

TIDA-01605 REV E2 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPCB	1		TIDA-01605	Any	Printed Circuit Board	
2	C1, C3, C6, C8, C9, C11, C14, C15, C17, C19, C22, C25, C27, C29, C32, C33, C37	17	0.1uF	CGA3E2X7R1E104K080AA	TDK	CAP, CERM, 0.1 µF, 25 V,+/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
3	C2, C10	2	10uF	GRT188C81A106ME13D	MuRata	CAP, CERM, 10 µF, 10 V,+/- 20%, X6S, AEC-Q200 Grade 2, 0603	0603
4	C4, C5, C7, C12, C13, C16, C18, C26, C28	9	4.7uF	GRT21BR61H475KE13L	MuRata	CAP, CERM, 4.7 µF, 50 V,+/- 10%, X5R, AEC-Q200 Grade 3, 0805	0805
5	C20, C21, C30, C31	4	0.01uF	CGA3E2C0G1H103J080AA	TDK	CAP, CERM, 0.01 µF, 50 V,+/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0603	0603
6	C34	1	27pF	GRM1555C1H270JA01D	MuRata	CAP, CERM, 27 pF, 50 V,+/- 5%, C0G/NP0, 0402	0402
7	C35	1	100pF	CGA3E2NP01H101J080AA	TDK	CAP, CERM, 100 pF, 50 V,+/- 5%, C0G/NP0, AEC-Q200 Grade 0, 0603	0603
8	C36	1	470pF	GCM1885C1H471JA16D	MuRata	CAP, CERM, 470 pF, 50 V,+/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0603	0603
9	C38, C41, C42, C43	4	100pF	GCM1885C2A101JA16D	MuRata	CAP, CERM, 100 pF, 100 V,+/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0603	0603
10	D1, D2	2	70V	BAV70-E3-08	Vishay-Semiconductor	Diode, Switching, 70 V, 0.25 A, AEC-Q101, SOT-23	SOT-23
11	D3, D4	2	40V	MBRA340T3G	ON Semiconductor	Diode, Schottky, 40 V, 3 A, SMA	SMA
12	D5, D7, D8	3	75V	1N4148X-TP	Micro Commercial Components	Diode, Switching, 75 V, 0.3 A, SOD-523	SOD-523
13	D6	1	1300V	BYG23T-M3/TR	Vishay-Semiconductor	Diode, Ultrafast, 1300 V, 1 A, SMA	SMA
14	D9	1	5.1V	BZT52CV1-G3-08	Vishay-Semiconductor	Diode, Zener, 5.1 V, 500 mW, SOD-123	SOD-123
15	J101	1		90122-0763	Molex	Header, 2.54mm, 3x2, Gold, R/A, TH	Header, 2.54mm, 3x2, R/A, TH
16	J102, J103	2		90121-0762	Molex	Header, 2.54mm, 2x1, Gold with Tin tail, R/A, TH	Header, 2.54mm, 2x1, R/A, TH
17	Q1	1	30V	CSD17313Q2	Texas Instruments	MOSFET, N-CH, 30 V, 5 A, DQK0006C (WSON-6)	DQK0006C
18	Q2, Q3, Q4	3	40 V	MMBT3904T-7-F	Diodes Inc.	Transistor, NPN, 40 V, 0.2 A, SOT-523	SOT-523
19	R1, R4	2	4.7k	CRCW08054K70JNEA	Vishay-Dale	RES, 4.7 k, 5%, 0.125 W, 0805	0805
20	R2, R5	2	3.01k	RT0603DRE073K01L	Yageo America	RES, 3.01 k, 0.5%, 0.1 W, 0603	0603
21	R3, R6	2	4.99k	RT0603DRE074K99L	Yageo America	RES, 4.99 k, 0.5%, 0.1 W, 0603	0603
22	R7, R10	2	5.11	CRCW12065R11FKEA	Vishay-Dale	RES, 5.11, 1%, 0.25 W, 1206	1206
23	R8, R11	2	1.0	CRM1206-JW-1R0ELF	Bourns	RES, 1.0, 5%, 0.5 W, 1206	1206
24	R9	1	1			Resistor	J1-0603
25	R12, R14	2	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
26	R13	1	27	CRCW120627R0JNEA	Vishay-Dale	RES, 27, 5%, 0.25 W, 1206	1206
27	R15, R20, R23, R25, R26, R30, R32	7	5.1k	RC0603JR-075K1L	Yageo America	RES, 5.1 k, 5%, 0.1 W, 0603	0603
28	R16, R17, R19, R27	4	1.0k	RCA06031K00JNEA	Vishay-Dale	RES, 1.0 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
29	R18	1	10.0k	TNPW060310K0BEEA	Vishay-Dale	RES, 10.0 k, 0.1%, 0.1 W, AEC-Q200 Grade 1, 0603	0603
30	R21	1	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, 0603	0603
31	R22	1	2.2k	RC0603JR-072K2L	Yageo America	RES, 2.2 k, 5%, 0.1 W, 0603	0603
32	R24	1	2.00k	RT0603DRE072KL	Yageo America	RES, 2.00 k, 0.5%, 0.1 W, 0603	0603
33	R28	1	10.0k	RT0603DRE0710KL	Yageo America	RES, 10.0 k, 0.5%, 0.1 W, 0603	0603
34	R29	1	15k	RC0603JR-0715KL	Yageo America	RES, 15 k, 5%, 0.1 W, 0603	0603
35	R33, R34, R132	3	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
36	T1, T2	2	50uH	750343725	Würth Elektronik	Transformer, 50 uH, SMT	9.14x8mm
37	U1, U4	2		SN6501QDBVRQ1	Texas Instruments	Automotive Low-Noise 350 mA, 410 kHz Transformer Driver, DBV0005A (SOT-23-5)	DBV0005A
38	U2	1		TPS7B6950QDCYRQ1	Texas Instruments	Automotive High-Voltage Ultra-Low IQ Low-Dropout Regulator/Fixed 5-V Output Voltage, DCY0004A (SOT-223-4)	DCY0004A
39	U3, U5, U9	3		TL431AQDBZRQ1	Texas Instruments	Automotive Catalog Adjustable Precision Shunt Regulator, 34 ppm / degC, 100 mA, -40 to 125 degC, 3-pin SOT-23 (DBZ), Green (RoHS & no Sb/Br)	DBZ0003A
40	U6	1		UCC21530QDWKRQ1	Texas Instruments	4-A, 6-A, 5.7-kVRMS Isolated Dual-Channel Gate Driver with Enable, DWK0014A (SOIC-14)	DWK0014A
41	U7	1		ISO7721QDRQ1	Texas Instruments	Automotive, High Speed, Robust EMC Reinforced Dual-Channel Digital Isolator, D0008B (SOIC-8)	D0008B
42	U8	1		LMV762QMA	Texas Instruments	Automotive Low Voltage, Precision Comparator with Push-Pull Output, D0008A	D0008A
43	C23, C24	0	0.1uF	CGA3E2X7R1E104K080AA	TDK	CAP, CERM, 0.1 µF, 25 V,+/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
44	C39, C40	0	1000pF	GCM155R71H102KA37D	MuRata	CAP, CERM, 1000 pF, 50 V,+/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
45	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
46	R31	0	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603

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