



TIDA-00771 REV E2 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	C1, C3, C15	3	1uF	C1608X7R1C105K	TDK	CAP, CERM, 1 µF, 16 V, +/- 10%, X7R, 0603	0603
2	C2, C4	2	0.047uF	C1608X7R1E473K	TDK	CAP, CERM, 0.047 µF, 25 V, +/- 10%, X7R, 0603	0603
3	C5	1	4.7uF	GRM31CR71H475KA12L	MuRata	CAP, CERM, 4.7 µF, 50 V, +/- 10%, X7R, 1206	1206
4	C6	1	4.7uF	GRM21BR61C475KA88L	MuRata	CAP, CERM, 4.7 µF, 16 V, +/- 10%, X5R, 0805	0805
5	C7, C8, C9	3	2.2uF	GRM32ER72A225KA35L	MuRata	CAP, CERM, 2.2 µF, 100 V, +/- 10%, X7R, 1210	1210
6	C10, C14, C26, C27, C30	5	1000pF	885012205061	Würth Elektronik	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0402	0402
7	C11	1	3300pF	C1005X7R1H332K	TDK	CAP, CERM, 3300 pF, 50 V, +/- 10%, X7R, 0402	0402
8	C12	1	2.2uF	GRM31CR71H225KA88L	MuRata	CAP, CERM, 2.2 µF, 50 V, +/- 10%, X7R, 1206	1206
9	C13, C18, C23, C25, C28, C31	6	0.1uF	885012105016	Würth Elektronik	CAP, CERM, 0.1 µF, 16 V, +/- 20%, X5R, 0402	0402
10	C16	1	10uF	0805YD106MAT2A	AVX	CAP, CERM, 10uF, 16V, +/-20%, X5R, 0805	0805
11	C17, C29	2	0.1uF	0603YC104JAT2A	AVX	CAP, CERM, 0.1 µF, 16 V, +/- 5%, X7R, 0603	0603
12	C19, C20	2	270uF	EKZN350ELL271MJC5S	United Chemi-Con	CAP ALUM 270UF 20% 35V RADIAL	10x20
13	C21	1	0.1uF	C2012X7R1E104K	TDK	CAP, CERM, 0.1 µF, 25 V, +/- 10%, X7R, 0805	0805
14	C22	1	2200pF	GRM155R71H222KA01D	MuRata	CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, 0402	0402
15	C24	1	0.01uF	C0603X103K5RACTU	Kemet	CAP, CERM, 0.01 µF, 50 V, +/- 10%, X7R, 0603	0603
16	D1	1	RED	150060RS75000	Würth Electronics Inc	LED RED CLEAR 0603 SMD	LED 0603
17	D2	1	30V	SMAJ30CA	Littelfuse	Diode, TVS, Bi, 30 V, 400 W, SMA	SMA
18	D3	1	YELLOW	150060YS75000	Würth Electronics Inc	LED YELLOW CLEAR 0603 SMD	LED 0603
19	D4	1	GREEN	150060GS75000	Würth Electronics Inc	LED, Green, SMD	LED 0603
20	D5	1	40V	NSR0240V2T1G	ON Semiconductor	Diode, Schottky, 40 V, 0.25 A, SOD-523	SOD-523
21	J1	1	PEC04SAA N	PEC04SAAN	Sullins	Header, Male 4-pin, 100mil spacing,	0.100 inch x 4
22	J2	1		800-10-003-10-001000	Mill-Max	Header, 100mil, 3x1, TH	Header, 3x1, 100mil, TH
23	J3	1		800-10-005-10-001000	Mill-Max	Header, 100mil, 5x1, TH	Header, 5x1, 100mil, TH
24	J4	1		800-10-002-10-001000	Mill-Max	Header, 100mil, 2x1, TH	Header, 2x1, 100mil, TH
25	LBL1	1		TIDA-00771	Any	Printed Circuit Board	
26	Q1, Q2, Q3, Q4, Q5, Q6	6	30V	CSD17576Q5B	Texas Instruments	MOSFET, N-CH, 30 V, 100 A, SON 5x6mm	SON 5x6mm
27	R1, R3	2	10k	CRCW060310K0JNEA	Vishay-Dale	RES, 10 k, 5%, 0.1 W, 0603	0603
28	R2	1	100	CRCW0603100R0JNEA	Vishay-Dale	RES, 100, 5%, 0.1 W, 0603	0603
29	R4, R16, R17	3	3.30k	RG1608P-332-B-T5	Susumu Co Ltd	RES, 3.30 k, 0.1%, 0.1 W, 0603	0603
30	R5, R18	2	0.001	CRE2512-FZ-R001E-3	Bourns Inc.	RES SMD 0.001 OHM 1% 3W 2512	2512
31	R6, R7, R22, R27, R28, R39, R42, R43, R44	9	100	ERJ-2RKF1000X	Panasonic	RES, 100, 1%, 0.1 W, 0402	0402
32	R8	1	5.11	RC0603FR-075R11L	Yageo America	RES, 5.11, 1%, 0.1 W, 0603	0603
33	R9	1	47.5k	CRCW040247K5FKED	Vishay-Dale	RES, 47.5 k, 1%, 0.063 W, 0402	0402
34	R10	1	2M	RC0603FR-072ML	Yageo	RES SMD 2M OHM 1% 1/10W 0603	0603
35	R11	1	3.3	CRCW06033R30JNEA	Vishay-Dale	RES, 3.3, 5%, 0.1 W, 0603	0603
36	R12	1	499k	RC0402FR-07499KL	Yageo	RES SMD 499K OHM 1% 1/16W 0402	0402
37	R13, R14, R15	3	3.3k	CRCW04023K30JNED	Vishay-Dale	RES, 3.3 k, 5%, 0.063 W, 0402	0402
38	R19, R21, R32, R36, R37, R38	6	10.0k	ERJ-2RKF1002X	Panasonic	RES, 10.0 k, 1%, 0.1 W, 0402	0402
39	R20	1	0	ERJ-2GE0R00X	Panasonic	RES, 0, 5%, 0.063 W, 0402	0402
40	R23	1	51.1k	CRCW040251K1FKED	Vishay-Dale	RES, 51.1 k, 1%, 0.063 W, 0402	0402
41	R24	1	78.7k	CRCW040278K7FKED	Vishay-Dale	RES, 78.7 k, 1%, 0.063 W, 0402	0402

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42	R25	1	100k	CRCW040251K1FKED	Yageo	RES SMD 100K OHM 1% 1/16W 0402	0402
43	R26	1	100	CRCW0402100RFKED	Vishay-Dale	RES, 100, 1%, 0.063 W, 0402	0402
44	R40, R45	2	1.00Meg	ERJ-2RKF1004X	Panasonic	RES, 1.00 M, 1%, 0.1 W, 0402	0402
45	U1	1		DRV83053PHPR	Texas Instruments	Three Phase Gate Driver With Current Shunt Amplifiers and Voltage Regulator, PHP0048G	PHP0048G
46	U2	1		MSP430G2553IPW28	Texas Instruments	16 MHz Mixed Signal Microcontroller with 16 KB Flash, 512 B SRAM and 24 GPIOs, -40 to 85 degC, 28-pin SOP (PW), Green (RoHS & no Sb/Br)	PW0028A
47	U3	1		LMT87QDCKRQ1	Texas Instruments	SC70 Analog Temperature Sensor with Class-AB Output, DCK0005A	DCK0005A
48	U4, U6, U7, U8	4		TPD1E10B06DPYT	Texas Instruments	ESD Protection in 0402 Package with 10 pF Capacitance and 6 V Breakdown, 1 Channel, -40 to +125 degC, 2-pin X2SON (DPY)	DPY0002A
49	U9	1		SN74LVC126APWR	Texas Instruments	Quadruple Bus Buffer Gate with 3-State Outputs, PW0014A	PW0014A
50	R41	0	0	ERJ-2GE0R00X	Panasonic	RES, 0, 5%, 0.063 W, 0402	0402

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