

TIDA-01428 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPCB1	1		TIDA-01428	Any	Printed Circuit Board	
2	C1	1	1uF	C1608X5R1A105K080AC	TDK	CAP, CERM, 1 uF, 10 V, +/- 10%, X5R, 0603	0603
3	C2, C9, C28, C29	4	0.1uF	06033C104JAT2A	AVX	CAP, CERM, 0.1 uF, 25 V, +/- 5%, X7R, 0603	0603
4	C3, C4, C5, C6, C7, C8	6	2.2uF	C0603C225K9PACTU	Kemet	CAP, CERM, 2.2 uF, 6.3 V, +/- 10%, X5R, 0603	0603
5	C10, C11	2	36pF	GRM1555C1E360JA01D	MuRata	CAP, CERM, 36 pF, 25 V, +/- 5%, C0G/NP0, 0402	0402
6	C12	1	0.1uF	GCM188R71H104KA57D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
7	C14	1	0.1uF	GCJ188R72A104KA01D	MuRata	CAP, CERM, 0.1 uF, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
8	C15	1	1uF	GRM188R61H105KAALD	MuRata	CAP, CERM, 1 uF, 50 V, +/- 10%, X5R, 0603	0603
9	C16, C17	2	4.7uF	GRM31CR71H475KA12L	MuRata	CAP, CERM, 4.7 uF, 50 V, +/- 10%, X7R, 1206	1206
10	C18	1	0.1uF	C2012X7R2A104K125AA	TDK	CAP, CERM, 0.1 uF, 100 V, +/- 10%, X7R, 0805	0805
11	C19	1	1uF	GCM188R71C105KA64D	MuRata	CAP, CERM, 1 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
12	C20, C21	2	10uF	GRM31CR71C106KAC7L	MuRata	CAP, CERM, 10 uF, 16 V, +/- 10%, X7R, 1206	1206
13	C22	1	2.2uF	C0603C225K8PACTU	Kemet	CAP, CERM, 2.2 uF, 10 V, +/- 10%, X5R, 0603	0603
14	C23	1	4.7uF	C0603C475K8PACTU	Kemet	CAP, CERM, 4.7 uF, 10 V, +/- 10%, X5R, 0603	0603
15	C24	1	0.01uF	C1005X7R1C103K050BA	TDK	CAP, CERM, 0.01 uF, 16 V, +/- 10%, X7R, 0402	0402
16	C25	1	1500pF	CGA2B3X7S2A152K050BB	TDK	CAP, CERM, 1500 pF, 100 V, +/- 10%, X7S, AEC-Q200 Grade 1, 0402	0402
17	C26, C30	2	56pF	GRM1885C1H560JA01D	MuRata	CAP, CERM, 56 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
18	C27	1	4700pF	GCM188R71H472KA37D	MuRata	CAP, CERM, 4700 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
19	C31	1	1200pF	C0402C122J5GACTU	Kemet	CAP, CERM, 1200 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
20	C36	1	1uF	UMK107AB7105KA-T	Taiyo Yuden	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, 0603	0603
21	C37	1	0.01uF	06031C103JAT2A	AVX	CAP, CERM, 0.01 uF, 100 V, +/- 5%, X7R, 0603	0603
22	D1	1	Blue	LB C39G-L2N2-35-1	OSRAM	LED, Blue, SMD	BLUE 0603 LED
23	D2	1	Green	150060VS75000	Wurth Elektronik	LED, Green, SMD	LED_0603
24	D3	1	Red	150060RS75000	Wurth Elektronik	LED, Red, SMD	LED_0603
25	D4	1	Yellow	150060YS75000	Wurth Elektronik	LED, Yellow, SMD	LED_0603
26	D5	1	40V	SS24FL	Fairchild Semiconductor	Diode, Schottky, 40 V, 2 A, AEC-Q101, SOD-123F	SOD-123F
27	H1, H2, H3, H4	4		NY PMS 440 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw
28	H5, H6, H7, H8	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
29	J5	1		0015912140	Molex	Header, 100mil, 7x2, SMT	Header, 100 mil, 7x2, SMT
30	J6	1		1734354-1	TE Connectivity	Receptacle, D-Sub, 9 Position, R/A, TH	Receptacle, D-Sub, 9 Position, R/A, TH
31	J7	1		5-146278-2	TE Connectivity	Header, 100mil, 2x1, Tin, TH	Header, 2x1, 100mil, TH
32	L1, L2	2	60 ohm	742792602	Wurth Elektronik	Ferrite Bead, 60 ohm @ 100 MHz, 3 A, 0603	0603
33	L3	1	220 ohm	BLM21PG221SN1D	MuRata	Ferrite Bead, 220 ohm @ 100 MHz, 2 A, 0805	0805
34	L4	1	1uH	NLCV32T-1R0M-PF	TDK	Inductor, Wirewound, Ferrite, 1 uH, 1 A, 0.06 ohm, SMD	3.2x2.2x2.5mm
35	L5	1	1uH	7440690010	Wurth Elektronik	Inductor, Shielded Drum Core, Ferrite, 1 uH, 3.6 A, 0.026 ohm, SMD	8x1.35x5mm
36	L6	1	4.7uH	MPI4040R3-4R7-R	Coiltronics	Inductor, Shielded, 4.7 uH, 2.3 A, 0.092 ohm, SMD	4.45x1.85x4.06mm
37	L7	1	100uH	B82789C0104H001	TDK	Coupled inductor, 100 uH, 0.15 A, 1.5 ohm, SMD	4.5x3.0x3.2mm
38	LBL1	1		THT-14-423-10	Brady	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	PCB Label 0.650"H x 0.200"W
39	Q1	1	30V	CSD17313Q2Q1	Texas Instruments	MOSFET, N-CH, 30 V, 5 A, AEC-Q101, DQK0006C (WSON-6)	DQK0006C
40	R1	1	16.9	RC0603FR-0716R9L	Yageo America	RES, 16.9, 1%, 0.1 W, 0603	0603
41	R2, R3, R4	3	28.0	CRCW060328R0FKEA	Vishay-Dale	RES, 28.0, 1%, 0.1 W, 0603	0603
42	R5, R8, R18, R19	4	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
43	R6, R7	2	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, 0603	0603
44	R9, R10	2	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
45	R11, R17	2	2.20k	RC0603FR-072K2L	Yageo America	RES, 2.20 k, 1%, 0.1 W, 0603	0603
46	R12, R13	2	10k	CRCW060310K0JNEA	Vishay-Dale	RES, 10 k, 5%, 0.1 W, 0603	0603
47	R14, R15	2	4.7k	CRCW06034K70JNEA	Vishay-Dale	RES, 4.7 k, 5%, 0.1 W, 0603	0603
48	R16	1	1.0Meg	CRCW04021M00JNED	Vishay-Dale	RES, 1.0 M, 5%, 0.063 W, 0402	0402
49	R20, R21, R22, R30, R31, R32, R33, R34	8	0	ERJ-3GEY0R00V	Panasonic	RES, 0, 5%, 0.1 W, 0603	0603
50	R23, R24	2	60.4	CRCW120660R4FKEA	Vishay-Dale	RES, 60.4, 1%, 0.25 W, 1206	1206
51	R25, R26	2	820	RC0603FR-07820RL	Yageo America	RES, 820, 1%, 0.1 W, 0603	0603
52	R27, R28	2	3.30k	RC0603FR-073K3L	Yageo America	RES, 3.30 k, 1%, 0.1 W, 0603	0603
53	R29	1	4.7	PNP300JR-73-4R7	Yageo America	RES, 4.7, 5%, 3 W, 3W Axial resistor	3W Axial resistor
54	R35	1	0.47	ERJ-2BQFR47X	Panasonic	RES, 0.47, 1%, 0.125 W, 0402	0402
55	S1	1		B3U-1100P	Omron Electronic Components	Switch, SPST-NO, Off-Mom, 12 V, SMD	SMD, 3-Leads, Body 3x2.5mm
56	S2, S3	2		1571983-5	TE Connectivity	Switch, SPST, 4 Pos, Top Actuated, SMD	SMD, 8-Leads, Pitch 1.27mm
57	U1	1		TMS320F28030PAGQ	Texas Instruments	Piccolo Microcontroller, PAG0064A (TQFP-64)	PAG0064A
58	U2, U3	2		SN74LVC2G06QDCKRQ1	Texas Instruments	Dual Inverter Buffer/Driver with Open-Drain Output, DCK0006A (SOT-6)	DCK0006A
59	U4	1		LM53601NQDSXRQ1	Texas Instruments	3.5V to 36V, 1A Synchronous 2.1MHz Step-Down Converter for Automotive Applications, DSX0010A (WSON-10)	DSX0010A
60	U5	1		TPS61240IDRVRQ1	Texas Instruments	Automotive Catalog 5V, 400mA, 4MHz Step-Up DC/DC Converter, DRV0006A (WSON-6)	DRV0006A
61	U6	1		TCAN1042HGVDRBQ1	Texas Instruments	Automotive Fault Protected CAN Transceiver With Flexible Data-Rate, DRB0008F (VSON-8)	DRB0008F
62	Y1	1		ABM3B-20.000MHZ-10-1-U-T	Abracon Corporation	Crystal, 20 MHz, 10 pF, SMD	Crystal, 3.2x1.1x5.x mm
63	C13	0	47uF	EEE-FK1J470P	Panasonic	CAP, AL, 47 uF, 63 V, +/- 20%, 0.65 ohm, AEC-Q200 Grade 2, SMD	SMT Radial F
64	FID1, FID2, FID3	0		NA	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
65	U7	0		TPD2E007DCKR	Texas Instruments	ESD Protection Array for AC Signal Data Interface, 2 Channels, -40 to +85 degC, 3-pin SC70 (DCK), Green (RoHS & no Sb/Br)	DCK0003A

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Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265
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