Variant: 001
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TID #: TIDA-03050

TIDA-03050 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	!PCB	1		TIDA-03050	Any	Printed Circuit Board	
2	C1	1	0.1uF	0603YC104JAT2A	AVX	CAP, CERM, 0.1 µF, 16 V, +/- 5%, X7R, 0603	0603
3	C2, C5, C7, C8, C9, C10, C11, C14, C16, C17, C18, C20, C21	13	1uF	CGA3E1X7R1V105K080AC	TDK	CAP, CERM, 1 µF, 35 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
4	C3, C6, C12, C13, C15	5	0.1uF	GRM188R72A104KA35J	MuRata	CAP, CERM, 0.1 µF, 100 V, +/- 10%, X7R, 0603	0603
5	C4	1	2.2uF	GRM188Z71C225KE43	MuRata	CAP, CERM, 2.2 µF, 16 V, +/- 10%, X7R, 0603	0603
6	C19	1	0.1uF	160R07X104KV4T	Johanson Technology	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X5R, 0402	0402
7	D1	1	70V	BAS70H,115	NXP Semiconductor	Diode, Schottky, 70 V, 0.07 A, SOD-123F	SOD-123F
8	D2, D4	2	58.1V	SMA6T68AY	STMicroelectronics	Diode, TVS, Uni, 58.1 V, 121 Vc, AEC-Q101, SMA	SMA
9	D3	1	20V	SM4T23AY/CAY	STMicroelectronics	Diode, TVS, Bi, 20 V, 42.8 Vc, AEC-Q101, SMA	SMA
10	J1, J2	2		800-10-010-10-001000	Mill-Max	Header, 100mil, 10x1, TH	Header, 10x1, 100mil, TH
11	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 x 0.200 inch
12	Q1	1	65 V	BC856A-7-F	Diodes Inc.	Transistor, PNP, 65 V, 0.01 A, SOT-23	SOT-23
13	R1, R4, R5, R7, R8, R9, R10	7	47	ERJ-2GEJ470X	Panasonic	RES, 47, 5%, 0.1 W, AEC-Q200 Grade 0, 0402	0402
14	R2	1	7.50k	ERA-2AEB752X	Panasonic	RES, 7.50 k, 0.1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
15	R3, R6, R11	3	50	CRCW060350R0FKEA	Vishay-Dale	RES, 50, 1%, 0.1 W, 0603	0603
16	R12	1	100k	ERJ-2GEJ104X	Panasonic	RES, 100 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0402	0402
17	U1	1		TPS70950QDRVRQ1	Texas Instruments	150-mA, 30-V, Ultra-Low IQ, Wide Input LDO with Reverse Current Protection for Automotive, DRV0006A (WSON-6)	DRV0006A
18	U2	1		INA240A2PWR	Texas Instruments	High/Low Side, Bi-Directional Zero-Drift Current Sense Amp w/ Enhanced PWM Rejection, PW0008A (TSSOP-8)	PW0008A
19	U3	1		ADS1259QPWRQ1	Texas Instruments	Automotive, 14.4kSPS, 24-Bit ADC with Integrated Low-Drift Reference, PW0020A (TSSOP-20)	PW0020A
20	U4	1		LMT01QLPGMQ1	Texas Instruments	0.5°C Accurate 2-Pin Digital Output Temperature Sensor with Pulse Count Interface, LPG0002A (TO-92-2)	LPG0002A
21	U5	1		OPA320AQDBVRQ1	Texas Instruments	Automotive Qualified Precision, Zero-Crossover, 20MHz, 0.9pA Ib, RRIO, CMOS Operational Amplifier, DBV0005A (SOT-23-5)	DBV0005A

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