



Bill of Materials

TI DESIGNS

TIDA-01377, 1 SENSE COIL CONFIGURATION

Item	Qty	Reference	Value	Manufacturer	Manufacturer Part Number	Part Description	Digikey Part Number	Comments
1	1	XT1	32.768 KHZ	CITIZEN FINEDEVICE CO LTD (VA)	CMR200T32768DZBT	CRYSTAL 32.768 KHZ 6PF SMD	300-8341-1-ND	None
2	2	C37,C40	12pF	YAGEO (VA)	CC0603JRNPO98N120	CAP CER 12PF 50V 5% NPO 0603	311-1059-1-ND	None
3	7	C1, C12, C14, C15, C52, C54, C55	DNP	DNP	DNP	DNP	DNP	None
4	9	C23,C25,C27,C28,C30,C31,C33,C36,C43	100nF	YAGEO (VA)	CC0603ZRY5V98B104	CAP CER 0.1UF 50V Y5V 0603	311-1343-1-ND	None
5	1	C53	0.1uF	YAGEO (VA)	CC0603ZRY5V98B104	CAP CER 0.1UF 50V Y5V 0603	311-1343-1-ND	None
6	2	C38,C44	0.47uF	YAGEO (VA)	CC0603KRX7R78B474	CAP CER 0.47UF 16V 10% X7R 0603	311-1428-1-ND	None
7	8	C22,C24,C26,C29,C32,C34,C35,C49	4.7uF	YAGEO (VA)	CC0603KRX5R68B475	CAP CER 4.7UF 10V 10% X5R 0603	311-1455-1-ND	None
8	4	DRV-I1,DRV_U57,HD1, LDC_PWR	None	3M	961102-6404-AR	CONN HEADER VERT SGL 2POS GOLD	3M9447-ND	None
9	7	JP4,JP5,JP6,JP7,JP8,JP9,JP10,	None	3M	961103-6404-AR	CONN HEADER VERT SGL 3POS GOLD	3M9448-ND	None
10	3	DGND,DVCC,LANLG,LDIG	None	3M	961104-6404-AR	CONN HEADER VERT SGL 4POS GOLD	3M9449-ND	None
11	3	SV1	None	3M	961102-6404-AR	CONN HEADER VERT SGL 2POS GOLD	3M9447-ND	None
12	9	R1, R4, R15, R16, R17, R45, R47, R64, R66	DNP	DNP	DNP	DNP	DNP	None
13	3	R11, R12, R13	0	STACKPOLE ELECTRONICS INC (VA)	RMCF0603ZTOR00	RES SMD 0.0OHM JUMPER 1/10W 0603	RMCF0603ZTOR00CT-ND	None
14	2	LED_1,LED_5	Orange	ROHM SEMICONDUCTOR	SLR-342DC3F	LED 3.1MM 610NM ORANGE TRANSP	511-1245-ND	None
15	2	LED_A,LED_B, LED3, LED6	Red	ROHM SEMICONDUCTOR	SLR-342VC3F	LED 3.1MM 650NM RED TRANSPARENT	511-1249-ND	None
16	2	LED_2,LED_4	Yellow	ROHM SEMICONDUCTOR	SLR-342YC3F	LED 3.1MM 585NM YELLOW TRANSP	511-1251-ND	None
17	2	D26,D27	DNP	DNP	DNP	DNP	DNP	None
18	1	JTAG	None	3M	N2514-6002-RB	CONN HEADER 14 POS STRGHT GOLD	MHC14K-ND	None
19	3	DBTN1,DBTN2,RESET	None	PANASONIC ELECTRONIC COMPONENTS (VA)	EVQ-11L05R	SWITCH TACTILE SPST-NO 0.02A 15V	P8079SCT-ND	None
20	8	R54,R55,R56,R57,R58,R59,R60,R61	100	STACKPOLE ELECTRONICS INC (VA)	RMCF0603JT100R	RES 100 OHM 1/10W 5% 0603 SMD	RMCF0603JT100RCT-ND	None
21	1	R68	DNP	DNP	DNP	DNP	DNP	None
22	1	R48	330	STACKPOLE ELECTRONICS INC (VA)	RMCF0603JT330R	RES 330 OHM 1/10W 5% 0603 SMD	RMCF0603JT330RCT-ND	None
23	1	R51	47K	STACKPOLE ELECTRONICS INC (VA)	RMCF0603JT47K0	RES 47K OHM 1/10W 5% 0603 SMD	RMCF0603JT47K0CT-ND	None
24	3	R42,R43,R46	560k	STACKPOLE ELECTRONICS INC (VA)	RMCF0805FT560K	RES TF 560K OHM 1% 0.125W 0805	RMCF0805FT560KCT-ND	None
25	2	R50,R53	100K	STACKPOLE ELECTRONICS INC (VA)	RMCF0805JT100K	RES 100K OHM 1/8W 5% 0805 SMD	RMCF0805JT100KCT-ND	None
26	1	R36	10R	STACKPOLE ELECTRONICS INC (VA)	RMCF0805JT10R0	RES 10 OHM 1/8W 5% 0805 SMD	RMCF0805JT10R0CT-ND	None
27	1	LCD1	TI_160SEG_LCD	ADKOM	Fh-1152p	Custom LCD		None
28	1	MSP430F67791A	MSP430F67791A1PEU	TEXAS INSTRUMENTS	MSP430F67791A1PEU	IC MCU 16BIT 512KB FLASH 128LQFP	MSP430F67791A1PEUR-ND	None
29	1	U58	DNP	DNP	DNP	DNP	DNP	None
30	2	U55,U56	DNP	DNP	DNP	DNP	DNP	None
31	2	U54,U57	DNP	DNP	DNP	DNP	DNP	None
32	1	LED7	DNP	DNP	DNP	DNP	DNP	None
33	1	C11	0.1uF	Murata Electronics North America	GRM155R71H104ME14D	CAP CER 0.1UF 50V X7R 0402	490-10701-1-ND	None
34	1	C10	1uF	KEMET	C0603C105K4PACTU	CAP CER 1UF 16V X5R 0603	399-5090-1-ND	None
35	1	R8	DNP	DNP	DNP	DNP	DNP	None
36	1	U1	LDC0851	TEXAS INSTRUMENTS	LDC0851HDSGT	INDUCTIVE PROXIMITY SWITCH 8WSON	296-43798-1-ND	None
37	1	D44	PMLL4148	Nexperia USA Inc.	PMLL4148L,115	DIODE SW GPP 75V 200MA SOD80C	568-1749-1-ND	None
38	1	C9	27pF	Kemet	C0603C270J5GACTU	CAP CER 27PF 50V C0G/NP0 0603	399-1054-1-ND	None
39		R9	49.9k	Yageo	RT0603DRE0749K9L	RES SMD 49.9KOHM 0.5% 1/10W 0603	311-2597-1-ND	None
40	1	R10	44.2k	Yageo	RT0603DRE0744K2L	RES SMD 44.2KOHM 0.5% 1/10W 0603	311-2584-1-ND	Please note that this resistor value would be different for the one sense coil configuration.
41	1	AD_SEL	0	Stackpole Electronics Inc.	RMCF0805ZTOR00	0-Ohm Resistor	RMCF0805ZTOR00CT-ND	By default, place the resistor between pads 1 and 2.
42	1	EN_SEL	0	Stackpole Electronics Inc.	RMCF0805ZTOR00	0-Ohm Resistor	RMCF0805ZTOR00CT-ND	By default, place the resistor between pads 2 and 3.

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43	1	LANLG	DNP	DNP	DNP	DNP	DNP	None
44	2	C5, C80	DNP	DNP	DNP	DNP	DNP	None