

Bill of Materials

TI DESIGNS

TIDM-THDREADING

Item	Qty	Reference	Value	Manufacturer	Manufacturer Part Number	Part Description	Digikey Part Number
1	1	IC1	24C02CSN	MICROCHIP TECHNOLOGY	24LC02B-I/SN	IC EEPROM 2KBIT 400KHZ 8SOIC	24LC02B-I/SN-ND
2	1	XT1	32.768 KHZ	CITIZEN FINEDEVICE CO LTD (VA)	CMR200T32768DZBT	CRYSTAL 32.768 KHZ 6PF SMD	300-8341-1-ND
3	2	C37 C40	12pF	YAGEO (VA)	CC0603JRNPO9BN120	CAP CER 12PF 50V 5% NPO 0603	311-1059-1-ND
4	7	C8 C10 C12 C15 C17 C19 C21	15nF	YAGEO (VA)	CC0805KRX7R9BB153	CAP CER 0.015UF 50V 10% X7R 0805	311-1143-1-ND
5	12	C23 C25 C27 C28 C30 C31 C33 C36 C43	100nF	YAGEO (VA)	CC0603ZRY5V9BB104	CAP CER 0.1UF 50V Y5V 0603	311-1343-1-ND
6	7	C41 C42 C52 C53 C54 C57 C59	0.1uF	YAGEO (VA)	CC0603ZRY5V9BB104	CAP CER 0.1UF 50V Y5V 0603	311-1343-1-ND
7	2	C38 C44	0.47uF	YAGEO (VA)	CC0603KRX7R7BB474	CAP CER 0.47UF 16V 10% X7R 0603	311-1428-1-ND
8	8	C22 C24 C26 C29 C32 C34 C35 C51 C49	4.7uF	YAGEO (VA)	CC0603KRX5R6BB475	CAP CER 4.7UF 10V 10% X5R 0603	311-1455-1-ND
9	14	C1 C2 C3 C4 C5 C6 C7 C9 C11 C13 C14 C16 C18 C20	47pF	YAGEO (VA)	CC0805JRNPOBBN470	CAP CER 47PF 500V 5% NPO 0805	311-1484-1-ND
10	1	C55 C56 C58	10uF	KEMET (VA)	T491A106M006AT	CAP TANT 10UF 6.3V 20% 1206	399-3685-1-ND
11	1	C100	4.7uF/400V	KEMET	ESH475M400AH2AA	CAP ALUM 4.7UF 400V 20% RADIAL	399-6097-ND
12	8	ACT JP2 JP11 JP12 REACT RX_EN TX_EN HD1	2x1 0.1 Header	3M	961102-6404-AR	CONN HEADER VERT SGL 2POS GOLD	3M9447-ND
13	8	JP3 JP4 JP5 JP6 JP7 JP8 JP9 JP10 AUXVCC3	3x1 0.1 Header	3M	961103-6404-AR	CONN HEADER VERT SGL 3POS GOLD	3M9448-ND
14	8	SV2	5x1 0.1 Header	3M	961105-6404-AR	CONN HEADER VERT SGL 5POS GOLD	961105-6404-AR
15	3	DGND DVCCs	4x1 0.1 Header	3M	961104-6404-AR	CONN HEADER VERT SGL 4POS GOLD	3M9449-ND
16	1	SV1	2x2 0.1 Header	TE CONNECTIVITY AMP	825440-2	CONN HEADER VERT DUAL 4POS GOLD	A106735-ND
17	8	R/L7 R/L8 R/L9 R/L10 R/L11 R/L12 R/L13 R/L14	0Ω	STACKPOLE ELECTRONICS INC (VA)	RMCF0805ZT0R00	RES 0.0 OHM 1/8W 0805 SMD	RMCF0805ZT0R00CT-ND
18	4	R1 R2 R3	S20K275	EPCOS INC	S20K275	VARISTOR 275V RMS 20MM RADIAL	495-1417-ND
19	2	LED_3 LED_4	Orange	ROHM SEMICONDUCTOR	SLR-342DC3F	LED 3.1MM 610NM ORANGE TRANSP	511-1245-ND
20	2	LED_1 LED_6	Green	ROHM SEMICONDUCTOR	SLR-342MC3F	LED 3.1MM 563NM GREEN TRANSP	511-1247-ND
21	2	LED_ACT LED_REACT	Red	ROHM SEMICONDUCTOR	SLR-342VC3F	LED 3.1MM 650NM RED TRANSPARENT	511-1249-ND

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22	2	LED_2 LED_5	Yellow	ROHM SEMICONDUCTOR	SLR-342YC3F	LED 3.1MM 585NM YELLOW TRANSP	511-1251-ND
23	32	D1 D2 D3 D4 D5 D6 D7 D8 D9 D10 D11 D12 D13 D14 D15 D16 D28 D29 D30 D31 D32 D33 D34 D35 D36 D37 D38 D39 D40 D41 D42 D43 D44	PMLL4148	NXP SEMICONDUCTORS (VA)	PMLL4148L,115	DIODE SW GPP 75V 200MA SOD80C	568-1749-1-ND
24	2	Q1 Q2	BC857BSMD	NXP SEMICONDUCTORS (VA)	BC860B,215	TRANSISTOR PNP 45V 100MA SOT23	568-6094-1-ND
25	1	IRDA	TFBS4711-TT1	VISHAY SEMICONDUCTOR OPTO DIVISION (VA)	TFBS4711-TT1	TXRX IRDA 115.2KBIT 1.9MM 6- SMD	751-1068-1-ND
26	1	RS1	RS-232 Connector	TE CONNECTIVITY AMP	2-5747706-0	CONN D-SUB RCPT STR 9POS 30GOLD	A32036-ND
27	4	D24 D25 D26 D27	LL103A	DIODES INCORPORATED (VA)	LLSD103A-7	DIODE SCHOTTKY 40v 350MW MINIMELF	LLSD103ADICT-ND
28	1	JTAG	JTAG	3M	N2514-6002-RB	CONN HEADER 14 POS STRGHT GOLD	MHC14K-ND
29	6	L1 L3 L5 L6	EXCML20A	PANASONIC ELECTRONIC COMPONENTS (VA)	EXC-ML20A390U	BEAD CORE 4A 100 MHZ 0805 SMD	P10191CT-ND
30	1	C101	150uF	PANASONIC ELECTRONIC COMPONENTS	EEU-FR1A151	CAP ALUM 150UF 10V 20% RADIAL	P14374-ND
31	4	BTN1 BTN2 BTN3 BTN4 RESET	Switch	PANASONIC ELECTRONIC COMPONENTS (VA)	EVQ-11L05R	SWITCH TACTILE SPST-NO 0.02A 15V	P8079SCT-ND
32	2	OPTO1 OPTO2	TIL191	CEL CALIFORNIA EASTERN LABS	PS2501-1-A	OPTOCOUPLER 1CH TRANS 4-DIP	PS2501-1A-ND
33	2	U1 U2	PS8802	CEL CALIFORNIA EASTERN LABS (VA)	PS8802-1-F3-AX	OPTOISOLATOR ANALOG HS OUT	PS8802-1-F3-AXCT-ND
34	1	R65	68Ω	STACKPOLE ELECTRONICS INC (VA)	RMCF0603FT68R0	RES TF 68 OHM 1% 0.1W 0603	RMCF0603FT68R0CT-ND
35	8	R54 R55 R56 R57 R58 R59 R60 R61	100Ω	STACKPOLE ELECTRONICS INC (VA)	RMCF0603JT100R	RES 100 OHM 1/10W 5% 0603 SMD	RMCF0603JT100RCT-ND
36	2	R62 R68 R72 R78	1kΩ	STACKPOLE ELECTRONICS INC (VA)	RMCF0603JT1K00	RES 1K OHM 1/10W 5% 0603 SMD	RMCF0603JT1K00CT-ND
37	1	R67	1.5kΩ	STACKPOLE ELECTRONICS INC (VA)	RMCF0603JT1K50	RES 1.5K OHM 1/10W 5% 0603	RMCF0603JT1K50CT-ND
38	1	R64	220Ω	STACKPOLE ELECTRONICS INC (VA)	RMCF0603JT220R	RES 220 OHM 1/10W 5% 0603	RMCF0603JT220RCT-ND
39	2	R69 R71	2.2kΩ	STACKPOLE ELECTRONICS INC (VA)	RMCF0603JT2K20	RES 2.2K OHM 1/10W 5% 0603	RMCF0603JT2K20CT-ND
40	1	R48	330Ω	STACKPOLE ELECTRONICS INC (VA)	RMCF0603JT330R	RES 330 OHM 1/10W 5% 0603	RMCF0603JT330RCT-ND
41	1	R51	47KΩ	STACKPOLE ELECTRONICS INC (VA)	RMCF0603JT47K0	RES 47K OHM 1/10W 5% 0603	RMCF0603JT47K0CT-ND
42	1	R47	47Ω	STACKPOLE ELECTRONICS INC (VA)	RMCF0603JT47R0	RES 47 OHM 1/10W 5% 0603 SMD	RMCF0603JT47R0CT-ND
43	18	R73 R74 R75 R76 R77 R79	0Ω	STACKPOLE ELECTRONICS INC (VA)	RMCF0603ZTOR00	RES 0.0 OHM 1/10W 0603 SMD	RMCF0603ZTOR00CT-ND
44	5	R42 R43 R46	560kΩ	STACKPOLE ELECTRONICS INC (VA)	RMCF0805FT560K	RES TF 560K OHM 1% 0.125W	RMCF0805FT560KCT-ND
45	4	R49 R50 R52 R53	100KΩ	STACKPOLE ELECTRONICS INC (VA)	RMCF0805JT100K	RES 100K OHM 1/8W 5% 0805	RMCF0805JT100KCT-ND
46	3	R40 R41 R63	10kΩ	STACKPOLE ELECTRONICS INC (VA)	RMCF0805JT10K0	RES 10K OHM 1/8W 5% 0805 SMD	RMCF0805JT10K0CT-ND
47	1	R36	10Ω	STACKPOLE ELECTRONICS INC (VA)	RMCF0805JT10R0	RES 10 OHM 1/8W 5% 0805 SMD	RMCF0805JT10R0CT-ND
48	14	R14 R16 R18 R24 R25 R26	1kΩ	STACKPOLE ELECTRONICS INC (VA)	RMCF0805JT1K00	RES 1.0K OHM 1/8W 5% 0805	RMCF0805JT1K00CT-ND
49	3	R15 R17 R19	2.37kΩ	STACKPOLE ELECTRONICS INC (VA)	RMCF0805FT2K37	RES 2.37K OHM 1/8W 1% 0805	RMCF0805FT2K37CT-ND
50	9	R5 R6 R7 R8 R9 R10 R11 R12 R13	330kΩ	STACKPOLE ELECTRONICS INC (VA)	RMCF0805JT330K	RES 330K OHM 1/8W 5% 0805	RMCF0805JT330KCT-ND
51	4	R20 R21 R22 R23	13Ω	STACKPOLE ELECTRONICS INC (VA)	RMCF0805FT13R0	RES 13 OHM 1/8W 1% 0805 SMD	RMCF0805FT13R0CT-ND
52	1	R4 R39 R99 R100 R101 R102 R103	0Ω	STACKPOLE ELECTRONICS INC (VA)	RMCF0805ZTOR00	RES 0.0 OHM 1/8W 0805 SMD	RMCF0805ZTOR00CT-ND
53	2	RF1 RF2	EM Connector	SAMTEC	TFM-110-02-S-D-WT	CONN HEADER 20POS 1.27MM	N/A
54	1	ZD3	SMAJ5.0ABCT	BOURNS INC (VA)	SMAJ5.0A	DIODE TVS 5.0V 400W UNI 5%	SMAJ5.0ABCT-ND
55	4	TVS1 TVS2 TVS3 TVS4	SMAJ5.0CA	BOURNS INC (VA)	SMAJ5.0CA	DIODE TVS 5.0V 400W BI 5% SMD	SMAJ5.0CABCT-ND
56	1	EZ-RF	SL127L6TH	DNP	DNP	Mill-Max 850-10-006-20-001000	N/A
57	1	LCD1	TI_160SEG_LCD	ADKOM	fh-1152p	Custom LCDs for TI EVM	Custom

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58		R44 R45	DNP	DNP	DNP	DNP	DNP
59		C63	DNP	DNP	DNP	DNP	DNP
60	1	R66	DNP	DNP	DNP	DNP	DNP
61	1	R70	DNP	DNP	DNP	DNP	DNP
62	1	U\$1	CUI_XR	CUI INC	VSK-S3-3R3U	Isolated Power Supply, 3.3 V, 700	102-1801-ND
63	1	MSP430F67791A	MSP430F67791AIP EU	TEXAS INSTRUMENTS	MSP430F67791AIP EU	MSP430F67791A IPEU metering	N/A
64	1	C102	100uF	RUBYCON	100YXG100MEFC10X23	CAP Electrolytic 100uF 100V 20%,	1189-1020-ND
65	3	C39,C46,C50	0.22uF	EPCOS INC	B32922C3224M	CAP poly 0.22uF 305VAC/630VDC	495-2320-ND
66	1	C48	2.2uF	TDK CORPORATION (VA)	C3225X7R2A225K230AB	CAP Ceramic 2.2uF 100V X7R 1210	445-4497-2-ND
67	1	C45	0.01uF	TDK CORPORATION (VA)	C1608X7R1E103K080AA	CAP CER 10000PF 25V 10% X7R	445-5100-1-ND
68	1	C62	47uF	TAIYO YUDEN (VA)	LMK325BJ476MM-T	CAP Ceramic 47uF 10V X5R 1210	587-1383-1-ND
69	1	C47	0.1uF	KEMET (VA)	C0603C104K8RACTU	CAP Ceramic 0.1uF 10V X5R 0603	399-1095-1-ND
70	1	C60	.056uF	MURATA ELECTRONICS (VA)	GRM188R71E563KA01D	CAP Ceramic .056uF 25V X7R 10%	490-6433-1-ND
71	1	C61	100pF	KEMET (VA)	C0603C101J3GACAU0	CAP Ceramic 100pF 25V NPO, 5%	399-6841-1-ND
72	1	D23	B160	COMCHIP TECHNOLOGY (VA)	CDBB160-G	Diode Schottky 1A 60V B160 SMB	641-1107-1-ND
73	3	D17,D19,D21	48V	DIODES INCORPORATED (VA)	1N4757A-T	Diode Zener 51V 1W 1N4757A D0	1N4757ADICT-ND
74	3	D18,D20,22	1N4007	FAIRCHILD SEMICONDUCTOR (VA)	1N4007	DIODE GEN PURPOSE 1000V 1A	1N4007FSCT-ND
75	1	L7	1mH	COILCRAFT	MSS1038-105	Inductor, SMT, MSS1038-105	N/A
76	1	R35,R38	1MΩ	TE CONNECTIVITY AMP (VA)	1-1879417-9	RES 1M OHM 1/16W 1% 0603	A102234CT-ND
77	1	R37	33.2kΩ	STACKPOLE ELECTRONICS INC (VA)	RNCS0603BKE33K2	RES 33.2K OHM 1/16W .1% 0603	RNCS0603BKE33K2CT-ND
78	1	R95	22.1kΩ	TE CONNECTIVITY AMP (VA)	9-1879337-2	RES 22.1K OHM 1/16W 1% 0603	A102241CT-ND
79	1	R96	51.1Ω	TE CONNECTIVITY AMP (VA)	3-1879335-7	RES 51.1 OHM 1/16W 1% 0603	A102292TR-ND
80	1	R97	31.6kΩ	TE CONNECTIVITY AMP (VA)	1879338-8	RES 31.6K OHM 1/16W 1% 0603	A102261DKR-ND
81	1	R98	10.0kΩ	TE CONNECTIVITY AMP (VA)	1614881-2	RES 10.0K OHM 1/16W 0.1% 0603	A102331CT-ND
82	3	R92,R93,R94	100Ω	PANASONIC ELECTRONIC COMPONENTS	ERG-25J101	RES 100 OHM 2W 5% AXIAL	P100W-2BK-ND
83	1	U3	TPS54060ADGQ	TEXAS INSTRUMENTS	TPS54060ADGQ	IC REG BUCK ADJ 0.5A 10MSOP	296-30339-5-ND

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