TEXAS INSTRUMENTS

Bill of Materials

TI DESIGNS

TIDA-00574

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint
1	1	!PCB		Printed Circuit Board	Any	TIDA-00574		
2	6	C0, C1, C2, C3, C30, C31	22uF	CAP, CERM, 22 µF, 10 V, +/-	Taiyo Yuden	LDK105EBJ226MV-F		0402
3	4	C4, C5, C6, C7	10uF	CAP, CERM, 10 µF, 6.3 V, +/- 20%, X5R, 0402	MuRata	GRM155R60J106ME44D		0402
4	2	C5_1, C6_1	22uF	CAP, CERM, 22uF, 10V, +/-20%, X5R, 0805	Taiyo Yuden	LMK212BJ226MG-T	-	0805
5	2	C5_2, C6_2	10uF	CAP, CERM, 10uF, 6.3V, +/-20%, X5R, 0603	Kemet	C0603C106M9PACTU	-	0603
6	1	C8	0.1uF	CAP, CERM, 0.1uF, 10V, +/-10%,	Samsung	CL03A104KP3NNNC	GMD033R60J104KE11	0201
7	1	C9	68uF	CAP, TA, 68 µF, 16 V, +/- 20%,	Panasonic	16TQC68MYF		7.3x2.0x4.3mm
8	1	C10	22uF	CAP, CERM, 22 µF, 16 V, +/-	MuRata	GRM32ER61C226KE20L		1210
9	2	C11, C29	10pF	CAP, CERM, 10pF, 50V, +/-5%,	MuRata	GRM1885C1H100JA01D		0603
10	2	C12, C13	15pF	CAP, CERM, 15pF, 100V, +/-5%, C0G/NP0, 0603	MuRata	GRM1885C2A150JA01D		0603
11	5	C14, C21, C23, C39, C48	10uF	CAP, CERM, 10uF, 16V, +/-20%,	Taiyo Yuden	EMK107BBJ106MA-T		0603
12	13	C15, C16, C17, C18, C19,	0.1uF	CAP, CERM, 0.1uF, 25V, +/-10%,	MuRata	GRM188R71E104KA01D		0603
13	4	C27, C32, C36, C42	1uF	CAP, CERM, 1 µF, 10 V, +/- 10%, X7S, 0402	TDK	C1005X7S1A105K050BC		0402
14	1	C34	10uF	CAP, CERM, 10uF, 16V, +/-10%, X5R, 0805	Taiyo Yuden	EMK212BJ106KG-T		0805
15	5	C37, C41, C43, C45, C47	1uF	CAP, CERM, 1uF, 25V, +/-10%, X5R, 0603	MuRata	GRM188R61E105KA12D		0603
16	1	C40	0.01uF	CAP, CERM, 0.01uF, 50V, +/- 10%, X5R, 0603	MuRata	GRM188R61H103KA01D		0603
17	1	C49	2200pF	CAP, CERM, 2200 pF, 25 V, +/- 10%, X5R, 0402	MuRata	GRM155R61E222KA01D		0402
18	1	C50	47uF	CAP, CERM, 47 µF, 10 V, +/- 10%, X5R, 1210	MuRata	GRM32ER61A476KE20L		1210
19	1	C51	100uF	CAP, Polymer, 100 µF, 6.3 V, +/- 20%, 0.018 ohm, 7343-20 SMD	Panasonic	6TPE100MI		7343-20
20	3	FID1, FID2, FID3		Fiducial mark. There is nothing to buy or mount.	N/A	N/A		Fiducial
21	4	H1, H2, H3, H4		MACHINE SCREW PAN	B&F Fastener Supply	NY PMS 440 0050 PH	-	Screw
22	4	H5, H6, H7, H8		Standoff, Hex, 0.5"L #4-40 Nylon	Keystone	1902C	-	Standoff
23	1	J4		Header, TH, 100mil, 2x2, Gold	Samtec, Inc.	TSW-102-07-G-D	-	TSW-102-07-G-

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24	1	J6		Conn Rcpt Mini USB2.0 Type B	TE Connectivity	1734035-2		USB Mini Type B
25	1	J9		Header, TH, 100mil, 2x1, Gold	Samtec, Inc.	TSW-102-07-G-S	-	TSW-102-07-G-
26	4	L0, L1, L2, L3	470nH	Inductor, Shielded, Metal	Toko	DFE201610R-H-R47M		2.0x1.0x1.6mm
27	2	L4, L6	10uH	Inductor, Wirewound, Ferrite, 10uH, 0.12A, 0.5 ohm, SMD	Taiyo Yuden	LB2012T100KR		0805
28	1	R1	0.01	RES, 0.01 ohm, 1%, 3W, 2512 High Power Current Sense Chip Resistor	Bourns	CRA2512-FZ-R010ELF	-	2512
29	3	R2, R3, R6	1.8k	RES, 1.8k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW06031K80JNEA	-	0603
30	1	R4	6.80k	RES, 6.80k ohm, 1%, 0.1W, 0603	Yageo America	RC0603FR-076K8L		0603
31	2	R5, R7	39.0	RES, 39.0 ohm, 1%, 0.1W, 0603	Yageo America	RC0603FR-0739RL		0603
32	1	R8	47.0k	RES, 47.0k ohm, 1%, 0.1W, 0603	Yageo America	RC0603FR-0747KL		0603
33	1	R9	27.0k	RES, 27.0k ohm, 1%, 0.1W, 0603	Yageo America	RC0603FR-0727KL		0603
34	8	R10, R11, R13, R14, R15, R16, R17, R22	0	RES, 0 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW06030000Z0EA		0603
35	2	R12, R23	1.00	RES, 1.00 ohm, 1%, 0.1W, 0603	Yageo America	RC0603FR-071RL		0603
36	1	R18	274	RES, 274, 1%, 0.063 W, 0402	Vishay-Dale	CRCW0402274RFKED		0402
37	1	R19	105k	RES, 105 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW0402105KFKED		0402
38	2	R20, R21	1.00k	RES, 1.00k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06031K00FKEA		0603
39	1	R24	7.87k	RES, 7.87 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW04027K87FKED		0402
40	1	R25	68.1k	RES, 68.1 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040268K1FKED		0402
41	1	R29	470k	RES, 470k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW0603470KJNEA		0603
42	1	R_J1	0	RES, 0 ohm, 5%, 0.063W, 0402	Vishay-Dale	CRCW04020000Z0ED		0402
43	3	SH-J9, SH-J10, SH-J12	1x2	Shunt, 100mil, Gold plated, Black	3M	969102-0000-DA	SNT-100-BK-G	Shunt
44	10	TP1, TP2, TP3, TP4, TP5, TP6, TP9, TP12, TP15, TP19	Yellow	Test Point, TH, Miniature, Yellow	Keystone	5004	-	Keystone5004
45	2	TP11, TP13	Double	Terminal, Turret, TH, Double	Keystone	1502-2		Keystone1502-2
46	1	U1		LP8758 Multiphase 4-Core Step-Down Converter, YFF0035	Texas Instruments	LP8758		YFF0035
47	1	U2		AT91SAM ARM-based Flash MCU, LQFP100	Atmel	ATSAM3U2C-AU		100 pin LQFP
48	1	U3		Dual Linear Regulator with 300mA and 150mA Outputs and Power-On Reset, 10-pin LLP, Pb-Free	Texas Instruments	LP3996SD-1833/NOPB		SDA10A
49	1	U4		SOT-23 Precision Low Dropout Voltage Reference	Texas Instruments	LM4132AMF-2.5		MF05A

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50	1	U5		3A SIMPLE SWITCHER Power Module with 4.5V-14.5V Input in QFN Package, RUQ0047A	Texas Instruments	LMZ31503RUQ		RUQ0047A
51	1	U6		Ultra Low-Noise, 250-mA Linear Regulator for RF and Analog Circuits - Requires No Bypass Capacitor, YKE0004AAAA	Texas Instruments	LP5907UVE-2.5/NOPB		YKE0004AAAA
52	1	U8		150mA Linear Voltage Regulator for Digital Applications, 4-pin Micro SMD, Pb-Free	Texas Instruments	LP3990TL-1.35/NOPB		TLA04AMA
53	7	VOUT0, VOUT1, VOUT2, VOUT3, VOUT5, VOUT6, X4_Vin 12V	2x1	Conn Term Block, 2POS, 5.08mm, TH	Phoenix Contact	1715721		2POS Terminal Block
54	2	X5, X10		Header, 2 Pos, 6A, 63V	Phoenix Contact	1725656		6.2x8.5x5.54 mm
55	1	X6		Terminal Block, 8x1, 2.54 mm, TH	Phoenix Contact	1725711		8POS Terminal Block
56	1	Y1		Crystal, 12Mhz, 18pF, SMD	Abracon Corportation	ABM3-12.000MHZ-B2-T		ABM3
57	0	C0_1, C1_1, C2_1, C3_1	22uF	CAP, CERM, 22uF, 10V, +/-20%, X5R, 0805	Taiyo Yuden	LMK212BJ226MG-T	-	0805
58	0	C0_2, C1_2, C2_2, C3_2	10uF	CAP, CERM, 10uF, 6.3V, +/-20%, X5R, 0603	Kemet	C0603C106M9PACTU	-	0603
59	0	J0		SMT Jumper Link	Harwin Inc	S1911-46R	5102	S1911-46R
60	0	J12, J13, J14, J15, J16, J17	0	RES, 0 ohm, 5%, 0.063W, 0402	Vishay-Dale	CRCW04020000Z0ED		0402
61	0	LBL1		Thermal Transfer Printable Labels, 1.250" W x 0.250" H - 10,000 per roll	Brady	THT-13-457-10		PCB Label 1.25"H x 0.250"W
62	0	TP10, TP14, TP16, TP17, TP18		Header, TH, 100mil, 2x1, Gold plated, 230 mil above insulator	Samtec, Inc.	TSW-102-07-G-S	-	TSW-102-07-G-S
63	0	X7, X9		Connector, 7 pos, 2.54mm, R/A, SMT	Samtec	OPP-07-01-T-S-M		30x3.6x9.2mm

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