFN48	
38	1	U2	TPS22910AYZV	IC, ANALOG, LOW ON-RESISTANCE LOAD SWITCH WITH CONTROLLED TURN-ON, ENABLE/ACTIVE LOW, 1.4V TO	TEXAS INSTRUMENTS	TPS22910AYZVR		DSBG44	
39	2	U4 U5	SN74LV164A	IC, DIGITAL, LOGIC, 8 BIT PARALLEL OUT SERIAL SHIFT REGISTER, 2V TO 5.5V, TSSOP14, SMD	TEXAS INSTRUMENTS	SN74LV164APWR		TSSOP14	
40	1	U6	MPU-9250	IC, TRANSDUCER, 3-AXIS ACCELEROMETER, 3-AXIS GYROSCOPE, 2.4V TO 3.6V, QFN24, SMD	INVENSENSE	MPU-9250		QFN24	
41	1	U8	SPH0641LM4H-1	IC, DIGITAL, MICROPHONE WITH MULTIPLE PERFORMANCE MODE, 1.62V TO 3.6V, SMD	KNOWLES	SPH0641LM4H-1			
42	1	U9	MX25R8035F	IC, MEMORY, ULTRA LOW POWER, 8M-BIT CMOS MXSMIO (SERIAL MULTIO)FLASH MEMORY, 1.65V-3.6V, USON-8, SMD	Macronix	MX25R8035FZUILO		USON-8	
43	1	Y1	32.768kHz	CRYSTAL, RESONATOR, 32.768kHz, -20PPM/+20PPM, -40DEGC/+85DEGC, SMD	EPSON	FC-135 32.7680KA-AG0			
44	1	Y2	24MHz	CRYSTAL, OSCILATOR, 24MHz, -40DEGC/+85DEGC, SMD	Epson Toyocom	TSX-3225 24MHz			

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