



Bill of Materials

TI DESIGNS

TIDA-080000
Display Board

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint	Note
1	20	C1,C4,C5,C8,C9,C22,C33,C34,C35,C37,C46,C65,C67,C68,C72,C73,C76,C81,C106,C147,C19	0.01uF	CAP CER 10000PF 16V X7R 10% 0402	Samsung	CL05B103K05NNNC		402	
2	6	C2,C12,C45,C46,C48,C58	0.1uF	CAP CER 0.1UF 50V 10% X5R 0402	TDK	C1005X5R1H104K050BB		402	
3	2	C3,C6	22uF	CAP CER 22UF 25V 20% X5R 0805	TDK	C2012X5R1E226M125AC		805	
4	7	C7,C11,C22,C40,C62,C90,C125	10uF	CAP CERAMIC 10UF 6.3V X5R 0603	TDK	C1608X5R0J106M080AB		603	
5	2	C9,C10	0.01uF	CAP CER 10000PF 50V X7R 0402	Murata	GRM155R71H103KA88D		402	
6	75	C13,C14,C20,C24,C26,C28,C33,C36,C56,C61,C66,C69,C71,C74,C75,C77,C85,C93,C94,C95,C96,C97,C98,C100,C101,C102,C103,C104,C115,C116,C117,C118,C119,C120,C121,C122,C123,C124,C127,C167,C168,C169,C170,C171,C146,C148,C149,C165,C166,C180,C181,C182,C183,C184,C185,C186,C187,C188,C189,C190,C193,C194,C195,C197,C198,C199,C211,C212,C222,C223,C224,C228,C229,C230,C231	0.1uF	CAP CER .1UF 16V X7R 0402	TDK	C1005X7R1C104K050BC		0402_AVXA	
7	2	C15,C16	22uF	CAP CER 22UF 10V 20% X5R 0603	TDK	C1608X5R1A226M080AC		603	
8	6	C17,C25,C105,C151,C152,C175	47uF	CAP CER 47UF 10V 20% X5R 0805	TDK	C2012X5R1A476M125AC		805	
9	2	C18,C35	470pF	CAP CER 470PF 50V 5% NPO 0603	TDK	C1608C0G1H471J080AA		603	
10	4	C19,C21,C30,C31	22uF	CAP CER 22UF 6.3V 20% X5R 0603	TDK	C1608X5R0J226M080AC		603	
11	10	C23,C38,C39,C172,C200,C201,C203,C206,C214,C215	22uF	CAP CER 22UF 35V 20% X5R 0805	TDK	C2012X5R1V226M125AC		805	
12	3	C27,C37,C219	10uF	CAP CER 10UF 10V 20% X5R 0603	TDK	C1608X5R1A106M080AC		603	
13	5	C29,C99,C191,C207,C208	1uF	CAP CER 1.0UF 10V X5R 0402	Taiyo Yuden	LMK105B105KV-F		402	
14	1	C32	10pF	CAP CER 10PF 50V NPO 0402	TDK	C1005C0G1H100D050BA		0402_AVXA	
15	1	C34	1200pF	CAP CER 1200PF 50V 5% NPO 1206	AVX	I2065A1221AT2A		1206	
16	2	C41,C42	4.7uF	CAP CER 4.7UF 25V 10% X6S 0603	Samsung	CL10A475KA8NQC		603	
17	1	C43	11pF	CAP CER 11PF 50V NPO 0402	Samsung	CL05C110IB5NNNC		402	
18	1	C44	15nF	CAP CER 0.015uF 50V 10% X7R 0402	Murata	GRM155R71H153KA12D		402	
19	21	C47,C51,C59,C60,C87,C91,C92,C114,C128,C132,C133,C137,C141,C143,C144,C145,C153,C157,C174,C177,C210	4.7uF	CAP CER 4.7UF 6.3V 20% X5R 0402	TDK	C1005X5R0J475M050BC		402	
20	2	C49,C50	22pF	CAP CER 22PF 50V 5% NPO 0402	Murata	GRM1555C1H220JA01D		402	
21	34	C63,C70,C78,C80,C86,C89,C106,C107,C109,C110,C111,C112,C113,C134,C135,C136,C138,C139,C140,C142,C154,C155,C156,C158,C159,C160,C161,C162,C163,C164,C173,C176,C178,C179	0.47uF	CAP CER 0.47UF 16V 10% X5R 0402	TDK	CGB2A1X5R1C474K033BC		402	
22	6	C79,C88,C126,C129,C130,C131	100uF	CAP CER 100UF 4V 20% X5R 0805	Murata	GRM21BR60G107ME15L		805	
23	6	C82,C83,C84,C213,C225,C226	0.1uF	CAP CER .10UF 25V X5R 0402	Taiyo Yuden	TMK105B104KV-F		402	
24	1	C150	330uF	CAP CER 330UF 4V 20% X5R 1210	Taiyo Yuden	AMK325ABJ337MM-T		1210	
25	6	C192,C204,C205,C216,C217,C218	1uF	CAP CER 1UF 25V 20% X5R 0402	TDK	C1005X5R1E105M050BC		402	
26	1	C202	10uF	CAP CER 10UF 35V 20% X5R 0805	TDK	C2012X5R1V106M085AC		805	
27	1	C209	2.2uF	CAP CER 2.2UF 6.3V X5R 0402	TDK	C1005X5R0J225M050BC		402	
28	2	C220,C227	1uF	CAP CER 1UF 50V 10% X5R 0603	TDK	C1608X5R1H105K080AB		603	
29	1	C221	0.47uF	CAP CER 0.47UF 50V 10% X5R 0603	TDK	C1608X5R1H474K080AB		603	
30	1	D1	blue	LED BLUE CLEAR 1206 SMD	Lumex	SML-LX1206USBC-TR		1206	
31	1	D2	BA240	DIODE SCHOTTKY 40V 2A DO214AC	Comchip Technology	CD8A240LL-HF		DO-214AC_SMA	
32	3	D3,D4,D5	ESDA18-K	TVS DIODE 15VWM 34VC SOD523	STMicroelectronics	ESDA18-1K		SOD523	
33	4	D6,D7,D8,D9	green	LED 565NM WTR CLR GREEN 1206 SMD	Lumex	SML-LX1206GC-TR		1206	
34	1	D10	MBR0540	SCHOTTKY RECT 40V 0.5A SOD123	Fairchild Semiconductor	MBR0540		SOD123	
35	5	F1,F2,F3,F5,F6	BLM15PD800SN1D	FERRITE CHIP 80 OHM 1500MA 0402	Murata	BLM15PD800SN1D		BLM15P	
36	1	F4	BLM18SG121TN1D	FERRITE BEAD 120 OHM 0603	Murata	BLM18SG121TN1D		603	
37	0	J1,J2,J4,J6	M20-9990345	CONN HEADER 3POS .100" SGL GOLD	Harwin	M20-9990345		TSW-103-07-G-S	
38	0	J3	878311220	CONN HEADER 12POS 2MM VERT GOLD	Molex	0878311220		Molex_0878311220	
39	1	J5	5034800400	CONN FFC FPC 4POS 0.50MM R/A	Molex	5034800400		Molex_5034800400_2GPA05	
40	0	J7	B2B-EH	CONN HEADER EH TOP 2POS 2.5MM	JST	B2B-EH-A(LF)(SN)		JST_B2B-EH	
41	3	J8,J9,J11	087438-0643	CONN HEADER 6POS 1.5MM R/A SMD	Molex	0874380643		Molex_0874380643	
42	1	J10	FH28H-80S-0.5SH(05)	CONN FPC 80POS 0.5MM SMD GOLD	Hirose	FH28H-80S-0.5SH(05)		Hirose_FH28H-80S-0p5SH	
43	1	J12	QTH-030-02-L-D-A	CONN HEADER HS .5MM 60POS DL AU (stacking ht 8mm)	Samtec	QTH-030-02-L-D-A		Samtec_QTH-030-xx-x-D-A	
44	1	J13	QTH-030-03-L-D-A	CONN HEADER HS .5MM 60POS DL AU (stacking ht 11mm)	Samtec	QTH-030-03-L-D-A		Samtec_QTH-030-xx-x-D-A	
45	1	L1	22uH	FIXED IND 22UH 1.5A 142 MOHM SMD	Bourns	SRN6045-220M		Bourns_SRN6045	
46	3	L2,L7,L8	2.2uH	INDUCTOR 2.2UH 20% 1300MA 1008	Murata	LQM2HPN2R2MG0L		1008_2p5mmx2mm	
47	2	L3,L4	3.3uH	FIXED IND 3.3UH 4.1A 57.8 MOHM	Vishay/Dale	IHLP2020BZER3R3M11		IHLP2020BZER	
48	1	L5	2.7uH	INDUCTOR 2.7uH 9.2A 20% SMD	Coilcraft	XAL7030-272MEB		Coilcraft_XAL70300	
49	1	L6	10u	INDUCTOR 10UH 20% 0.9A SMD	Coilcraft	LP54018-103MRB		Coilcraft_LP54018_MR	
50	1	RT1	100k	THERMISTOR 100K OHM NTC 0402 SMD	Murata	NCP15WF104F03RC		402	
51	15	R1,R5,R10,R11,R17,R21,R22,R23,R24,R38,R81,R95,R131,R163,R166	0	RES 0.0 OHM 1/16W 0402 SMD	Panasonic	ERJ-2GEOR00X		402	
52	0	R2,R64,R68,R69,R94	0	RES 0.0 OHM 1/16W 0402 SMD	Panasonic	ERJ-2GEOR00X		402	
53	1	R3	12k	RES SMD 12K OHM 1% 1/10W 0402	Panasonic	ERJ-2RKF1202X		402	
54	1	R4	5.1k	RES SMD 5.1K OHM 1% 1/10W 0402	Panasonic	ERJ-2RKF5101X		402	
55	1	R6	147k	RES 147K OHM 1% 1/10W 0402 SMD	Panasonic	ERJ-2RKF1473X		402	
56	1	R7	10.5k	RES SMD 10.5K OHM 1% 1/10W 0402	Panasonic	ERJ-2RKF1052X		402	
57	3	R8,R9,R28	30.0k	RES 30.0K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF3002X		402	

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58	15	R12,R35,R37,R56,R62,R71,R80,R92,R122,R125,R130,R145,R150,R161,R172	10k	RES SMD 10K OHM 1% 1/10W 0402	Panasonic	ERJ-2RKF1002X		402	
59	1	R13	47.5k	RES SMD 47.5K OHM 1% 1/10W 0402	Panasonic	ERJ-2RKF4752X		402	
60	1	R14	56k	RES SMD 56K OHM 1% 1/10W 0402	Panasonic	ERJ-2RKF5602X		402	
61	1	R15	5.6k	RES SMD 5.6K OHM 1% 1/10W 0402	Panasonic	ERJ-2RKF5601X		402	
62	1	R16	40.2k	RES 40.2K OHM 1%/10W 1% 0402 SMD	Panasonic	ERJ-2RKF4022X		402	
63	1	R18	665	RES 665 OHM 1% 1/8W 0805 SMD	Panasonic	ERJ-6ENF665OV		805	
64	1	R19	360k	RES SMD 360K OHM 1% 1/10W 0402	Panasonic	ERJ-2RKF3603X		402	
65	2	R20,R26	180k	RES SMD 180K OHM 1% 1/16W 0402	Yageo	RC0402FR-07180KL		402	
66	6	R25,R30,R31,R72,R123,R124	240	RES SMD 240 OHM 1% 1/10W 0402	Panasonic	ERJ-2RKF2400X		402	
67	1	R27	226k	RES SMD 226K OHM 1% 1/10W 0402	Panasonic	ERJ-2RKF2263X		402	
68	14	R29,R47,R49,R67,R70,R77,R78,R93,R135,R136,R138,R165,R167,R170	100k	RES 100K OHM 1/10W 1% 0402 SMD	Vishay/Dale	CRCW0402100KFKED		402	
69	18	R32,R45,R48,R57,R59,R86,R87,R89,R90,R91,R133,R137,R146,R147,R151,R152,R153,R169	30.1	RES 30.1 OHM 1/16W 1% 0402 SMD	Panasonic	ERJ-2RKF30R1X		402	
70	9	R33,R39,R40,R41,R44,R46,R50,R75,R79	4.7k	RES 4.7K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF4701X		402	
71	1	R34	3.09k	RES SMD 3.09K OHM 1% 1/10W 0402	Panasonic	ERJ-2RKF3091X		402	
72	0	R36	4.7k	RES 4.7K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF4701X		402	
73	28	R42,R43,R82,R83,R84,R85,R96,R97,R98,R99,R100,R101,R102,R103,R104,R105,R106,R107,R108,R109,R110,R111,R112,R113,R114,R117,R118,R119	20	RES SMD 20 OHM 1% 1/20W 0201	Panasonic	ERJ-1GNF20R0C		0201_R	
74	2	R51,R60	10	RES 10 OHM 1/4W 1% 0603 SMD	Rohm	ESR03EZPF10R0		603	
75	1	R52	5.1k	RES 5.1K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF5101X		402	
76	2	R53,R54	43	RES 43 OHM 1/20W 5% 0201 SMD	Panasonic	ERJ-1GNJ430C		201	
77	1	R55	300	RES 300 OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF3000X		402	
78	1	R58	3.9	RES 3.9 OHM 1/2W 5% 1210 SMD	Rohm	ESR25J2PJ3R9		1210	
79	1	R61	0.025	RES SMD 0.025 OHM 1% 1W 2010	Stackpole Electronics	CSRN2010FK25L0		2010	
80	1	R63	105k	RES SMD 105K OHM 1% 1/16W 0402	Vishay/Dale	CRCW0402105KFKED		402	
81	1	R65	19.1k	RES 19.1K OHM 1% 1/10W 0402 SMD	Panasonic	ERJ-2RKF1912X		402	
82	1	R66	121k	RES SMD 121K OHM 1% 1/10W 0402	Panasonic	ERJ-2RKF1213X		402	
83	0	R73,R74,R76	80.6	RES SMD 80.6 OHM 1% 1/10W 0402 SMD	Panasonic	ERJ-2RKF80R6X		402	
84	7	R88,R128,R129,R132,R134,R160,R164	7.87k	RES 7.87K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF7871X		402	
85	2	R115,R116	80.6	RES SMD 80.6 OHM 1% 1/10W 0402 SMD	Panasonic	ERJ-2RKF80R6X		402	
86	4	R120,R121,R148,R149	2k	RES SMD 2K OHM 1% 1/10W 0402	Panasonic	ERJ-2RKF2001X		402	
87	4	R126,R127,R162,R168	1k	RES 1.00K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF1001X		402	
88	17	R139,R140,R141,R142,R143,R144,R154,R155,R156,R157,R158,R159,R171,R173,R174,R175,R176	100	RES 100 OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF1000X		402	
89	7	TPGND1,TPGND2,TPGND3,TPGND4,TPGND5,TPGND6,TPGND7	TP_BLK	TEST POINT PC MINI .040inD BLACK	Keystone	5001		KEYSTONE_TP_MINIATURE	
90	0	TP4,TP29,TP30,TP43,TP64	TP_WHT	TEST POINT PC MINI .040inD WHITE	Keystone	5002		KEYSTONE_TP_MINIATURE	
91	0	TP20,TP28,TP34	TP_BLK	TEST POINT PC MINI .040inD BLACK	Keystone	5001		KEYSTONE_TP_MINIATURE	
92	1	U1	TP554340	IC REG BUCK ADJ 3.5A 8SOPWRPAD	Texas Instruments	TP554340DDAR		HSOIC8_DDA_R-PDSO-G8	
93	1	U2	TCA0372DW	IC OPAMP GP 1.4MHZ 16SOIC	ON Semiconductor	TCA0372DWG		ONSEMI_SOIC16W_DW_CASE751G	
94	1	U3	SN74AVC4T774PWR	IC BUS TRANSCVR 4BIT DL 16TSSOP	Texas Instruments	SN74AVC4T774PWR		TSSOP16_PW	
95	2	U4,U8	TP562240DDC	IC REG BUCK ADJ 0.3A SYNC TSOT23	Texas Instruments	TP562240DDCR		TSOT-23_DDC_R-PDSO-G5	
96	1	U5	SN74AHC1G09DBVR	IC GATE AND SGL ZINP	Texas Instruments	SN74AHC1G09DBVR		SC70_DBV_R-PDSO-G5	
97	1	U6	SN74AUP1G08DBV	IC GATE AND 1CH 2-INP SOT-23-5	Texas Instruments	SN74AUP1G08DBVR		SC70_DBV_R-PDSO-G5	
98	1	U7	DAC081S101CIMK/NOPB	CONV D/A 8BIT MICRO PWR TSOT23-6	Texas Instruments	DAC081S101CIMK/NOPB		SOT-23-6_DDC_R-PDSO-G6	
99	1	U9	MT41K64M16TW-107	IC DDR3 SDRAM 1Gb (64MX16) 96FBGA	Micron	MT41K64M16TW-107-J		Micron_96-ball_FBGA-x16_TW	
100	1	U10	TP5562209DDCT	IC REG BUCK ADJ 2A SYNC SOT-23-6	Texas Instruments	TP5562209DDCT		SOT-23_DDC_R-PDSO-G6	
101	2	U11,U25	W25Q64JVSIIQ	IC FLASH 64MBIT 104MHZ 8SOIC	Winbond	W25Q64JVSIIQ		SOIC-8_208mil	
102	1	U12	SN74AUP1G07DCK	IC BUFF/DVR LOW PWR N-INV SC705, open drain	Texas Instruments	SN74AUP1G07DCKR		U_5_DCK	
103	1	U13	SN74AUP1G125DCK	IC BUS BUFFER TRI-ST SC70-5	Texas Instruments	SN74AUP1G125DCKR		U_5_DCK	
104	1	U14	W25Q32FWSSIG	IC FLASH 32MBIT 104MHZ 8SOIC	Winbond	W25Q32FWSSIG		SOIC-8_208mil	
105	1	U15	TP53125J18DBV	IC 1.62V SUPPLY MONITOR SOT23-5	Texas Instruments	TP53125J18DBVR		DBV_R-PDSO-G5	
106	2	U16,U20	DLPC3437	IC DLP CTLR DLP3310 DMD 201NFBGA	Texas Instruments	DLPC3437CZEZ		DLPC3437_13mmx13mm_NFBGA_201balls	
107	1	U17	48MHz	OSC MEMS 48.000MHZ CMOS SMD	Abracon	ASDMB-48.000MHZ-LY-T		ECS-2018_2p5mmx2mm	
108	1	U18	XC7Z020-1CLG484I4493	XC7Z020-1CLG484I4493	Xilinx	XC7Z020-1CLG484I4493		Xilinx_CLG484	
109	3	U19,U21,U26	TP522929DBVT	IC LOAD SWITCH SOT23-6	Texas Instruments	TP522929DBVT		SOT23-6_DBV_R-PDSO-G6	
110	2	U22,U33	SN74AUP1T17DCK	IC BUFFER SCHMITT TRIG LP SC70-5	Texas Instruments	SN74AUP1T17DCKR		U_5_DCK	
111	1	U23	24MHz	OSC MEMS 24.000MHZ CMOS SMD 1.8V-3.3V	Abracon	ASDMB-24.000MHZ-LC-T		ECS-2018_2p5mmx2mm	
112	1	U24	DLPA3000	IC DLP PMIC LED DRIVER 100HTQFP	Texas Instruments	DLPA3000PFD		PAD3000_PQFP_100	
113	4	U27,U28,U29,U30	SN74AUP1G06DCK	IC INVERTER SINGLE 1INPUT SC705, open drain	Texas Instruments	SN74AUP1G06DCKR		U_5_DCK	
114	1	C232	4700pF	CAP CER 4700PF 50V 5% COG/NP0 0603	Kemet	C0603C47J25GACTU		603	