

# Bill of Materials

TI DESIGNS

TIDA-00236

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint	Note
1	1	!PCB1		Printed Circuit Board	Any	PCB			Printed Circuit Board
2	7	C2, C23, C28, C29, C35, C36, C41	0.1uF	CAP, CERM, 0.1uF, 25V, +/-10%, X5R, 0402	MuRata	GRM155R61E104KA87D		0402	GRM155R61E104KA87D
3	1	C21	0.022uF	CAP, CERM, 0.022uF, 50V, +/-10%, C0G/NP0,	MuRata	GCM155R71H223KA55		0402	GCM155R71H223KA55
4	1	C22	4.7uF	CAP, CERM, 4.7uF, 16V, +/-10%, X7R, 0805	MuRata	GRM21BR71C475KA73L		0805_HV	GRM21BR71C475KA73L
5	1	C24	0.1uF	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	MuRata	GCM188R71H104KA57		0603	GCM188R71H104KA57
6	1	C25	0.47uF	CAP, CERM, 0.47uF, 6.3V, +/-10%, X5R, 0402	MuRata	GRM155R60J474KE19D		0402S	GRM155R60J474KE19D
7	1	C33	1000pF	CAP, CERM, 1000pF, 2KV 10% X7R 1206	Johanson Dielectrics Inc	202R18W102KV4E		1206	202R18W102KV4E
8	3	C42, C43, C44	0.1uF	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	AVX	06035C104KAT2A		0603	06035C104KAT2A
9	2	C45, C46	0.1uF	CAP, CERM, 0.1 uF, 100 V, +/- 10%, X7R, 0805	Samsung	CL21B104KCF5FNE		0805_HV	CL21B104KCF5FNE
10	8	C61, C62, C63, C64, C65, C66,	0.01uF	CAP, CERM, 0.01uF, 50V, +/-10%, X8R, 0603	TDK	C1608X8R1H103K		0603	C1608X8R1H103K
11	4	C69, C70, C71, C72	4700pF	CAP, CERM, 4700pF, 50V, +/-10%, X5R, 0603	MuRata	GRM188R61H472KA01D		0603	GRM188R61H472KA01D
12	1	C74	1uF	CAP, CERM, 1uF, 50V, +/-10%, X7R, 1206	TDK	C3216X7R1H105K		1206	C3216X7R1H105K
13	1	C75	0.1uF	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	Kemet	C0603C104K5RACTU		0603	C0603C104K5RACTU
14	4	D21, D22, D24, D25	Green	LED, Green, SMD	Lite-On	LTST-C190KGKT		LED_LTST-C190_G	LTST-C190KGKT
15	1	D23	MMBD120	Diode, Small Signal, 100V, 200 mA	Fairchild	D-MMBD1204		SOT-23	D-MMBD1204
16	1	D33	33V	Diode, TVS, Bi, 33V, 400W, SMA	Littelfuse	SMAJ33CA		SMA	SMAJ33CA
17	1	D34	300V	Diode, Standard Recovery Rectifier, 300V, 1A, SMA	ON Semiconductor	MRA4003T3G		SMA	MRA4003T3G
18	8	D41, D42, D43, D44, D45, D46,	Orange	LED, Orange, SMD	Lite-On	LTST-C190KFKT		LED_LTST-C190	LTST-C190KFKT
19	8	D49, D50, D51, D52, D53, D54,	Red	LED, Red, SMD	Lite-On	LTST-C190CKT		LED_LTST-C190_Red	LTST-C190CKT
20	2	D57, D58	48V	Diode, TVS, Uni, 48V, 600W, SMB	Diodes Inc.	SMBJ48A-13-F		SMB	SMBJ48A-13-F
21	8	D61, D62, D63, D64, D65, D66,	90V	Diode, Switching, 90V, 0.1A, 0603 Diode	Bourns	CD0603-S0180		Diode_0603	CD0603-S0180
22	8	D69, D70, D71, D72, D73, D74,	Blue	LED, Blue, SMD	OSRAM	LB Q39G-L2N2-35-1		LB Q39G_BLUE	LB Q39G-L2N2-35-1
23	1	J1		Header, 100mil, 7x2, Vertical, Gold, SMT	Samtec	TSM-107-02-L-DV-P		SAMTEC_TSM-107-02-L-DV-P	TSM-107-02-L-DV-P
24	1	J2		Receptacle, 0.8mm, 25x2, SMT	Samtec	ERF8-025-05.0-L-DV-K-TR		CONN_ERF8-025-05_0-L-DV-L-TR	ERF8-025-05.0-L-DV-K-TR

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25	2	J61, J62		Terminal Block, 6A, 3.5mm Pitch, 7-Pos, TH	On-Shore Technology	ED555/7DS		On-Shore_ED555-7DS	ED555/7DS
26	1	L21	68uH	Inductor, Wirewound, Ferrite, 68uH, 0.35A, 0.852 ohm, SMD	Bourns	SRN4026-680M		SRN4026	SRN4026-680M
27	1	LBL1		Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	Brady	THT-14-423-10		Label_650x200	Size: 0.65" x 0.20 "
28	2	R7, R9	1.5k	RES, 1.5k ohm, 5%, 0.063W, 0402	Vishay-Dale	CRCW04021K50JNED		0402	CRCW04021K50JNED
29	2	R21, R35	7.5k	RES, 7.5k ohm, 5%, 0.063W, 0402	Vishay-Dale	CRCW04027K50JNED		0402S	CRCW04027K50JNED
30	1	R22	10.0	RES, 10.0 ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060310R0FKEA		0603	CRCW060310R0FKEA
31	1	R23	86.6k	RES, 86.6k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060386K6FKEA		0603	CRCW060386K6FKEA
32	1	R24	66.5k	RES, 66.5k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060366K5FKEA		0603	CRCW060366K5FKEA
33	2	R25, R36	1.2k	RES, 1.2k ohm, 5%, 0.063W, 0402	Vishay-Dale	CRCW04021K20JNED		0402S	CRCW04021K20JNED
34	2	R26, R30	2.00k	RES, 2.00k ohm, 1%, 0.063W, 0402	Vishay-Dale	CRCW04022K00FKED		0402	CRCW04022K00FKED
35	2	R27, R28	4.7k	RES, 4.7k ohm, 5%, 0.063W, 0402	Vishay-Dale	CRCW04024K70JNED		0402S	CRCW04024K70JNED
36	5	R29, R32, R33, R34, R42	10E	RES, 10 ohm, 5%, 0.063W, 0402	Vishay-Dale	CRCW040210R0JNED		0402S	CRCW040210R0JNED
37	1	R31	1.00	RES, 1.00 ohm, 1%, 0.125W, 0805	Vishay-Dale	CRCW08051R00FKEA		0805_HV	CRCW08051R00FKEA
38	1	R41	3.74k	RES, 3.74k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06033K74FKEA		0603	CRCW06033K74FKEA
39	8	R61, R62, R63, R64, R65, R66	10.0k	RES, 10.0k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060310K0FKEA		0603	CRCW060310K0FKEA
40	1	RF1	47	RES, 47 ohm, 10%, 2W, Fusible, TH	TT Electronics/IRC	EMC2-47RKL		EMC2	47 Ohm
41	1	U2		IC, EEPROM, 2KBIT, 1MHZ, SOIC-8	Atmel	AT24C02C-SSHM-B		SOIC-8M	AT24C02C-SSHM-B
42	1	U21		Ultra-Low Quiescent Current LDO Voltage Regulator, 4-pin SOT-223, Pb-Free	National Semiconductor	LM2936MP-3.3/NOPB		MP04A_N	LM2936MP-3.3/NOPB
43	1	U22		100V, 150 mA Constant On-Time Buck Switching Regulator, 8-pin MSOP, Pb-Free	Texas Instruments	LM5009AMM/NOPB		MUA08A_N	LM5009AMM/NOPB
44	1	U23		1 Mbps Dual Channels, 1 / 1, Digital Isolator, 3.3 V / 5 V, -40 to +105 degC, 8-pin SOIC (D), Green (RoHS & no Sb/Br)	Texas Instruments	ISO7421DR		D0008A_N	ISO7421DR
45	1	U24		4242-VPK Small-Footprint and Low-Power Quad Channels Digital Isolators, DBQ0016A	Texas Instruments	ISO7141CCDBQ		DBQ0016A_N	ISO7141CCDBQ
46	1	U41		16-Bit Constant-Current LED Sink Driver, 3 to 5.5 V, -40 to 85 degC, 24-pin SOP (DBQ24), Green (RoHS & no Sb/Br)	Texas Instruments	TLC5927IDBQR		DBQ0024A_N	TLC5927IDBQR
47	2	U42, U43		QUAD SERIAL INTERFACE LOW-SIDE DRIVER IC, PWP0016D	Texas Instruments	DRV8804PWP		PWP0016D_N	DRV8804PWP

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