

TIDA-010279 REV E1 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB	1		TIDA-010279	Any	Printed Circuit Board	
C1_A1, C1_A2, C1_A3, C1_A4, C2_A1, C2_A2, C2_A3, C2_A4, C3_A1, C3_A2, C3_A3, C3_A4, C4_A1, C4_A2, C4_A3, C4_A4, C15_A1, C15_A2, C15_A3, C15_A4, C16_A1, C16_A2, C16_A3, C16_A4, C17_A1, C17_A2, C17_A3, C17_A4, C34_A1, C34_A2, C34_A3, C34_A4, C35_A1, C35_A2, C35_A3, C35_A4, C36_A1, C36_A2, C36_A3, C36_A4, C52_A1, C52_A2, C52_A3, C52_A4, C53_A1, C53_A2, C53_A3, C53_A4, C54_A1, C54_A2, C54_A3, C54_A4, C62_A1, C62_A2, C62_A3, C62_A4, C68_A1, C68_A2, C68_A3, C68_A4, C72_A1, C72_A2, C72_A3, C72_A4, C73_A1, C73_A2	230	0.1uF	GCM155R71H104KE02D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C5_A1, C5_A2, C5_A3, C5_A4, C6_A1, C6_A2, C6_A3, C6_A4, C8_A1, C8_A2, C8_A3, C8_A4, C9_A1, C9_A2, C9_A3, C9_A4, C11_A1, C11_A2, C11_A3, C11_A4, C12_A1, C12_A2, C12_A3, C12_A4, C19_A1, C19_A2, C19_A3, C19_A4, C20_A1, C20_A2, C20_A3, C20_A4, C23_A1, C23_A2, C23_A3, C23_A4, C24_A1, C24_A2, C24_A3, C24_A4, C27_A1, C27_A2, C27_A3, C27_A4, C28_A1, C28_A2, C28_A3, C28_A4, C31_A1, C31_A2, C31_A3, C31_A4, C32_A1, C32_A2, C32_A3, C32_A4, C39_A1, C39_A2, C39_A3, C39_A4, C40_A1, C40_A2, C40_A3, C40_A4, C42_A1, C42_A2	160	22nF	CGA3E2X7R2A223K080AA	TDK	Cap Ceramic 22nF 100V X7R 10% Pad SMD 0603 +125°C Automotive T/R	0603

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C7_A1, C7_A2, C7_A3, C7_A4, C14_A1, C14_A2, C14_A3, C14_A4, C22_A1, C22_A2, C22_A3, C22_A4, C30_A1, C30_A2, C30_A3, C30_A4, C37_A1, C37_A2, C37_A3, C37_A4, C45_A1, C45_A2, C45_A3, C45_A4, C49_A1, C49_A2, C49_A3, C49_A4, C58_A1, C58_A2, C58_A3, C58_A4, C61_A1, C61_A2, C61_A3, C61_A4, C63_A1, C63_A2, C63_A3, C63_A4, C67_A1, C67_A2, C67_A3, C67_A4, C71_A1, C71_A2, C71_A3, C71_A4, C75_A1, C75_A2, C75_A3, C75_A4, C79_A1, C79_A2, C79_A3, C79_A4, C81_A1, C81_A2, C81_A3, C81_A4, C84_A1, C84_A2, C84_A3, C84_A4, C88_A1, C88_A2	104	4700pF	GCM155R71H472KA37D	MuRata	CAP, CERM, 4700 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C18_A1, C18_A2, C18_A3, C18_A4	4	4.7uF	C0805C475J8RACAUTO	Kemet	CAP, CERM, 4.7 µF, 10 V, +/- 5%, X7R, AEC-Q200 Grade 1, 0805	0805
C26_A1, C26_A2, C26_A3, C26_A4	4	0.01uF	GCM188R72A103KA37J	MuRata	CAP, CERM, 0.01 µF, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C38_A1, C38_A2, C38_A3, C38_A4, C55_A1, C55_A2, C55_A3, C55_A4, C197	9	1uF	GCM188R71C105KA64D	MuRata	CAP, CERM, 1 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C46_A1, C46_A2, C46_A3, C46_A4, C64_A1, C64_A2, C64_A3, C64_A4	8	0.47uF	GCM188R71C474KA55D	MuRata	CAP, CERM, 0.47 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C125_A1, C125_A2, C125_A3, C125_A4, C191_A1, C191_A2, C191_A3, C191_A4	8		8.85012E+11	Wurth Elektronik	WCAP-CSGP Multilayer Ceramic Chip Capacitor, General Purpose, size 1206, X7R, 100nF, 100VDC	
C147_A1, C147_A2, C147_A3, C147_A4, C148_A1, C148_A2, C148_A3, C148_A4	8	0.01uF	GCM188R71H103KA37D	MuRata	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603

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C149_A1, C149_A2, C149_A3, C149_A4, C150_A1, C150_A2, C150_A3, C150_A4, C151_A1, C151_A2, C151_A3, C151_A4, C152_A1, C152_A2, C152_A3, C152_A4	16	220pF	CL10B221JB8NNNC	Samsung Electro-Mechanics	CAP, CERM, 220 pF, 50 V, +/- 5%, X7R, 0603	0603
C153, C154, C155, C163, C164, C165	6	2200pF	12061A222JAT2A	AVX	CAP, CERM, 2200 pF, 100 V, +/- 5%, C0G/NP0, 1206	1206
C156, C157, C158, C159, C160, C161, C162, C166	8	100pF	GCM1885C1H101JA16J	MuRata	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0603	0603
C167	1	10uF	GRM188R60J106ME84	MuRata	CAP, CERM, 10 uF, 6.3 V, +/- 20%, X5R, 0603	0603
C168	1	0.1uF	GRM155R61H104ME14D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 20%, X5R, 0402	0402
C169	1	0.47uF	GRM155R60J474KE19D	MuRata	CAP, CERM, 0.47 uF, 6.3 V, +/- 10%, X5R, 0402	0402
C171	1	0.01uF	GRM155R61C103KA01D	MuRata	CAP, CERM, 0.01 uF, 16 V, +/- 10%, X5R, 0402	0402
C172	1	1uF	C1608X5R1E105K080AC	TDK	CAP, CERM, 1 uF, 25 V, +/- 10%, X5R, 0603	0603
C174, C175, C176, C177	4	22pF	GRM1555C1H220JA01D	MuRata	CAP, CERM, 22 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C178	1	47uF	EEV-TG2A470Q	Panasonic	CAP, AL, 47 uF, 100 V, +/- 20%, 0.42 ohm, AEC-Q200 Grade 1, SMD	12.5x13.5
C179, C180, C181	3	2.2uF	C3216X7S2A225K160AB	TDK	CAP, CERM, 2.2 uF, 100 V, +/- 10%, X7S, 1206	1206
C182	1	22pF	CGA3E2C0G1H220J080AA	TDK	CAP, CERM, 22 pF, 50 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0603	0603
C183	1	10uF	GRM21BZ71E106KE15L	MuRata	CAP, CERM, 10 uF, 25 V, +/- 10%, X7R, 0805	0805
C184	1	22uF	CGA8P1X7R1E226M250KC	TDK	CAP, CERM, 22 uF, 25 V, +/- 20%, X7R, AEC-Q200 Grade 1,	
C185, C186, C189, C204, C205, C212, C213	7	22uF	GRM21BZ71A226ME15L	MuRata	CAP, CERM, 22 uF, 10 V, +/- 20%, X7R, 0805	0805
C187, C190, C203, C206, C211, C214	6	15nF	GCM155R71H153KA55D	Murata	0.015µF ±10% 50V Ceramic Capacitor X7R 0402 (1005 Metric)	0402
C198	1	4.7uF	GRT188R61C475KE13D	MuRata	CAP, CERM, 4.7 µF, 16 V, +/- 10%, X5R, AEC-Q200 Grade 3, 0603	0603
C201, C202, C216, C217, CBoot1	5	0.1uF	06035C104KAT2A	AVX	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
C207, C215	2	2200pF	GCM155R71H222KA37D	MuRata	CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C218, C221	2	68pF	GCM1885C1H680JA16D	MuRata	CAP, CERM, 68 pF, 50 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0603	0603
C219	1	4700pF	GCM188R72A472KA37D	MuRata	CAP, CERM, 4700 pF, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C220, C222	2	0.1uF	GCM155R71A104KA55D	MuRata	CAP, CERM, 0.1 uF, 10 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
CO1	1	0.1uF	08055C104JAT2A	AVX	CAP, CERM, 0.1 uF, 50 V, +/- 5%, X7R, 0805	0805
D1_A1, D1_A2, D1_A3, D1_A4	4	150V	ES1C-13-F	Diodes Inc.	Diode, Superfast Rectifier, 150 V, 1 A, SMA	SMA
D2_A1, D2_A2, D2_A3, D2_A4, D3_A1, D3_A2, D3_A3, D3_A4	8	Green	LTST-C170KGKT	Lite-On	LED, Green, SMD	LED_0805
D4_A1, D4_A2, D4_A3, D4_A4, D5_A1, D5_A2, D5_A3, D5_A4	8		SMD16PL-TP	Micro Commercial Co	SMD16PL Series 60 V 1 A Surface Mount Schottky Rectifier - SOD-123FL	SOD123FL
D6_A1, D6_A2, D6_A3, D6_A4, D7_A1, D7_A2, D7_A3, D7_A4, D8_A1, D8_A2, D8_A3, D8_A4, D10_A1, D10_A2, D10_A3, D10_A4	16	85V	SMBJ85A-13-F	Diodes Inc.	Diode, TVS, Uni, 85 V, 137 Vc, SMB	SMB
D9_A1, D9_A2, D9_A3, D9_A4	4	85V	SMAJ85A	Littelfuse	Diode, TVS, Uni, 85 V, 137 Vc, 400 W, 2.9 A, SMA	SMA

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D11_A1, D11_A2, D11_A3, D11_A4, D12_A1, D12_A2, D12_A3, D12_A4	8		ESD652DBZR	Texas Instruments	18V two-channel bidirectional ESD protection diode	SOT23-3
D13	1	33V	SMCJ33CA	Littelfuse	Diode, TVS, Bi, 33 V, SMC	SMC
D14, D15	2	75V	1N4148WS-7-F	Diodes Inc.	Diode, Switching, 75 V, 0.15 A, AEC-Q101, SOD-323	SOD-323
D16	1	24V	NUP2105LT1G	ON Semiconductor	Diode, TVS, Bi, 24 V, SOT-23	SOT-23
FID1, FID2, FID3	3		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
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
H5, H6, H7, H8	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
H9, H10, H11, H12	4		SJ-5303 (CLEAR)	3M	Bumpon, Hemisphere, 0.44 X 0.20, Clear	Transparent Bumpon
J1_A1, J1_A2, J1_A3, J1_A4, J11	5		FTSH-105-01-L-DV-K	Samtec	Header(Shrouded), 1.27mm, 5x2, Gold, SMT	Header(Shrouded), 1.27mm, 5x2, SMT
J2_A1, J2_A2, J2_A3, J2_A4	4		141114-214010	BEIJIDA ELECTRONICS TECH	2.00mm Wafer, Right Angle Connector, 40pins, Key-A With CPA Feature	HDR40
J3_A1, J3_A2, J3_A3, J3_A4, J4_A1, J4_A2, J4_A3, J4_A4, J16	9		PEC02SAAN	Sullins Connector Solutions	Header, 100mil, 2x1, Tin, TH	Header, 2 PIN, 100mil, Tin
J5	1		141114-210810	BEIJIDA ELECTRONICS TECH	2.00mm R/A SMT WAFER 8PIN KEY-A WITH CPA FEATURE	CONN_HDR16
J7, J8	2		70551-0038	Molex	Header(shrouded), 2.54mm, 4x1, R/A, Gold, TH	Header(shrouded), 2.54mm, 4x1, R/A, TH
J9, J12, J13, J17, J18, J20	6		90120-0122	Molex	Header, 100mil, 2x1, Tin, TH	Header 2x1
J21	1		HTSW-102-09-G-S	Samtec	Header, 100mil, 2x1, Gold, TH	Header, 2x1, 2.54mm, TH
L2	1		74479276210C	Würth Elektronik	WE-PMCI SMT Power Molded Chip Inductor, size 0806, 1uH, 4.4A, 60mOhm	
L3	1		74404064330	Würth Elektronik		
L4	1	51uH	ACT45B-510-2P-TL003	TDK	Coupled inductor, 51 µH, 0.2 A, 1 ohm, AEC-Q200 Grade 0, SMD	SMD, 4-Leads, Body 4.7 x 3.7 mm
L5, L6	2		74479763222	Würth Elektronik		
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
LED2	1	RGB	19-337/R6GHBHC-A01/2T	Everlight	LED, RGB, TH	1.6x1.6mm
MSP1	1		MSPM0G3519SPMR	Texas Instruments	Mixed-Signal Microcontrollers With CAN-FD Interface LQFP64	LQFP64
Q1_A1, Q1_A2, Q1_A3, Q1_A4, Q2_A1, Q2_A2, Q2_A3, Q2_A4, Q7	9	20V	RE1C002UNTCL	Rohm	MOSFET, N-CH, 20 V, 0.2 A, AEC-Q101, SC-89	SC-89
Q3_A1, Q3_A2, Q3_A3, Q3_A4	4	150 V	ZXTN4004KTC	Diodes Inc.	Transistor, NPN, 150 V, 1 A, AEC-Q101, DPAK	DPAK
Q5	1	-50V	BSS84AKW,115	Nexperia	MOSFET, P-CH, -50 V, -0.15 A, AEC-Q101, SOT-323	SOT-323
Q6	1	45 V	BC847BW,115	NXP Semiconductor	Transistor, NPN, 45 V, 0.1 A, AEC-Q101, SOT-323	SOT-323

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R1_A1, R1_A2, R1_A3, R1_A4, R2_A1, R2_A2, R2_A3, R2_A4, R3_A1, R3_A2, R3_A3, R3_A4, R4_A1, R4_A2, R4_A3, R4_A4, R5_A1, R5_A2, R5_A3, R5_A4, R6_A1, R6_A2, R6_A3, R6_A4, R7_A1, R7_A2, R7_A3, R7_A4, R8_A1, R8_A2, R8_A3, R8_A4, R9_A1, R9_A2, R9_A3, R9_A4, R10_A1, R10_A2, R10_A3, R10_A4, R11_A1, R11_A2, R11_A3, R11_A4, R12_A1, R12_A2, R12_A3, R12_A4, R13_A1, R13_A2, R13_A3, R13_A4, R14_A1, R14_A2, R14_A3, R14_A4, R15_A1, R15_A2, R15_A3, R15_A4, R16_A1, R16_A2, R16_A3, R16_A4, R17_A1, R17_A2	304	68	HPCR0805J68R0KT	RESI	RES, 68, 5%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
R19_A1, R19_A2, R19_A3, R19_A4, R26_A1, R26_A2, R26_A3, R26_A4, R37_A1, R37_A2, R37_A3, R37_A4, R41_A1, R41_A2, R41_A3, R41_A4, R51_A1, R51_A2, R51_A3, R51_A4, R61_A1, R61_A2, R61_A3, R61_A4, R65_A1, R65_A2, R65_A3, R65_A4, R75_A1, R75_A2, R75_A3, R75_A4, R83_A1, R83_A2, R83_A3, R83_A4, R90_A1, R90_A2, R90_A3, R90_A4, R100_A1, R100_A2, R100_A3, R100_A4, R104_A1, R104_A2, R104_A3, R104_A4, R114_A1, R114_A2, R114_A3, R114_A4, R126_A1	76	1.00k	CRCW04021K00FKED	Vishay-Dale	RES, 1.00 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R36_A1, R36_A2, R36_A3, R36_A4	4	60.4	CRCW080560R4FKEA	Vishay-Dale	RES, 60.4, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	0805
R79_A1, R79_A2, R79_A3, R79_A4	4	511	CRCW0402511RFKED	Vishay-Dale	RES, 511, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R88	1	47k	ERJ-2GEJ473X	Panasonic	47 kOhms ±5% 0.1W, 1/10W Chip Resistor 0402 (1005 Metric) Automotive AEC-Q200 Thick Film	0402

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R121_A1, R121_A2, R121_A3, R121_A4, R122_A1, R122_A2, R122_A3, R122_A4, R235	9	3.3k	CRCW04023K30JNED	Vishay-Dale	RES, 3.3 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R136_A1, R136_A2, R136_A3, R136_A4, R137_A1, R137_A2, R137_A3, R137_A4	8	10Meg	CRCW060310M0JNEA	Vishay-Dale	RES, 10 M, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R140_A1, R140_A2, R140_A3, R140_A4, R196_A1, R196_A2, R196_A3, R196_A4, R197_A1, R197_A2, R197_A3, R197_A4, R198_A1, R198_A2, R198_A3, R198_A4, R199_A1, R199_A2, R199_A3, R199_A4, R200_A1, R200_A2, R200_A3, R200_A4, R201_A1, R201_A2, R201_A3, R201_A4, R202_A1, R202_A2, R202_A3, R202_A4, R203_A1	62	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402

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R144_A1, R144_A2, R144_A3, R144_A4, R146_A1, R146_A2, R146_A3, R146_A4, R147_A1, R147_A2, R147_A3, R147_A4, R152_A1, R152_A2, R152_A3, R152_A4, R156_A1, R156_A2, R156_A3, R156_A4, R158_A1, R158_A2, R158_A3, R158_A4, R161_A1, R161_A2, R161_A3, R161_A4, R162_A1, R162_A2, R162_A3, R162_A4	32	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R145_A1, R145_A2, R145_A3, R145_A4, R148_A1, R148_A2, R148_A3, R148_A4, R149_A1, R149_A2, R149_A3, R149_A4, R150_A1, R150_A2, R150_A3, R150_A4, R151_A1, R151_A2, R151_A3, R151_A4, R153_A1, R153_A2, R153_A3, R153_A4, R157_A1, R157_A2, R157_A3, R157_A4, R159_A1, R159_A2, R159_A3, R159_A4, R164_A1	42	1.0k	CRCW04021K00JNED	Vishay-Dale	RES, 1.0 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R154_A1, R154_A2, R154_A3, R154_A4	4	100	CRCW2010100RFKEF	Vishay-Dale	RES, 100, 1%, 0.75 W, AEC-Q200 Grade 0, 2010	2010
R155_A1, R155_A2, R155_A3, R155_A4	4	200	CRCW2010200RFKEF	Vishay-Dale	RES, 200, 1%, 0.75 W, AEC-Q200 Grade 0, 2010	2010

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R177_A1, R177_A2, R177_A3, R177_A4, R182_A1, R182_A2, R182_A3, R182_A4, R190_A1, R190_A2, R190_A3, R190_A4, R195_A1, R195_A2, R195_A3, R195_A4, R223	17	0	RC0603JR-070RL	Yageo	RES, 0, 5%, 0.1 W, 0603	0603
R178_A1, R178_A2, R178_A3, R178_A4, R181_A1, R181_A2, R181_A3, R181_A4, R191_A1, R191_A2, R191_A3, R191_A4, R194_A1, R194_A2, R194_A3, R194_A4	16	51	CRCW060351R0JNEA	Vishay-Dale	RES, 51, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R179_A1, R179_A2, R179_A3, R179_A4, R180_A1, R180_A2, R180_A3, R180_A4, R192_A1, R192_A2, R192_A3, R192_A4, R193_A1, R193_A2, R193_A3, R193_A4	16	0	ERJ-3GEY0R00V	Panasonic	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R184_A1, R184_A2, R184_A3, R184_A4, R185_A1, R185_A2, R185_A3, R185_A4, R188_A1, R188_A2, R188_A3, R188_A4, R189_A1, R189_A2, R189_A3, R189_A4	16	510	CRCW0603510RJNEA	Vishay-Dale	RES, 510, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R186_A1, R186_A2, R186_A3, R186_A4, R187_A1, R187_A2, R187_A3, R187_A4	8	1.00k	ERJ-3EKF1001V	Panasonic	RES, 1.00 k, 1%, 0.1 W, 0603	0603
R214	1	47k	CRCW040247K0JNED	Vishay-Dale	RES, 47 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R215_A1, R215_A2, R215_A3, R215_A4, R257_A1, R257_A2, R257_A3, R257_A4	8	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R218	1	118k	CRCW0402118KFKED	Vishay-Dale	RES, 118 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R219	1	22.1k	CRCW040222K1FKED	Vishay-Dale	RES, 22.1 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R220, R237, R238	3	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R226	1	220	CRCW0402220RJNED	Vishay-Dale	RES, 220, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R227, R228	2	330	CRCW0402330RJNED	Vishay-Dale	RES, 330, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R229	1		ERA-2AEB104X	Panasonic	Res Thin Film 0402 100K Ohm 0.1% 1/16W ±25ppm/°C Molded SMD SMD Punched Carrier T/R	0402
R230, R231, R232	3	10k	CRCW060310K0JNEA	Vishay-Dale	RES, 10 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R233, R234, R244, R258	4	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R236	1	100k	CRCW0402100KJNED	Vishay-Dale	RES, 100 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R246, R247	2	18.2k	CRCW060318K2FKEA	Vishay-Dale	RES, 18.2 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R249, R252	2	60.4	ERJ-8ENF60R4V	Panasonic	RES, 60.4, 1%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
R255, R256	2	2.20k	ERJ-2RKF2201X	Panasonic	RES, 2.20 k, 1%, 0.1 W, 0402	0402
RT1_A1, RT1_A2, RT1_A3, RT1_A4, RT2_A1, RT2_A2, RT2_A3, RT2_A4, RT3_A1, RT3_A2, RT3_A3, RT3_A4, RT4_A1, RT4_A2, RT4_A3, RT4_A4	16	10k	TMP6131DYAT	Texas Instruments	±1% tolerance 10kΩ linear thermistor available in 0402 and 0603 package options 2-SOT-5X3 -40 to 125	SOD-523
S1, S2	2		1188E-1K2-V-TR	Diptronics	Switch, SPST, 0.05 A, 12 VDC, SMD	7.8x3.5mm
T1, T5	2		LKBMT10B	LineKey Technology	SMD BMS Transformer	SMT_XFRMR_27MM9_12MM5
T2, T3, T4	3		74941301	Würth Elektronik	BMS TRANSFORMER	SMT_TRANSFORMER_8MM89_10MM09
U1_A1, U1_A2, U1_A3, U1_A4	4		BQ78706PAP	Texas Instruments	Functional Safety-Compliant 14S Battery Monitor	HTQFP64
U2_A1, U2_A2, U2_A3, U2_A4, U3_A1, U3_A2, U3_A3, U3_A4	8		TMUX1308PWR	Texas Instruments	5-V, 8: 1, 1-channel general-purpose multiplexer with 1.8-V logic control 16-TSSOP -40 to 125	TSSOP16
U5	1		LMR51406YDBVR	Texas Instruments	SIMPLE SWITCHER® Power Converter, 4-V to 42-V, 1-A Buck Converter, SOT23	SOT23
U6	1		TPS7B8133QDRVRQ1	Texas Instruments	Automotive 150-mA high-voltage ultra-low-IQ low-dropout (LDO) linear regulator, DRV0006A (WSON-6)	DRV0006A
U7	1		UCC33420	Texas Instruments	1.5W, High-Density, >3 kV RMS Isolated DC-DC Converter	VSON-FCRLF12
U8	1		ISO6721FQDWVRQ1	Texas Instruments	General Purpose Reinforced and Basic Dual-Channel Automotive Digital Isolators with Robust EMC	SOIC8
U9, U10	2		UCC33421-Q1	Texas Instruments	1.5W, High-Density, >5 kV RMS Isolated DC-DC Converter	SSOP16
U11, U12	2		ISO7731DWR	Texas Instruments	High Speed, Robust EMC Triple-Channel Digital Isolators, DW0016B (SOIC-16)	DW0016B
U13	1		TCAN1044DDFRQ1	Texas Instruments	Automotive High Speed CAN Transceiver	SOT23-8
U14	1		TPD6E004RSER	Texas Instruments	Low-Capacitance 6-Channel +/-15 kV ESD Protection Array for High-Speed Data Interfaces, RSE0008A (UQFN-8)	RSE0008A
Y1	1		CM315D32768DZFT	Citizen Micro HumanTech	Turning Fork Crystal Unit, 32.768 KHz, -40 to 85 degC, 2-Pin SMD, RoHS, Tape and Reel	
Y2	1		X1E0000210179	Seiko Epson	Crystal 40MHz ±10ppm (ToI) ±20ppm (Stability) 12pF FUND 40Ohm 4-Pin Mini-CSMD T/R	TSX-3225

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