

Bill of Materials
TI Designs # TIDA-00181

Sl. No.	Fitted	Quantity	Designator	Description	PartNumber	Manufacturer	RoHS	PackageReference
1	Fitted	1	PCB	Printed Circuit Board	TIDA-00181	Any	0	
2	Not Fitted	0	C1	CAP, AL, 47uF, 80V, +/-20%, 0.7 ohm, SMD	EEE-FK1K470P	Panasonic	Y	SMT Radial G
3	Not Fitted	0	C2	CAP, AL, 1uF, 63V, +/-20%, ohm, SMD	EMVE630ADA1R0MD55G	Nippon Chemi-Con	Y	D55
4	Fitted	1	C3	CAP, CERM, 22uF, 16V, +/-20%, X5R, 1206	1206YD22MATA2A	AVX	Y	1206
5	Fitted	1	C4	CAP, CERM, 0.022uF, 25V, +/-5%, COG/NP0, 0805	C2012C0G1E22J3	TDK	Y	0805
6	Fitted	1	C5	CAP, CERM, 1000pF, 25V, +/-10%, X7R, 0805	GRM216R71E102KA01D	MuRata	Y	0805
7	Fitted	1	C6	CAP, CERM, 470pF, 50V, +/-10%, X7R, 0805	CC0805KRX7R9BB471	Yageo America	Y	0805
8	Not Fitted	0	C7, C8	CAP, CERM, 1000pF, 25V, +/-10%, X7R, 0805	GRM216R71E102KA01D	MuRata	Y	0805
9	Not Fitted	0	C9, C59	CAP, AL, 22uF, 35V, +/-20%, 1 ohm, SMD	EEE-FC1V220P	Panasonic	Y	SMT Radial D
10	Fitted	18	C10, C11, C12, C22, C23, C24, C35, C36, C37, C47, C48, C49, C60, C61, C62, C72, C73, C74	CAP, CERM, 10uF, 50V, +/-10%, X5R, 1206, 190	CGA5L3X5R1H106K160AB	TDK	Y	1206_190
11	Fitted	12	C13, C17, C25, C29, C38, C42, C50, C54, C63, C67, C75, C79	CAP, AL, 47uF, 35V, +/-20%, 0.36 ohm, SMD	EEE-FK1V470P	Panasonic	Y	SMT Radial D
12	Not Fitted	0	C14, C18, C26, C30, C39, C43, C51, C55, C64, C68, C76, C80	CAP, AL, 47uF, 35V, +/-20%, 0.36 ohm, SMD	EEE-FK1V470P	Panasonic	Y	SMT Radial D
13	Fitted	6	C15, C27, C40, C52, C65, C77	CAP, CERM, 100pF, 50V, +/-10%, COG/NP0, 0805	C0805C101K5GACTU	Kemet	Y	0805
14	Fitted	6	C16, C28, C41, C53, C66, C78	CAP, CERM, 4.7uF, 25V, +/-10%, X5R, 0805	C2012X5R1E475K125AB	TDK	Y	0805
15	Fitted	12	C19, C20, C31, C32, C44, C45, C56, C57, C69, C70, C81, C82	CAP, CERM, 0.01uF, 16V, +/-5%, COG/NP0, 0805	B37947K9103J62	EPCOS Inc	Y	0805
16	Fitted	6	C21, C33, C46, C58, C71, C83	CAP, CERM, 10uF, 16V, +/-20%, X5R, 0805	0805YD106MAT2A	AVX	Y	0805
17	Fitted	1	C34	CAP, AL, 22uF, 35V, +/-20%, 1 ohm, SMD	EEE-FC1V220P	Panasonic	Y	SMT Radial D
18	Fitted	12	C84, C85, C86, C87, C88, C89, C90, C91, C92, C93, C94, C95	CAP, CERM, 0.1uF, 50V, +/-5%, X7R, 0805	0805SC104JAT2A	AVX	Y	0805
19	Fitted	1	CONN1	Terminal Block, 2x1, 5.08mm, TH	282841-2	TE Connectivity	Y	10.16x15.24mm
20	Fitted	1	CONN2	Terminal Block, 4x1, 2.54mm, TH	OSTVN02A150	3n Shore Technology Inc	Y	TERM_BLK, 2pos, 2.54mm
21	Fitted	6	CONN3, CONN4, CONN5, CONN6, CONN7, CONN8	CONN TERM BLOCK 2.54MM 4POS PCB	STVN04A150	3n Shore Technology Inc	Y	TERM_BLK, 4pos, 2.54mm
22	Fitted	1	D1	Diode, Schottky, 60V, 2A, SMA	B260A-13-F	Diodes Inc.	Y	SMA
23	Not Fitted	0	D2, D3	Diode, Signal, 300-mA, 75-V, 350-mW	1N4148W-7-F	Diodes	Y	SOD-123
24	Fitted	18	D4, D5, D6, D7, D8, D9, D10, D11, D12, D13, D14, D15, D16, D17, D18, D19, D20, D21	Diode, Schottky, 90V, 1A, SMA	B190-13-F	Diodes Inc.	Y	SMA
25	Not Fitted	0	FID1, FID2, FID3, FID4, FID5, FID6	Fiducial mark. There is nothing to buy or mount.	N/A	N/A		Fiducial
26	Fitted	4	H1, H2, H3, H4	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	NY PMS 440 0025 PH	B&F Fastener Supply	Y	Screw
27	Fitted	4	H5, H6, H7, H8	Standoff, Hex, 0.5" L, #4-40 Nylon	1902C	Keystone	Y	Standoff
28	Fitted	6	J1, J2, J3, J4, J5, J6	Header, Male 2-pin, 100mil spacing.	PEC025AAN	Sullins		0.100 inch x 2
29	Not Fitted	0	L1	Inductor, Shielded, Ferrite, 2.2mH, 0.65A, 1.94 ohm, SMD	MSS1210-225KE	Coilcraft	Y	Inductor, 12.3x10x12.3mm
30	Fitted	1	LBL1	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	THT-14-423-10	Brady	Y	PCB Label 0.650"H x 0.200"W
31	Fitted	24	LD1, LD2, LD3, LD4, LD5, LD6, LD7, LD8, LD9, LD10, LD11, LD12, LD13, LD14, LD15, LD16, LD17, LD18, LD19, LD20, LD21, LD22, LD23, LD24	LED SmartLED Green 570NM	LG L29K-G2J1-24-Z	OSRAM		0603
32	Not Fitted	0	Q1	MOSFET, N-CH, 60V, 6.3A, SO-8	CSD88539ND	Texas Instruments	Y	SO-8
33	Fitted	2	Q2, Q3	MOSFET, N-CH, 100V, 13A, SON 5x6mm	CSD19533Q5A	Texas Instruments	Y	SON 5x6mm
34	Not Fitted	0	R1, R7, R10, R13, R15, R18, R19, R41, R42, R51, R52	RES, 0 ohm, 5%, 0.125W, 0805	CRCW0805000020EA	Vishay-Dale	Y	0805
35	Fitted	1	R2	RES, 1.00k ohm, 1%, 0.125W, 0805	CRCW08051K00FKEA	Vishay-Dale	Y	0805
36	Fitted	11	R3, R9, R11, R21, R22, R31, R32, R61, R62, R71, R72	RES, 0 ohm, 5%, 0.125W, 0805	CRCW0805000020EA	Vishay-Dale	Y	0805
37	Fitted	1	R4	RES, 26.7k OHM 1/8W 1% 0805 SMD	RC0805FR-0726K7L	Yageo	Y	0805
38	Fitted	3	R5, R44, R54	RES, 100k ohm, 1%, 0.125W, 0805	ERJ-6ENF1003V	Panasonic	Y	0805
39	Fitted	1	R6	RES, 10.0k ohm, 1%, 0.125W, 0805	CRCW080510K0FKEA	Vishay-Dale	Y	0805
40	Fitted	1	R8	RES, 24.9k ohm, 1%, 0.125W, 0805	ERJ-6ENF2492V	Panasonic	Y	0805
41	Fitted	2	R12, R14	RES, 22 ohm, 5%, 0.125W, 0805	CRCW080522R0JNEA	Vishay-Dale	Y	0805
42	Fitted	1	R16	RES, 1.15k ohm, 1%, 0.125W, 0805	CRCW08051K15FKEA	Vishay-Dale	Y	0805
43	Fitted	1	R17	RES, 0.22 ohm, 1%, 0.25W, 1206	ERJ-8ROFR22V	Panasonic	Y	1206
44	Fitted	24	R20, R25, R26, R29, R30, R35, R36, R39, R40, R45, R46, R49, R50, R55, R56, R59, R60, R65, R66, R69, R70, R75, R76, R79	RES, 10k ohm, 5%, 0.125W, 0805	CRCW080510K0JNEA	Vishay-Dale	Y	0805
45	Not Fitted	0	R23, R33, R63, R73	RES, 1.2Meg ohm, 5%, 0.125W, 0805	ERJ-6GEYJ125V	Panasonic	Y	0805
46	Not Fitted	0	R24, R34, R64, R74	RES, 100k ohm, 1%, 0.125W, 0805	ERJ-6ENF1003V	Panasonic	Y	0805
47	Fitted	6	R27, R37, R47, R57, R67, R77	RES, 330k ohm, 0.5%, 0.1W, 0805	RR1220P-334-D	Susumu Co Ltd	Y	0805
48	Fitted	6	R28, R38, R48, R58, R68, R78	RES, 102k ohm, 1%, 0.125W, 0805	CRCW0805102KFKEA	Vishay-Dale	Y	0805
49	Fitted	2	R43, R53	RES, 1.2Meg ohm, 5%, 0.125W, 0805	ERJ-6GEYJ125V	Panasonic	Y	0805
50	Fitted	1	R80	RES, 0 ohm, 5%, 0.25W, 1206	ERJ-8GEYR00V	Panasonic	Y	1206
51	Fitted	3	T1, T2, T3	Transformer, Push-Pull, 12.8uH, TH	750342312	Würth Elektronik eiSos	Y	Transformer, .25x16x22.3mm
52	Fitted	1	U1	100V Push-Pull Current Mode PWM Controller, 10-pin MSOP, Pb-Free	LM5030MMNOPB	National Semiconductor	Y	MUB10A
53	Fitted	1	U2	1.2V - 8V, 3A PFET Load Switch with Configurable Slew Rate, Fast Transient Isolation and Hysteretic Control, DDC0006A	TPS27082LDDC	Texas Instruments	Y	DDC0006A
54	Fitted	6	U3, U5, U7, U9, U11, U13	5V Micropower Low-Dropout Voltage Regulator, 8-pin Narrow SOIC, Pb-Free	LP2954AIMNOPB	National Semiconductor	Y	M08A
55	Fitted	6	U4, U6, U8, U10, U12, U14	IC, -3V to -36V, ~200mA, Ultralow Noise, High-PSRR LDO Negative Linear Regulator	TPS7A30xDGN	TI		MSOP-8
56	Fitted	1	Z1	Diode, Zener, 12V, 500mW, SOD-123	MMSZ5242B-TP	Micro Commercial Co	Y	SOD-123

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