

TIDA-01586 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPCB	1		TIDA-01586	Any	Printed Circuit Board	
2	C1, C13, C14, C15	4	0.1uF	GRM155R71A104KA01D	MuRata	CAP, CERM, 0.1 uF, 10 V, +/- 10%, X7R, 0402	0402
3	C2	1	100pF	GRM1885C1H101JA01D	MuRata	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
4	C3, C8	2	1uF	C0805C105K3RACTU	Kemet	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0805	0805
5	C4	1	100uF	TPSV107K025R0100	AVX	CAP, TA, 100 uF, 25 V, +/- 10%, 0.1 ohm, SMD	7361-38
6	C5	1	47uF	GRT31CR61A476KE13L	MuRata	CAP, CERM, 47 uF, 10 V, +/- 10%, X5R, AEC-Q200 Grade 1, 1206	1206
7	C6, C12, C17	3	10uF	GRM188R61E106MA73D	MuRata	CAP, CERM, 10 uF, 25 V, +/- 20%, X5R, 0603	0603
8	C7, C18	2	0.1uF	C1005X7R1H104K050BB	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0402	0402
9	C9	1	100uF	TPSD107K1010R0100	AVX	CAP, TA, 100 uF, 10 V, +/- 10%, 0.1 ohm, SMD	7343-31
10	C10, C11	2	1uF	GRM155R61A105ME15D	MuRata	CAP, CERM, 1 uF, 10 V, +/- 20%, X5R, 0402	0402
11	C16	1	33uF	C3216X5R1E336M160AC	TDK	CAP, CERM, 33 uF, 25 V, +/- 20%, X5R, 1206	1206
12	C19	1	0.082uF	GRM155R71A823KA01D	MuRata	CAP, CERM, 0.082 uF, 10 V, +/- 10%, X7R, 0402	0402
13	C20	1	10uF	CL05A106MP5NUNC	Samsung Electro-Mechanics	CAP, CERM, 10 uF, 10 V, +/- 20%, X5R, 0402	0402
14	C21	1	4.7uF	GRM188R6YA475KE15D	MuRata	CAP, CERM, 4.7 uF, 35 V, +/- 10%, X5R, 0603	0603
15	D1	1	Red	LS L29K-G1J2-1-Z	OSRAM	LED, Red, SMD	SMD, 2-Leads, Body 1.3x0.8mm
16	D2	1	Blue	LB Q39G-L2N2-35-1	OSRAM	LED, Blue, SMD	BLUE 0603 LED
17	D3	1	Green	LP L296-J2L2-25	OSRAM	LED, Green, SMD	1.3x0.8mm
18	D4	1	40V	NSR0240V2T1G	ON Semiconductor	Diode, Schottky, 40 V, 0.25 A, SOD-523	SOD-523
19	J1, J2	2		SSQ-110-03-F-S	Samtec	Receptacle, 2.54mm, 10x1, Gold, TH	10x1 Receptacle
20	J3, J6, J7, J10, J13	5		TSW-102-07-G-S	Samtec	Header, 100mil, 2x1, Gold, TH	2x1 Header
21	J4, J5	2		ED555/2DS	On-Shore Technology	Terminal Block, 3.5mm Pitch, 2x1, TH	7.0x8.2x6.5mm
22	J8	1		53398-0271	Molex	Plug, SMT, Vertical, 1.25mm, 1x2	533980271
23	J9	1		GRPB052VWVN-RC	Sullins Connector Solutions	Header, 50mil, 5x2, Gold, TH	Header, 5x2, 50mil
24	J11, J12	2		TSW-103-07-G-S	Samtec	Header, 100mil, 3x1, Gold, TH	3x1 Header
25	L1	1	22uH	SRR0745A-220M	Bourns	Inductor, Shielded Drum Core, Ferrite, 22 uH, 1.65 A, 0.096 ohm, AEC-Q200 Grade 1, SMD	7.3x7.3x4.7mm
26	L2	1	180uH	ELL-6UH181M	Panasonic	Inductor, Shielded Drum Core, Ferrite, 180 uH, 0.47 A, 0.75 ohm, SMD	ELL6UH
27	L3	1	4.7uH	IFSC1515AHER4R7M01	Vishay-Dale	Inductor, Shielded, Ferrite, 4.7 uH, 2 A, 0.09 ohm, SMD	SMD, 3.8x3.8mm
28	Q1, Q4	2	-30V	SI2343CDS-T1-GE3	Vishay-Siliconix	MOSFET, P-CH, -30 V, -5.9 A, SOT-23	SOT-23
29	Q2, Q3	2	-20V	CSD25402Q3A	Texas Instruments	MOSFET, P-CH, -20 V, -15 A, DNH0008A (VSONP-8)	DNH0008A
30	Q5	1	30V	CSD17585F5T	Texas Instruments	MOSFET, N-CH, 30 V, 5.9 A, YJK0003A (PICOSTAR-3)	YJK0003A
31	R1, R20	2	0	RC0402JR-070RL	Yageo America	RES, 0, 5%, 0.063 W, 0402	0402
32	R2	1	100k	RC0603FR-07100KL	Yageo America	RES, 100 k, 1%, 0.1 W, 0603	0603
33	R3, R11, R12, R13, R15, R16, R17	7	0	RC0603JR-070RL	Yageo America	RES, 0, 5%, 0.1 W, 0603	0603
34	R4	1	154k	RC0603FR-07154KL	Yageo America	RES, 154 k, 1%, 0.1 W, 0603	0603
35	R5	1	2.87k	CRCW06032K87FKEA	Vishay-Dale	RES, 2.87 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
36	R6	1	19.6k	RC0603FR-0719K6L	Yageo America	RES, 19.6 k, 1%, 0.1 W, 0603	0603
37	R7	1	13.3k	RC0603FR-0713K3L	Yageo America	RES, 13.3 k, 1%, 0.1 W, 0603	0603
38	R8, R9, R18	3	47k	RC0603JR-0747KL	Yageo America	RES, 47 k, 5%, 0.1 W, 0603	0603
39	R10	1	590	CRCW0603590RFKEA	Vishay-Dale	RES, 590, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
40	R14, R23, R24	3	10.0k	RC0603FR-0710KL	Yageo America	RES, 10.0 k, 1%, 0.1 W, 0603	0603
41	R19	1	487	CRCW0603487RFKEA	Vishay-Dale	RES, 487, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
42	R21	1	910	CRCW0402910RJNED	Vishay-Dale	RES, 910, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
43	R22, R25	2	7.87	CRCW04027R87FKED	Vishay-Dale	RES, 7.87, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
44	SH-J3, SH-J6, SH-J7, SH-J10, SH-J11, SH-J12, SH-J13	7	1x2	SNT-100-BK-G	Samtec	Shunt, 100mil, Gold plated, Black	Shunt
45	TP1, TP2, TP8, TP10, TP15, TP17	6		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
46	TP3, TP9	2		5004	Keystone	Test Point, Miniature, Yellow, TH	Yellow Miniature Testpoint
47	TP4, TP5, TP6, TP11, TP14, TP16, TP18	7		5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
48	TP7, TP12, TP13	3		5002	Keystone	Test Point, Miniature, White, TH	White Miniature Testpoint
49	U1	1		TPS54202DDCR	Texas Instruments	4.5V to 28V Input, 2A Output, EMI Friendly Synchronous Step-Down Converter, DDC0006A (SOT-23-T-6)	DDC0006A
50	U2	1		TLV70033DCKR	Texas Instruments	Single Output LDO, 200 mA, Fixed 3.3 V Output, 2 to 5.5 V Input, with Low IQ, 5-pin SC70 (DCK), -40 to 125 degC, Green (RoHS & no Sb/Br)	DCK0005A
51	U3	1		DRV8837CDSDG	Texas Instruments	1-A Low-Voltage H-Bridge Driver, DSG0008A (WSON-8)	DSG0008A
52	U4, U5, U6	3		TPD1E10B06DPYR	Texas Instruments	ESD in 0402 Package with 10 pF Capacitance and 6 V Breakdown, 1 Channel, -40 to +125 degC, 2-pin X2SON (DPY), Green (RoHS & no Sb/Br)	DPY0002A
53	U7	1		TPS54201DDCR	Texas Instruments	4.5V TO 28V INPUT VOLTAGE, 1.5A OUTPUT CURRENT, SYNCHRONOUS BUCK WLED Driver, DDC0006A (SOT-6)	DDC0006A
54	U8	1		TPS61169DCKR	Texas Instruments	TPS61169 38-V High-Current Boost WLED Driver, DCK0005A (SOT-SC70-5)	DCK0005A
55	FID1, FID2, FID3, FID4, FID5, FID6	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A

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