TIDA-01292 REV E1 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB1	1		TIDA-01292	Any	Printed Circuit Board	
C1, C2, C3, C5	4	1000pF	885012206034	Wurth Elektronik	CAP, CERM, 1000 pF, 16 V, +/- 10%, X7R, 0603	0603
C4, C10, C11, C14	4	10uF	C3216X5R1H106K160AB	TDK	CAP, CERM, 10 µF, 50 V, +/- 10%, X5R, 1206	1206
C6, C13	2	100uF	860130475005	Rubycon	CAP ALUM 100UF 20% 25V RADIAL	TH, 2-Leads, Dia 10mm, Pin Spacing 5mm
C7, C8, C9, C12, C15, C18, C19	7	1uF	C0603C105K3RACTU	Kemet	CAP, CERM, 1 µF, 25 V, +/- 10%, X7R, 0603	0603
C20, C21	2	10uF	1210YD106KAT2A	AVX	CAP, CERM, 10 µF, 16 V, +/- 10%, X5R, 1210	1210
CB1, CB2, CB3, CB4	4	1000uF	25ZLH1000MEFC10X23	Rubycon	CAP, AL, 1000 µF, 25 V, +/- 20%, 0.018 ohm, TH	TH, 2-Leads, Dia 10mm, Pin Spacing 5mm
CB5, CB6, CB7, CB8, CB9, CB10, CB11, CB12	8	1uF	12063C105KAT2A	AVX	CAP, CERM, 1 µF, 25 V, +/- 10%, X7R, 1206	1206
D1, D2, D3, D4, D5, D6, D8, D9, D12, D15, D17, D18	12	20V	MBR1020VL	Fairchild Semiconductor	Diode, Schottky, 20 V, 1 A, SOD-123F	SOD-123F
D7, D11	2	20V	5.0SMDJ20A	Littelfuse	Diode, TVS, Uni, 20 V, 5000 W, SMC	SMC
H1, H2, H3, H4	4		SJ-5303 (CLEAR)	3M	Bumpon, Hemisphere, 0.44 X 0.20, Clear	Transparent Bumpon
J1	1		TSW-110-07-G-S	Samtec	Header, 100mil, 10x1, Gold, TH	10x1 Header
J2, J3, J4, J5	4				REDCUBE PRESS-FIT with internal thread, circumference WP-BUCF, M8, 13.5 mm	
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
Q2, Q3, Q4, Q5, Q7, Q8, Q9, Q12	8	30V	CSD17573Q5B	Texas Instruments	MOSFET, N-CH, 30 V, 100 A, SON 5x6mm	SON 5x6mm
R1, R4	2	6.2	CRCW06036R20JNEA	Vishay-Dale	RES, 6.2, 5%, 0.1 W, 0603	0603
R2, R3	2	0.0005	CSS2725FTL500	Stackpole Electronics Inc	RES, 0.0005, 1%, 4 W, RES_2725	RES_2725
R5	1	2.00k	CRCW06032K00FKEA	Vishay-Dale	RES, 2.00 k, 1%, 0.1 W, 0603	0603
R6, R9, R13, R14	4	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100, 1%, 0.1 W, 0603	0603
R7, R8, R10, R11, R16, R17, R19, R22, R23, R25	10	3.0	CRCW12063R00JNEA	Vishay-Dale	RES, 3.0, 5%, 0.25 W, 1206	1206
R12	1	30.0k	RC0603FR-0730KL	Yageo America	RES, 30.0 k, 1%, 0.1 W, 0603	0603
R15	1	4.75k	RC0603FR-074K75L	Yageo America	RES, 4.75 k, 1%, 0.1 W, 0603	0603
R26, R27	2	1.00	RC1206FR-071RL	Yageo America	RES, 1.00, 1%, 0.25 W, 1206	1206
R28, R29	2	1.00	CSR1206FK1R00	Stackpole Electronics Inc	RES, 1.00, 1%, 0.5 W, 1206	1206
R31, R32, R34, R35, R37, R38, R40, R41	8	22k	CRCW060322K0JNEA	Vishay-Dale	RES, 22 k, 5%, 0.1 W, 0603	0603
R43	1	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
U1, U4	2		LM5101BMA/NOPB	Texas Instruments	2A High Voltage High-Side and Low-Side Gate Driver, 8-pin Narrow SOIC	M08A

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
U2	1		TLV70433DBVR	Texas Instruments	Single Output LDO, 150 mA, Fixed 3.3 V Output, 2.5 to 24 V Input, with Ultra-Low IQ, 5-pin SOT-23 (DBV), -40 to 125 degC, Green (RoHS & no Sb/Br)	DBV0005A
U3	1		INA181A2IDBVT	Texas Instruments	Bidirectional, Low- and High-Side Measurement, Multichannel, Voltage Output, Current-Sense Amplifier, DBV0006A (SOT-23-6)	DBV0006A
U5	1		LMV431BIMF/NOPB	Texas Instruments	Low-Voltage (1.24V) Adjustable Precision Shunt Regulators, 3-pin SOT-23, Pb-Free	MF03A
U7	1		LMT88DCKT	Texas Instruments	Temperature Sensor Analog, Local -55°C ~ 130°C 11.77mV/°C SC-70-5	MAA05A
FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
R18, R20, R21	0	0	RC0603JR-070RL	Yageo America	RES, 0, 5%, 0.1 W, 0603	0603

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