

## TIDA-00774 REV E2 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
IPCB1	1		TIDA-00774	Any	Printed Circuit Board	
C1, C2, C4, C18, C19, C20, C21, C22, C41, C42	10	2.2uF	GRM32ER72A225KA35L	MuRata	CAP, CERM, 2.2 $\mu$ F, 100 V, +/- 10%, X7R, 1210	1210
C3	1	0.01uF	GRM155R71E103KA01D	MuRata	CAP, CERM, 0.01 $\mu$ F, 25 V, +/- 10%, X7R, 0402	0402
C5	1	22uF	CC1210MKX5R8BB226	Yageo	ion 22 $\mu$ F 25V Ceramic Capacitor X5R 1210	1210
C6	1	2.2uF	GRM32ER72A225KA35L	MuRata	CAP, CERM, 2.2uF, 100V, +/-10%, X7R, 1210	1210
C7	1	820pF	GRM155R71H821KA01D	MuRata	CAP, CERM, 820 pF, 50 V, +/- 10%, X7R, 0402	0402
C8	1	15pF	CC0402JRNPO9BN150	Yageo America	CAP, CERM, 15 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C9	1	0.1uF	06035C104KAT2A	AVX	CAP, CERM, 0.1 $\mu$ F, 50 V, +/- 10%, X7R, 0603	0603
C10	1	4.7uF	GRM31CR71H475KA12L	MuRata	CAP 4.7 $\mu$ F $\pm$ 10% 50V Ceramic X7R 1206	1206
C11, C13	2	1uF	C1608X7R1C105K080AC	TDK	CAP, CERM, 1 $\mu$ F, 16 V, +/- 10%, X7R, 0603	0603
C12	1	0.022uF	C0603C223K3RACTU	Kemet	CAP, CERM, 0.022 $\mu$ F, 25 V, +/- 10%, X7R, 0603	0603
C14, C15, C16	3	470uF	35ZLG470MEFC10X20	Rubycon	470 $\mu$ F 35V CAP ALUM CAN 4000 Hrs @ 105°C	10x20
C17	1	0.1uF	08055C104KAT2A	AVX Corporation	CAP, CERM, 0.1 $\mu$ F, 50 V, +/- 10%, X7R, 0805	0805
C23, C24, C33, C34, C35, C36	6	0.1uF	885012105016	Würth Elektronik	CAP, CERM, 0.1 $\mu$ F, 16 V, +/- 20%, X5R, 0402	0402
C26	1	0.47uF	C0805C474K4RACTU	Kemet	CAP, CERM, 0.47 $\mu$ F, 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 $\mu$ F, 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	30V	SMAJ30CA-E3/61	Vishay Semiconductor Diodes	TVS DIODE 30VWM 48.4VC DO214AC	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
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	PEC04SAAN	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
J5	1		PEC07DAAN	Sullins Connector Solutions	Header, 100mil, 7x2, Tin, TH	Header, 7x2, 100mil, Tin
L1	1	120uH	SDR0302-121KL	Bourns	Inductor, Drum Core, Ferrite, 120uH, 0.22A, 3.2 ohm, SMD	3x2.5x2.8mm
R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R37	13	3.3	CRCW06033R30JNEA	Vishay-Dale	RES, 3.3, 5%, 0.1 W, 0603	0603
R13, R15	2	0.001	CSS2H-2512R-1L00F	Bourns Inc.	RES SMD 0.001 OHM 1% 5W 2512	2512

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R14	1	30.9k	CRCW040230K9FKED	Vishay-Dale	RES, 30.9k ohm, 1%, 0.063W, 0402	0402
R16	1	196k	CRCW0402196KFKED	Vishay-Dale	RES, 196 k, 1%, 0.063 W, 0402	0402
R19	1	53.6k	CRCW040253K6FKED	Vishay-Dale	RES, 53.6 k, 1%, 0.063 W, 0402	0402
R20	1	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0k ohm, 1%, 0.063W, 0402	0402
R21	1	49.9k	CRCW040249K9FKED	Vishay-Dale	RES, 49.9 k, 1%, 0.063 W, 0402	0402
R22	1	97.6k	CRCW040297K6FKED	Vishay-Dale	RES, 97.6k ohm, 1%, 0.063W, 0402	0402
R23	1	2M	RC0603FR-072ML	Yageo	RES SMD 2M OHM 1% 1/10W 0603	0603
R24, R26, R56, R57	4	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
R27, R29, R32, R34, R35, R50, R51, R52, R53, R54, R55	11	100	ERJ-2RKF1000X	Panasonic	RES, 100, 1%, 0.1 W, 0402	0402
R31	1	300k	RC0402FR-07300KL	Yageo	RES SMD 300K OHM 1% 1/16W 0402	0402
R33, R36, R42, R45	4	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, 0402	0402
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	Würth Elektronik	Switch, Tactile, SPST, 12 V, SMD	SMD, 6x3.9mm
U1, U2, U3, U4, U6, U7	6		CSD88584Q5DC	Texas Instruments	40 V Half-Bridge NexFE Power Block, DMM0022A	DMM0022A
U5	1	TPS54061DRBR	TPS54061DRBR	Texas Instruments	IC, 60V/0.2A Synchronous Buck Regulator	QFN
U8	1		DRV8323SRTAR	Texas Instruments	60-V Three-Phase Smart Gate Driver, RHA0040B	WQFN
U9	1		MSP430F5132IDA	Texas Instruments	25 MHz Mixed Signal Microcontroller with 8 KB Flash, 1024 B SRAM and 29 GPIOs, -40 to 85 degC, 38-pin SOP (DA), Green (RoHS & no Sb/Br)	DA0038A
U10	1		LMT87DCKR	Texas Instruments	SC70 Analog Temperature Sensor with Class-AB Output, DCK0005A	DCK0005A
C25, C46, C47, C48	0	1000pF	885012205061	Würth Elektronik	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0402	0402
R17, R18, R25, R28, R30	0	100	ERJ-2RKF1000X	Panasonic	RES, 100, 1%, 0.1 W, 0402	0402

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