

Bill of Materials

TI DESIGNS

TIDM-NFC-SDM

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint	Note
1	1	J1		Connector, USB, (Type A), PCB R/A (Male)	Conec	33UBARS1-04PN1			
2	1	J2		Header (JTAG), 2x6 PIN, (0.100 inch STR)	Molex	10-89-1121	WM6812-ND		
3	1	S1		Switch, Reset, 1P1T, (20mA)	Panasonic	EVQ-PAC04M	P8006S-ND		
4	1	Y1	13.56 MHz	Crystal 13.56 MHz, (Xtal Load Cap = 18pF), (Ckt Caps = 27 pF)	Crystek	017486 Rev A			
5	1	C40	4.7 uF	Capacitor, 4.7uF, Tantalum, +/-10%, X5R, (10V)	Kemet	T491A475M010AS	399-1562-2-ND	1206	
6	6	C3, 5, 7, 9, 25, 30	2.2 uF	Capacitor, 2.2uF, Ceramic, +/-10%, X5R, (10V), (0603)	Kemet	C0603C225K8PACTU	399-4911-2-ND	0603	
7	3	C31, 41, 42	0.1 uF	Capacitor, 0.1uF, X7R, (25V), (0603)	Panasonic	ECJ-1VB1E104K	PCC2277TR-ND	0603	
8	6	C4, 6, 8, 10, 26, 33	0.01 uF	Capacitor, 0.01uF, (or 10nF), X7R, (25V), (0603)	Panasonic	ECJ-1VB1E103K	PCC1763TR-ND	0603	
9	2	C11, 12	1500 pF	Capacitor, 1500pF, +/-10%, X7R, (50V), (0603)	Panasonic	ECJ-1VB1H152K	PCC1774TR-ND	0603	
10	2	C13, 14	1200 pF	Capacitor, 1200pF, +/-10%, X7R, (50V), (0603)	Panasonic	ECJ-1VB1H122K	PCC1773TR-ND	0603	
11	2	C15, C18	680 pF	Capacitor, 680pF, +/- 5%, NPO, (50V), (0603)	Panasonic	ECJ-1VC1H681J	PCC2149TR-ND	0603	
12	1	C17	220 pF	Capacitor, 220pF, +/- 5%, NPO, (50V), (0603)	Panasonic	ECJ-1VC1H221J	PCC221ACVTR-ND	0603	
13	1	C19	100 pF	Capacitor, 100pF, +/- 5%, NPO, (50V), (0603)	Panasonic	ECJ-1VC1H101J	PCC101ACVTR-ND	0603	
14	1	C24	56 pF	Capacitor, 56pF, +/- 5%, NPO, (50V), (0603)	Panasonic	ECJ-1VC1H560J	PCC560ACVTR-ND	0603	
15	1	C21	47 pF	Capacitor, 47pF, +/- 5%, NPO, (50V), (0603)	Panasonic	ECJ-1VC1H470J	PCC470ACVTR-ND	0603	
16	3	C1, 2, 20	27 pF	Capacitor, 27pF, +/- 5%, NPO, (50V), (0603)	Panasonic	ECJ-1VC1H220J	PCC220ACVTR-ND	0603	
17	2	C22, 27	10 pF	Capacitor, 10pF, +/- 5%, NPO, (50V), (0603)	Panasonic	ECJ-1VC1H100D	PCC100CVCT-ND	0603	
18	1	L1	150 nH	Inductor, 150nH, (Q = 45), (I _{dc} = 580 mA), (1008HS)	Coilcraft	1008CS-151XJLB		1008	
19	1	L2	330 nH	Inductor, 330nH, (Q = 45), (I _{dc} = 450 mA), (1008HS)	Coilcraft	1008CS-331XJLB		1008	
20	1	R11	47K ohms	Resistor, 47K (0.1W), (0603)	Panasonic	ERJ-3GEYJ473V	P47KGTR-ND	0603	
21	5	R13, 14, 24, 30, 31	10K ohms	Resistor, 10K (0.1W), (0603)	Panasonic	ERJ-3GEYJ103V	P10KGTR-ND	0603	
22	4	R6, 25, 26, 27	1k ohms	Resistor, 1K (0.1W), (0603)	Panasonic	ERJ-3GEYJ102V	P1.0KGTR-ND	0603	
23	6	R15, 16, 17, 18, 19, 20	560 ohms	Resistor, 560 ohms (0.1W), (0603)	Panasonic	ERJ-3GEYJ561V	P560GTR-ND	0603	
24	1	R10	100 ohms	Resistor, 100 ohms (0.1W), (0603)	Panasonic	ERJ-3GEYJ101V	P100GTR-ND	0603	
25	1	R3, 4	0 ohms	Resistor, 0 ohms (0.1W), (0603)	Panasonic	ERJ-3GEYJ0R00V	P0.0GTR-ND	0603	
26	12	R212, 245, 450, 451, 452,	0 ohms	Resistor, 0 ohms (0.063W), (0402)	Panasonic	ERJ-2GEOR00X	P0.0JTR-ND	0402	
27	1	U1		CP2102, USB to UART, (-40 to 85 deg C), (28 pin QFN)	Silicon Labs	CP2102-GM	336-1160-ND		28-QFN
28	1	U2		MSP430F2370, (-40 to 85 deg C), (40 pin QFN)	Texas Inst	MSP430F2370 IRHA	296-21750-1-ND		40-VQFN
29	1	U3		TRF7970A, HF RFID Reader, (-40 to 110 deg C), (32 pin QFN)	Texas Inst	TRF7970ARHBT			32-VQFN
30	1	LED1 (PWR)		LED: water clear lense - Green (565nm), (2.1V @ 10mA)	LiteOn	LTST-C190GKT	160-1183-2-ND	0603	
31	1	LED2 (14443A)		LED: water clear lense - Red-Org (630nm), (2.0V @ 10mA)	LiteOn	LTST-C190EKT	160-1182-2-ND	0603	
32	1	LED3 (14443B)		LED: water clear lense - Yellow (585nm), (2.1V @ 10mA)	LiteOn	LTST-C190YKT	160-1184-2-ND	0603	
33	1	LED4 (15693)		LED: water clear lense - Red (660nm), (1.8V @ 10mA)	LiteOn	LTST-C190CKT	160-1181-2-ND	0603	
34	1	LED5 (Tag-It)		LED: water clear lense - Amber (610nm), (2.1V @ 10mA)	LiteOn	LTST-C190AKT	160-1180-2-ND	0603	
35	1	LED6 (User App)		LED: water clear lense - Red-Org (630nm), (2.0V @ 10mA)	LiteOn	LTST-C190EKT	160-1182-2-ND	0603	

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