

Bill of Materials

TI DESIGNS

TIDA-00493

Item	Qty	Reference	Fitted	Part Description	Manufacturer	Manufacturer Part Number	Supplier part number	PCB Footprint
2	5	C1, C10, C17, C23, C30	Fitted	CAP, CERM, 1000pF, 2KV 10% X7R 1206	Johanson Dielectrics Inc	202R18W102KV4E	709-1036-1-ND	1206
3	4	C2, C3, C4, C5	Fitted	CAP, CERM, 1000pF, 50V, +/-5%, COG/NP0, 0603	TDK	C1608C0G1H102J	445-1293-1-ND	0603
4	0	C6, C7, C8, C9, C11, C16, C22, C28	Not Fitted	CAP, CERM, 0.082uF, 50V, +/-10%, X7R, 0805	AVX	08055C823KAT2A	478-1394-1-ND	0805
5	16	C12, C13, C20, C21, C24, C25, C33, C34, C37, C39, C44, C47, C51, C52, C60, C61	Fitted	CAP, CERM, 100 pF, 50 V, +/- 5%, COG/NP0, 0603	AVX	06035A101JAT2A	478-1175-1-ND	0603
6	0	C14, C15, C18, C19, C26, C27, C29, C31, C38, C40, C45, C46, C53, C54, C56, C57	Not Fitted	CAP, CERM, 180pF, 50V, +/-5%, COG/NP0, 0603	AVX	06035A181JAT2A	478-1178-1-ND	0603
7	0	C32, C36, C41, C43, C48, C49, C55, C59	Not Fitted	CAP, CERM, 47pF, 500V, +/-5%, COG/NP0, 0805	MuRata	GRM21A5C2E470JW01D	490-5538-1-ND	0805
8	0	C35, C42, C50, C58	Not Fitted	CAP, CERM, 0.015uF, 50V, +/-10%, X7R, 0805	AVX	08055C153KAT2A	478-1385-1-ND	0805
9	4	C62, C66, C67, C69	Fitted	CAP, CERM, 0.01 uF, 6.3 V, +/- 10%, X7R, 0603	MuRata	GRM188R70J103KA01D	490-9729-1-ND	0603
10	0	C63, C73, C79, C85	Not Fitted	CAP, CERM, 100 pF, 50 V, +/- 5%, COG/NP0, 0603	AVX	06035A101JAT2A	478-1175-1-ND	0603
11	9	C64, C65, C68, C72, C75, C77, C80, C82, C84	Fitted	CAP, CERM, 4.7 uF, 25 V, +/- 20%, X7R, 1206	TDK	C3216X7R1E475M	445-1424-1-ND	1206
12	1	C70	Fitted	CAP, CERM, 0.22 uF, 6.3 V, +/- 10%, X7R, 0603	Kemet	C0603C224K9RACTU	399-9046-1-ND	0603
13	2	C71, C78	Fitted	CAP, CERM, 10 pF, 50 V, +/- 5%, COG/NP0, 0603	Kemet	C0603C100J5GACTU	399-1049-1-ND	0603
14	1	C74	Fitted	CAP, TA, 4.7 uF, 25 V, +/- 10%, 2 ohm, SMD	Vishay-Sprague	293D475X9025C2TE3	718-1082-1-ND	6032-28
15	9	C76, C83, C86, C87, C90, C91, C92, C93, C94	Fitted	CAP, CERM, 0.1uF, 25V, +/-5%, X7R, 0603	AVX	06033C104JAT2A	478-3713-1-ND	0603
16	1	C81	Fitted	CAP, CERM, 1 uF, 25 V, +/- 10%, X5R, 0603	MuRata	GRM188R61E105KA12D	490-3897-1-ND	0603
17	2	C88, C89	Fitted	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	Kemet	C0603C104K5RACTU	399-5089-1-ND	0603
18	1	D1	Fitted	TVS 18 VOLT 600 WATT BI-DIR SMB	Littelfuse Inc	SMBJ18CA	SMBJ18CALFCT-ND	SMB
19	8	D29	Fitted	Diode, TVS, ARRAY, 15V, SOD323	Bourns Inc.	CDSOD323-T15SC	CDSOD323-T15SCCT-ND	SOD-323

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20	8	D13	Fitted	Diode, P-N, 70V, 0.2A, SOT-323	Diodes Inc	DESD1P0RFW-7	DESD1P0RFW-7DICT-ND	SOT-323
21	8	D23, D25	Fitted	26VC, SOD323	NXP Semiconductor	PESD3V3L1BA	568-4040-1-ND	SOD323
22	2	D18, D20	Fitted	Diode, Zener, 15V, 1W, SOD-123	Panasonic	DZ2W15000L	DZ2W15000LCT-ND	SOD-123
23	2	D22, D24	Fitted	Diode, Schottky, 20 V, 1 A, POWERMITE	ON Semiconductor	MBRM120ET1G	MBRM120ET3GOSCT-ND	POWERMITE
24	0	FID1, FID2, FID3, FID4, FID5, FID6	Not Fitted	mount.	N/A	N/A		Fiducial
25	16	J15, J16, J17, J18, J19, J20, J21,	Fitted	Terminal Block, 4x1, 2.54mm, TH	On Shore Technology Inc	OSTVN02A150	ED10561-ND	TERM_BLK, 2pos, 2.54mm
26	5	J2, J3, J4, J5, J23	Fitted	TH	On-Shore Technology	ED120/2DS	ED1609-ND	TERM_BLK, 2pos, 5.08mm
27	2	J9, J14	Fitted	Terminal Block, 8x1, 2.54 mm, TH	Phoenix Contact	1725711	277-1279-ND	8POS Terminal Block
28	2	L1, L2	Fitted	0.1 ohm, SMD	TDK	VLF504012MT-4R7M	445-17203-1-ND	IND_5x1.2x4mm
29	12	R10, R12, R14, R16	Fitted	RES, 330 k, 1%, 0.25 W, 1206	Yageo America	RC1206FR-07330KL	311-330KFRCT-ND	1206
30	8	R24	Fitted	RES, 2.20 k, 1%, 0.1 W, 0603	Yageo America	RC0603FR-072K2L	311-2.20KHRCT-ND	0603
31	1	R20	Fitted	RES, 0 ohm, 5%, 0.25W, 1206	Panasonic	ERJ-8GEY0R00V	P0.0ECT-ND	1206
32	2	R21, R144	Fitted	RES, 0 ohm, 5%, 0.25W, 1206	Vishay-Dale	CRCW12060000Z0EA	541-0.0ECT-ND	1206
33	20	R45, R56, R59, R69, R77, R81,	Fitted	RES, 10 ohm, 5%, 0.25W, 0603	Vishay-Dale	CRCW060310R0JNEAHP	541-10SACT-ND	0603
34	4	R27, R37, R44, R55	Fitted	RES, 100 ohm,1/4W, 1%, 0204 MELF	TT Electronics/Welwyn	WRM0204C-100RFI	985-1442-2-ND	0204 MELF
35	0	R154, R155	Not Fitted	RES, 10.0Meg ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060310M0FKEA	541-10.0MHCT-ND	0603
36	20	R60, R62, R66, R67, R73, R79,	Fitted	RES, 10k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060310K0JNEA	541-10KGCT-ND	0603
37	20	R61, R63, R71, R72, R75, R82,	Fitted	RES, 160k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW0603160KJNEA	541-160KGCT-ND	0603
38	16	R57, R58, R74, R80, R83, R87,	Fitted	RES, 68.0 ohm, 1%, 0.1W, 0603	Yageo America	RC0603FR-0768RL	311-68.0HRCT-ND	0603
39	8	R142, R148	Fitted	RES, 22 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060322R0JNEA	541-22GCT-ND	0603
40	0	R143, R149	Not Fitted	RES, 22 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060322R0JNEA	541-22GCT-ND	0603
41	0	R68, R84, R99, R112	Not Fitted	RES, 0, 5%, 0.1 W, 0603	Vishay-Dale	CRCW06030000Z0EA	541-0.0GCT-ND	0603
42	0	R70, R86, R100, R113	Not Fitted	RES, 160k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW0603160KJNEA	541-160KGCT-ND	0603
43	2	R119, R123	Fitted	RES, 0, 5%, 0.125 W, 0805	Yageo America	RC0805JR-070RL	311-0.0ARCT-ND	0805
44	3	R124, R127, R137	Fitted	RES, 0, 5%, 0.1 W, 0603	Vishay-Dale	CRCW06030000Z0EA	541-0.0GCT-ND	0603
45	3	R126, R128, R132	Fitted	RES, 49.9 k, 0.1%, 0.1 W, 0603	Susumu Co Ltd	RG1608P-4992-B-T5	RG16P49.9KBCT-ND	0603
46	1	R129	Fitted	RES SMD 620K OHM 1% 1/10W 0603	Vishay-Dale	CRCW0603620KFKEA	541-620KHCT-ND	0603
47	1	R133,R136	Fitted	RES, 1.0 k, 5%, 0.1 W, 0603	Vishay-Dale	CRCW06031K00JNEA	541-1.0KGCT-ND	0603
48	1	R134	Fitted	RES, 576 k, 1%, 0.1 W, 0603	Vishay-Dale	CRCW0603576KFKEA	541-576KHCT-ND	0603
49	2	R138	Fitted	RES, 100 ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW0603100RFKEA	541-100HCT-ND	0603
50	11	R159, R160, R161, R162, R163,	Fitted	RES, 0, 5%, 0.1 W, 0603	Yageo America	RC0603JR-070RL	311-0.0GRCT-ND	0603
51	1	R140	Fitted	RES, 470 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW0603470RJNEA	541-470GCT-ND	0603
52	1	R141	Fitted	RES SMD 1 OHM 5% 1/10W 0603	Bourns inc	CR0603-J/-1R0ELF	CR0603-J/-1R0ELFCT-ND	0603
53	1	R147	Fitted	RES, 10.0k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060310K0FKEA	541-10.0KHCT-ND	0603
54	1	R150	Fitted	RES, 30k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060330K0JNEA	541-30KGCT-ND	0603
55	1	R151	Fitted	RES, 0 ohm, 5%, 0.125W, 0805	Vishay-Dale	CRCW08050000Z0EA	541-0.0ACT-ND	0805
56	4	U1, U2, U3, U4	Fitted	IC OPAMP ZERO-DRIFT 2MHZ 14TSSOP	Texas Instruments	OPA4180IPW	296-40469-1-ND	TSSOP (PW) 14
57	1	U5	Fitted	Converter, 2.7 to 5.5 V, -40 to 85 degC, 24-	Texas Instruments	TPS65131RGET	296-41760-1-ND	RGE0024B
58	1	U6	Fitted	36-V, ZERO-DRIFT OPAMP, 2MHZ,	TEXAS INSTRUMENTS	OPA180IDBVR	296-40435-1-ND	DBV
59	1	U7	Fitted	100 ppm/°C, 45µA-12mA, Adjustable	TI	LM4041BIBZ	296-20914-1-ND	SOT23

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