

## TIDA-01485 REV E2 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
IPCBB1	1		TIDA-01485	Any	Printed Circuit Board	
C3, C23, C24, C33, C34, C35, C36	7	0.1uF	885012105016	Würth Elektronik	CAP, CERM, 0.1 µF, 16 V, +/- 20%, X5R, 0402	0402
C5	1	22uF	C3225X7R1C226K250AC	TDK	CAP, CERM, 22 µF, 16 V,+/- 10%, X7R, 1210	1210
C6	1	2.2uF	GRM32ER72A225KA35L	MuRata	CAP, CERM, 2.2uF, 100V, +/-10%, X7R, 1210	1210
C9	1	0.1uF	06035C104KAT2A	AVX	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603	0603
C10	1	4.7uF	GRM21BC71H475KE11K	MuRata	CAP, CERM, 4.7 µF, 50 V,+/- 10%, X7S, 0805	0805
C11, C13	2	1uF	C1608X7R1C105K080AC	TDK	CAP, CERM, 1 µF, 16 V, +/- 10%, X7R, 0603	0603
C12	1	0.047uF	C1608X7S2A473K080AB	TDK	CAP, CERM, 0.047 µF, 100 V,+/- 10%, X7S, 0603	0603
C14, C15	2	390uF	UHW1H391MPD6	Nichicon	CAP ALUM 390UF 20% 50V RADIAL	10x22
C17	1	0.1uF	C3216X7R2A104K160AA	TDK	CAP, CERM, 0.1 µF, 100 V, +/- 10%, X7R, 1206	1206
C18, C19, C22	3	2.2uF	GRM32ER72A225KA35L	MuRata	CAP, CERM, 2.2 µF, 100 V, +/- 10%, X7R, 1210	1210
C26	1	0.47uF	C0805C474K4RACTU	Kemet	CAP, CERM, 0.47 µF, 16 V, +/- 10%, X7R, 0805	0805
C27, C29, C31	3	10uF	0805YD106MAT2A	AVX	CAP, CERM, 10uF, 16V, +/-20%, X5R, 0805	0805
C28, C30, C32	3	0.1uF	0603YC104JAT2A	AVX	CAP, CERM, 0.1 µF, 16 V, +/- 5%, X7R, 0603	0603
C37	1	2200pF	GRM155R71H222KA01D	MuRata	CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, 0402	0402
C38, C39, C40	3	1000pF	885012205061	Würth Elektronik	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0402	0402
C43, C44, C45	3	3300pF	CGA2B2X7R1H332K050BA	TDK	CAP, CERM, 3300 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
D1	1	58V	SMAJ58CA	Littelfuse	Diode, TVS, Bi, 58 V, SMA	SMA
D2	1	RED	150060RS75000	Würth Electronics Inc	LED RED CLEAR 0603 SMD	LED_0603
D3	1	YELLOW	150060YS75000	Würth Electronics Inc	LED YELLOW CLEAR 0603 SMD	LED_0603
D4	1	GREEN	150060GS75000	Würth Electronics Inc	LED, Green, SMD	LED_0603
D5	1	200V	ES2DA-13-F	Diodes Inc.	Diode, Superfast Rectifier, 200 V, 2 A, SMA	SMA
D6	1	60V	PMEG6010CEJ,115	NXP Semiconductor	Diode, Schottky, 60 V, 1 A, SOD-323F	SOD-323F
H1, H2	2		6003	Serpac	SHEET MTL SCREW FLAT PHH #2 1=1	SCREW FLAT PHH #2 1=1
H3	1		904-27-2-23-2-B-0	Wakefield-Vette	HEATSINK 27X27X23MM PIN	HEATSINK 27X27X23MM PIN
H4	1		A15727-00	Laird Technologies - Thermal	Thermal Conductive Pad	TPCM 5810 27mmx27mm
J1	1		800-10-003-10-001000	Mill-Max	Header, 100mil, 3x1, TH	Header, 3x1, 100mil, TH
J2, J6	2		800-10-002-10-001000	Mill-Max	Header, 100mil, 2x1, TH	Header, 2x1, 100mil, TH
J3	1	PEC04SAA N	PEC04SAAN	Sullins	Header, Male 4-pin, 100mil spacing,	0.100 inch x 4
J4	1		800-10-005-10-001000	Mill-Max	Header, 100mil, 5x1, TH	Header, 5x1, 100mil, TH
L1	1	120uH	SDR0302-121KL	Bourns	Inductor, Drum Core, Ferrite, 120uH, 0.22A, 3.2 ohm, SMD	3x2.5x2.8mm
R3	1	100k	ERJ-2GEJ104X	Panasonic	RES, 100 k, 1%, 0.063 W, 0402	0402
R4, R27, R29, R32, R34, R35, R50, R51, R52, R53, R54, R55	12	100	ERJ-2RKF1000X	Panasonic	RES, 100, 1%, 0.1 W, 0402	0402
R13, R15	2	0.002	CRE2512-FZ-R002E-3	Bourns	RES, 0.002, 1%, 3 W, AEC-Q200 Grade 0, 2512	2512
R14	1	28.0k	CRCW040228K0FKED	Vishay-Dale	RES, 28.0 k, 1%, 0.063 W, 0402	0402
R20	1	8.45k	CRCW04028K45FKED	Vishay-Dale	RES, 8.45 k, 1%, 0.063 W, 0402	0402
R23	1	2M	RC0603FR-072ML	Yageo	RES SMD 2M OHM 1% 1/10W 0603	0603

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R24, R26, R56, R57	4	0	RC0402JR-070RL	Yageo	RES, 0, 5%, 0.063 W, 0402	0402
R31	1	150k	CRCW0402150KFED	Vishay-Dale	RES, 150 k, 1%, 0.063 W, 0402	0402
R33, R36, R42, R45	4	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, 0402	0402
R37	1	3.3	CRCW06033R30JNEA	Vishay-Dale	RES, 3.3, 5%, 0.1 W, 0603	0603
R38, R40, R41	3	1.0k	CRCW06031K00JNEA	Vishay-Dale	RES, 1.0 k, 5%, 0.1 W, 0603	0603
R43, R46	2	1.00Meg	ERJ-2RKF1004X	Panasonic	RES, 1.00 M, 1%, 0.1 W, 0402	0402
R44	1	47.5k	CRCW040247K5FKED	Vishay-Dale	RES, 47.5 k, 1%, 0.063 W, 0402	0402
R47, R48, R49	3	3.3k	CRCW04023K30JNED	Vishay-Dale	RES, 3.3 k, 5%, 0.063 W, 0402	0402
S1	1		434121025816	Wurth Elektronik	Switch, Tactile, SPST, 12 V, SMD	SMD, 6x3.9mm
U1, U2, U3	3		CSD88599Q5DC	Texas Instruments	60 V Half-Bridge NexFE Power Block, DMM0022A	DMM0022A
U8	1		DRV8323RSRGZR	Texas Instruments	60-V Three-Phase Smart Gate Driver, RGZ0048B	RGZ0048B
U9	1		MSP430F5132IRSBR	Texas Instruments	25 MHz Mixed Signal Microcontroller with 8 KB Flash, 1024 B SRAM and 29 GPIOs, -40 to 85 degC, 40-pin QFN (RSB), Green (RoHS & no Sb/Br)	RSB0040B
U10	1		LMT87QDCKRQ1	Texas Instruments	SC70 Analog Temperature Sensor with Class-AB Output, DCK0005A	DCK0005A
C25, C46, C47, C48	0	1000pF	885012205061	Wurth Elektronik	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0402	0402
R17, R18	0	10.0	RMCF0402JT10R0	Stackpole Electronics	RES, 10.0, 1%, 0.063 W, 0402	0402
R25, R28, R30	0	100	ERJ-2RKF1000X	Panasonic	RES, 100, 1%, 0.1 W, 0402	0402

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