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 Variant: 001
 Generated: 2/16/2021 12:18:31 AM
 TID #: 010085



TIDA-010085 REV E2 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	PCB1	1		TIDA-010085	Any	Printed Circuit Board	
2	C1	1	10uF	GRM188R61E106MA73D	MuRata	CAP, CERM, 10 uF, 25 V, +/- 20%, X5R, 0603	0603
3	C2, C4, C9	3	10uF	GRM188R61A106KE69D	MuRata	CAP, CERM, 10 uF, 10 V, +/- 10%, X5R, 0603	0603
4	C5, C18, C19, C20, C21, C22, C23, C24, C25, C26, C27, C28, C29, C30, C31, C32, C33, C34, C35, C36, C37	21	1000pF	885012205061	Würth Elektronik	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0402	0402
5	C6, C10, C11, C12, C13, C16, C17	7	0.1uF	GCM155R71A104KA55D	MuRata	CAP, CERM, 0.1 uF, 10 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
6	C8, C15	2	0.1uF	GRM155R71H104ME14D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 20%, X7R, 0402	0402
7	C14	1	470pF	GRT155R71H471KE01D	MuRata	CAP, CERM, 470 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
8	D1, D4, D6, D7	4	30V	RB520S30.115	Nexperia	Diode, Schottky, 30 V, 0.2 A, SOD-523	SOD-523
9	D2, D11, D14, D20, D21, D27, D30, D36, D37, D44, D45	11	12V	BZT585B12T-7	Diodes Inc.	DIODE ZENER 12V 350MW SOD523	SOD-523
10	D3, D5	2	Red	150060RS75000	Würth Elektronik	LED, Red, SMD	LED 0603
11	D8, D9, D10, D13, D16, D17, D18, D19, D24, D25, D26, D29, D32, D33, D34, D35, D40, D41, D42, D43	20	100V	BAS516.115	Nexperia	Diode, Switching, 100 V, 0.25 A, SOD-523	SOD-523
12	D12, D15, D22, D23, D28, D31, D38, D39, D46, D47	10	40V	SMAJ40CA	Littelfuse	Diode, TVS, Bi, 40 V, 64.5 Vc, 400 W, 6.2 A, SMA (non-polarized)	SMA (non-polarized)
13	H1, H2, H3, H4	4		NY PMS 256 0025 PH	B&F Fastener Supply	MACHINE SCREW PAN PHILLIPS 2-56	Machine Screw Pan Phillips 2-56
14	J1, J4	2		282834-2	TE Connectivity	Terminal Block, 2x1, 2.54mm, TH	Terminal Block, 2x1, 2.54mm, TH
15	J2, J3	2		SSW-110-23-F-D	Samtec	Connector, Receptacle, 100mil, 10x2, Gold plated, TH	10x2 Receptacle
16	J5, J6, J7	3		282834-4	TE Connectivity	Terminal Block, 100mil, 4X1 TH	10.62x10x6.5 mm
17	L1	1		744889030330	Würth Electronics	Shielded 2 Coil Inductor Array Inductance - Connected in Series 33uH Inductance - Connected in Parallel 5.2Ohm DC Resistance (DCR) - Parallel 0.45A Nonstandard	SMD4
18	Q1	1		CSD17382F4	Texas Instruments	N-Channel 30V 2.3A (Ta) 500mW (Ta) Surface Mount 3-PICOSTAR	PICOSTAR3
19	Q2, Q4, Q6, Q7, Q10, Q11, Q14, Q15, Q18, Q20, Q23, Q25, Q27, Q28, Q32, Q33, Q36, Q37, Q41, Q42	20	60 V	MMBT2907AT-7-F	Diodes Inc.	Transistor, PNP, 60 V, 0.6 A, AEC-Q101, SOT-523	SOT-523
20	Q3, Q5, Q8, Q9, Q12, Q13, Q16, Q17, Q19, Q21, Q24, Q26, Q29, Q30, Q34, Q35, Q38, Q39, Q43, Q44	20	100V	CSD19538Q2	Texas Instruments	MOSFET, N-CH, 100 V, 4.5 A, DQK0006C (WSON-6)	DQK0006C
21	Q22, Q31, Q40	3	65V	NSVBC846BM3T5G	ON Semiconductor	Bipolar (BJT) Transistor NPN 65V 100mA 100MHz 265mW Surface Mount SOT-723	SOT-723
22	R1	1	3.3k	CRCW04023K30JNED	Vishay-Dale	RES, 3.3 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
23	R2, R8, R12, R13, R14, R15, R24, R25, R38, R40, R50, R51, R62, R64, R75, R76, R88, R89	18	0	RC0402JR-070RL	Yageo America	RES, 0, 5%, 0.063 W, 0402	0402
24	R3, R5, R6, R32, R33, R39, R42, R44, R45, R52, R53, R56, R57, R63, R67, R69, R70, R77, R78, R82, R83, R90, R91	23	10.0k	RMCF0402FT10K0	Stackpole Electronics Inc	RES, 10.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
25	R7	1	100	RC0402FR-07100RL	Yageo America	RES, 100, 1%, 0.063 W, 0402	0402
26	R16	1	2.87k	CRCW04022K87FKED	Vishay-Dale	RES, 2.87 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
27	R17	1	7.50k	CRCW04027K50FKED	Vishay-Dale	RES, 7.50 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
28	R18, R19, R20, R21, R22, R23, R28, R29, R30, R31, R35, R37, R41, R43, R48, R49, R54, R55, R59, R61, R65, R66, R68, R73, R74, R79, R80, R81, R86, R87, R92, R93, R94	33	100k	ERJ-2RKF1003X	Panasonic	RES, 100 k, 1%, 0.1 W, 0402	0402
29	R34, R36, R46, R47, R58, R60, R71, R72, R84, R85	10	475	CRCW0402475RFKED	Vishay-Dale	RES, 475, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
30	U1	1		TLV75533PDRVR	Texas Instruments	500mA LDO, DRV0006A (WSON-6)	DRV0006A
31	U3	1		TLV76050DBZR	Texas Instruments	100-mA, 30-V, Fixed-Output, Linear-Voltage Regulator, DBZ0003A (SOT-23-3)	DBZ0003A
32	U4	1		ISO7760FDBQR	Texas Instruments	High-speed, robust EMC six-channel digital isolator, DBQ0016A (SSOP-16)	DBQ0016A
33	U5	1		TLC555ID	Texas Instruments	2.1-MHz, 250-uA, Low-Power Timer, D0008A (SOIC-8)	D0008A
34	U6	1		TPL7407LA	Texas Instruments	7-Channel Low Side Driver, 0 to 40 V VOUT, -40 to 125 degC, 16-Pin TSSOP (PW), RoHS, Tape and Reel	PW0016A

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35	U7	1		ISO7740FDBQR	Texas Instruments	High-Speed, Low-Power, Robust EMC Quad-Channel Digital Isolator, DBQ0016A (SSOP-16)	DBQ0016A
36	C3	0	10uF	GRM188R61A106KE69D	MuRata	CAP. CERM. 10 μ F, 10 V, +/- 10%, X5R, 0603	0603
37	C7	0	0.1uF	GCM155R71A104KA55D	MuRata	CAP. CERM. 0.1 μ F, 10 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
38	R4, R9, R10, R11, R26	0	0	RC0402JR-070RL	Yageo America	RES, 0, 5%, 0.063 W, 0402	0402
39	R27	0	4.70k	RC0402FR-074K7L	Yageo America	RES, 4.70 k, 1%, 0.0625 W, 0402	0402
40	U2	0		SN74LV1T34DCKR	Texas Instruments	Single Power Supply BUFFER Logic Level Shifter (no enable), DCK0005A (SOT-SC70-5)	DCK0005A

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