

Bill of Materials

TI DESIGNS

TIDM-3PHMTR-TAMP-ESD

Line	Qty	Value	Digikey #	Description	Board Designator
1	1	24C02CSN	24LC02B-I/SN-ND	IC EEPROM 2KBIT 400KHZ 8SOIC	IC1
2	1	32.768 KHZ	300-8341-1-ND	CRYSTAL 32.768 KHZ 6PF SMD	XT1
3	2	12pF	311-1059-1-ND	CAP CER 12PF 50V 5% NPO 0603	C37 C40
4	7	15nF	311-1143-1-ND	CAP CER 0.015UF 50V 10% X7R 0805	C8 C10 C12 C15 C17 C19 C21
5	12	100nF	311-1343-1-ND	CAP CER 0.1UF 50V Y5V 0603	C23 C25 C27 C28 C30 C31 C33 C36 C43
6	7	0.1uF	311-1343-1-ND	CAP CER 0.1UF 50V Y5V 0603	C41 C42 C52 C53 C54 C57 C59
7	2	0.47uF	311-1428-1-ND	CAP CER 0.47UF 16V 10% X7R 0603	C38 C44
8	8	4.7uF	311-1455-1-ND	CAP CER 4.7UF 10V 10% X5R 0603	C22 C24 C26 C29 C32 C34 C35 C51 C49
9	14	47pF	311-1484-1-ND	CAP CER 47PF 500V 5% NPO 0805	C1 C2 C3 C4 C5 C6 C7 C9 C11 C13 C14 C16 C18 C20
10	1	10uF	399-3685-1-ND	CAP TANT 10UF 6.3V 20% 1206	C55 C56 C58
11	1	4.7uF/400V	399-6097-ND	CAP ALUM 4.7UF 400V 20% RADIAL	C100
12	8	2x1 0.1 Header	3M9447-ND	CONN HEADER VERT SGL 2POS GOLD	ACT JP2 JP11 JP12 REACT RX_EN TX_EN HD1
13	8	3x1 0.1 Header	3M9448-ND	CONN HEADER VERT SGL 3POS GOLD	JP3 JP4 JP5 JP6 JP7 JP8 JP9 JP10 AUXVCC3
14	8	5x1 0.1 Header	961105-6404-AR	CONN HEADER VERT SGL 5POS GOLD	SV2
15	3	4x1 0.1 Header	3M9449-ND	CONN HEADER VERT SGL 4POS GOLD	DGND DVCCs
16	1	2x2 0.1 Header	A106735-ND	CONN HEADER VERT DUAL 4POS GOLD	SV1
17	8	0Ω	RMCF0805ZT0R00CT-ND	RES 0.0 OHM 1/8W 0805 SMD	R/L7 R/L8 R/L9 R/L10 R/L11 R/L12 R/L13 R/L14
18	4	S20K275	495-1417-ND	VARISTOR 275V RMS 20MM RADIAL	R1 R2 R3
19	2	Orange	511-1245-ND	LED 3.1MM 610NM ORANGE TRANSP	LED_3 LED_4
20	2	Green	511-1247-ND	LED 3.1MM 563NM GREEN TRANSP	LED_1 LED_6
21	2	Red	511-1249-ND	LED 3.1MM 650NM RED TRANSPARENT	LED_ACT LED_REACT
22	2	Yellow	511-1251-ND	LED 3.1MM 585NM YELLOW TRANSP	LED_2 LED_5
23	32	PMLL4148	568-1749-1-ND	DIODE SW GPP 75V 200MA SOD80C	D1 D2 D3 D4 D5 D6 D7 D8 D9 D10
24	2	BC857BSMD	568-6094-1-ND	TRANSISTOR PNP 45V 100MA SOT23	D11 D12 D13 D14 D15 D16
25	1	TFBS4711-TT1	751-1068-1-ND	TXRX IRDA 115.2KBIT 1.9MM 6-SMD	D28 D29 D30 D31 D32 D33 D34 D35
26	1	RS-232 Connector	A32036-ND	CONN D-SUB RCPT STR 9POS 30GOLD	D36 D37 D38 D39 D40 D41 D42 D43 D44
27	4	LL103A	LLSD103ADICT-ND	DIODE SCHOTTKY 40v 350MW MINIMELF	D24 D25 D26 D27
28	1	JTAG	MHC14K-ND	CONN HEADER 14 POS STRGHT GOLD	JTAG
29	6	EXCML20A	P10191CT-ND	BEAD CORE 4A 100 MHZ 0805 SMD	L1 L3 L5 L6
30	1	150uF	P14374-ND	CAP ALUM 150UF 10V 20% RADIAL	C101
31	4	Switch	P8079SCT-ND	SWITCH TACTILE SPST-NO 0.02A 15V	BTN1 BTN2 BTN3 BTN4 RESET
32	2	TIL191	PS2501-1A-ND	OPTOCOUPLER 1CH TRANS 4-DIP	OPTO1 OPTO2

33	2	PS8802	PS8802-1-F3-AXCT-ND	OPTOISOLATOR ANALOG HS OUT 8SSOP	U1 U2
34	1	68Ω	RMCF0603FT68R0CT-ND	RES TF 68 OHM 1% 0.1W 0603	R65
35	8	100Ω	RMCF0603JT100RCT-ND	RES 100 OHM 1/10W 5% 0603 SMD	R54 R55 R56 R57 R58 R59 R60 R61
36	2	1kΩ	RMCF0603JT1K00CT-ND	RES 1K OHM 1/10W 5% 0603 SMD	R62 R68 R72 R78
37	1	1.5kΩ	RMCF0603JT1K50CT-ND	RES 1.5K OHM 1/10W 5% 0603 SMD	R67
38	1	220Ω	RMCF0603JT220RCT-ND	RES 220 OHM 1/10W 5% 0603 SMD	R64
39	2	2.2kΩ	RMCF0603JT2K20CT-ND	RES 2.2K OHM 1/10W 5% 0603 SMD	R69 R71
40	1	330Ω	RMCF0603JT330RCT-ND	RES 330 OHM 1/10W 5% 0603 SMD	R48
41	1	47KΩ	RMCF0603JT47K0CT-ND	RES 47K OHM 1/10W 5% 0603 SMD	R51
42	1	47Ω	RMCF0603JT47R0CT-ND	RES 47 OHM 1/10W 5% 0603 SMD	R47
					R73 R74 R75 R76 R77 R79
					R80 R81 R82 R83 R84 R85
43	18	0Ω	RMCF0603ZT0R00CT-ND	RES 0.0 OHM 1/10W 0603 SMD	R86 R87 R88 R89 R90 R91
44	5	560kΩ	RMCF0805FT560KCT-ND	RES TF 560K OHM 1% 0.125W 0805	R42 R43 R46
45	4	100KΩ	RMCF0805JT100KCT-ND	RES 100K OHM 1/8W 5% 0805 SMD	R49 R50 R52 R53
46	3	10kΩ	RMCF0805JT10K0CT-ND	RES 10K OHM 1/8W 5% 0805 SMD	R40 R41 R63
47	1	10Ω	RMCF0805JT10R0CT-ND	RES 10 OHM 1/8W 5% 0805 SMD	R36
					R14 R16 R18 R24 R25 R26
48	14	1kΩ	RMCF0805JT1K00CT-ND	RES 1.0K OHM 1/8W 5% 0805 SMD	R27 R28 R29 R30 R31 R32 R33 R34
49	3	2.37kΩ	RMCF0805FT2K37CT-ND	RES 2.37K OHM 1/8W 1% 0805 SMD	R15 R17 R19
50	9	330kΩ	RMCF0805JT330KCT-ND	RES 330K OHM 1/8W 5% 0805 SMD	R5 R6 R7 R8 R9 R10 R11 R12 R13
51	4	13Ω	RMCF0805FT13R0CT-ND	RES 13 OHM 1/8W 1% 0805 SMD	R20 R21 R22 R23
52	1	0Ω	RMCF0805ZT0R00CT-ND	RES 0.0 OHM 1/8W 0805 SMD	R4 R39 R99 R100 R101 R102 R103
53	2	EM Connector	Must Order From Samtec	CONN HEADER 20POS 1.27MM GLD SMD	RF1 RF2
54	1	SMAJ5.0ABCT	SMAJ5.0ABCT-ND	DIODE TVS 5.0V 400W UNI 5% SMD	ZD3
55	4	SMAJ5.0CA	SMAJ5.0CABCT-ND	DIODE TVS 5.0V 400W BI 5% SMD	TVS1 TVS2 TVS3 TVS4
56	1	SL127L6TH		Mill-Max 850-10-006-20-001000	EZ-RF
57	1	TI_160SEG_LCD	Custom	Custom LCDs for TI EVM	LCD1
58		DNP			R44 R45
59		DNP			C63
60	1	DNP			R66
61	1	DNP			R70
62	1	CUL_XR	102-1801-ND	Isolated Power Supply, 3.3 V, 700 mA	U\$1
63	1	MSP430F67791AIPEU	From Texas Instruments	MSP430F67791A IPEU metering SoC	MSP430F67791A
				CAP Electrolytic 100uF 100V 20%,	
64	1	100uF	1189-1020-ND	10mm(diameter) x 25 mm(height), ZL Rubycon, 5 mm spacing	C102
65	3	0.22uF	495-2320-ND	CAP poly 0.22uF 305VAC/630VDC X2 10% (B32922C3224M)	C39,C46,C50
66	1	2.2uF	445-4497-2-ND	CAP Ceramic 2.2uF 100V X7R 1210	C48
67	1	0.01uF	445-5100-1-ND	CAP CER 10000PF 25V 10% X7R 0603	C45
68	1	47uF	587-1383-1-ND	CAP Ceramic 47uF 10V X5R 1210	C62
69	1	0.1uF	399-1095-1-ND	CAP Ceramic 0.1uF 10V X5R 0603	C47
70	1	.056uF	490-6433-1-ND	CAP Ceramic .056uF 25V X7R 10% 0603	C60
71	1	100pF	399-6841-1-ND	CAP Ceramic 100pF 25V NPO, 5% 0603	C61
72	1	B160	641-1107-1-ND	Diode Schottky 1A 60V B160 SMB	D23
73	3	48V	1N4757ADJCT-ND	Diode Zener 51V 1W 1N4757A D0-41	D17,D19,D21
74	3	1N4007	1N4007FSCT-ND	DIODE GEN PURPOSE 1000V 1A DO41	D18,D20,22
75	1	1mH	<u>Must order from CoilCraft (MSS1038-105)</u>	Inductor, SMT, MSS1038-105 (.402 x .394 inch)	L7
76	1	1MΩ	A102234CT-ND	RES 1M OHM 1/16W 1% 0603	R35,R38
77	1	33.2kΩ	RNCS0603BKE33K2CT-ND	RES 33.2K OHM 1/16W .1% 0603	R37

78	1	22.1k Ω	A102241CT-ND	RES 22.1K OHM 1/16W 1% 0603	R95
79	1	51.1 Ω	A102292TR-ND	RES 51.1 OHM 1/16W 1% 0603	R96
80	1	31.6k Ω	A102261DKR-ND	RES 31.6K OHM 1/16W 1% 0603	R97
81	1	10.0k Ω	A102331CT-ND	RES 10.0K OHM 1/16W 0.1% 0603	R98
82	3	100 Ω	P100W-2BK-ND	RES 100 OHM 2W 5% AXIAL	R92,R93,R94
83	1	TPS54060ADGQ	296-30339-5-ND	IC REG BUCK ADJ 0.5A 10MSOP	U3

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