

**TIDA-010253 REV E1 Bill of Materials**

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB1	1		TIDA-010253	Any	Printed Circuit Board	
BT1	1		BU2032SM-G	MPD	Battery Holder Coin 20MM SMD	SMT2
C1, C2, C8, C9, C15, C16, C109, C110, C111, C112, C117, C118, C119, C120, C121, C122, C123, C124, C125, C128, C129, C131, C132, C133, C134, C138, C139, C144, C145, C146, C147	31	0.1uF	GCM155R71A104KA55D	MuRata	CAP, CERM, 0.1 uF, 10 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C3, C4, C10, C11, C17, C18, C140, C141	8	10uF	CL21B106KOQNNNE	Samsung Electro-Mechanics	CAP, CERM, 10 uF, 16 V, +/- 10%, X7R, 0805	0805
C5, C7, C12, C14, C135, C137	6	68pF	GRM1885C2A680JA01D	MuRata	CAP, CERM, 68 pF, 100 V, +/- 5%, C0G/NP0, 0603	0603
C6, C13, C136	3	4700pF	GRM188R71H472KA01D	MuRata	CAP, CERM, 4700 pF, 50 V, +/- 10%, X7R, 0603	0603
C19, C25, C30, C36, C75, C101, C105, C106	8	0.1uF	GCM155R71H104KE02D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C20, C24, C26, C28, C31, C35, C37, C39	8	220pF	CL10B221JB8NNNC	Samsung Electro-Mechanics	CAP, CERM, 220 pF, 50 V,+/- 5%, X7R, 0603	0603
C21, C27, C32, C38	4	100pF	GCM1885C1H101JA16J	MuRata	CAP, CERM, 100 pF, 50 V,+/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0603	0603
C22, C23, C33, C34	4	0.22uF	GCM155R71C224KE02D	MuRata	CAP, CERM, 0.22 uF, 16 V,+/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C29, C40	2	0.01uF	CGA2B3X7R1H103K050BB	TDK	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C47, C51	2	0.1uF	8.85012E+11	Würth Elektronik	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
C48, C53	2	2.2uF	C2012X6S1H225K125AB	TDK	CAP, CERM, 2.2 uF, 50 V, +/- 10%, X6S, 0805	0805
C49	1	33pF	06035A330JAT2A	AVX	CAP, CERM, 33 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C50	1	100pF	C0603C101J5GAC	Kemet	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C52, C108	2	1uF	CGA3E1X7R1E105K080AD	TDK	CAP, CERM, 1 uF, 25 V,+/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C54	1	31.6k	CRCW060331K6FKEA	Vishay-Dale	RES, 31.6 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
C59	1	150uF	EEE-FK1H151P	Panasonic	CAP, AL, 150 uF, 50 V, +/- 20%, 0.18 ohm, AEC-Q200 Grade 2, SMD	SMT Radial G
C68	1	470pF	GRM155R71H471KA01D	MuRata	CAP, CERM, 470 pF, 50 V, +/- 10%, X7R, 0402	0402
C71, C72, C73, C74	4	1000pF	C0603C102J5RACAUTO	Kemet	CAP, CERM, 1000 pF, 50 V, +/- 5%, X7R, AEC-Q200 Grade 1, 0603	0603
C76, C77	2	220uF	EEE-TP1V221AP	Panasonic	CAP, AL, 220 uF, 35 V, +/- 20%, 0.15 ohm, AEC-Q200 Grade 1, SMD	SMT Radial G

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C78	1	4700pF	CGA3E2X7R2A472K080AA	TDK	CAP, CERM, 4700 pF, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C79, C81	2	15uF	CGA9P3X7S2A156M250KB	TDK	CAP, CERM, 15 uF, 100 V, +/- 20%, X7S, AEC-Q200 Grade 1, 2220	2220
C80	1	1000pF	GRM1555C1H102JA01D	MuRata	CAP, CERM, 1000 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C82, C83, C87, C88, C89, C90	6	10uF	CGA6P3X7S1H106K250AB	TDK	CAP, CERM, 10 uF, 50 V, +/- 10%, X7S, AEC-Q200 Grade 1, 1210	1210
C84, C91, C92	3	2.2uF	CGA4J3X7R1H225K125AB	TDK	CAP, CERM, 2.2 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
C85	1	0.1uF	CGA3E3X8R1H104M080AB	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 20%, X8R, AEC-Q200 Grade 0, 0603	0603
C86, C93	2	1000pF	CGA2B2C0G1H102J050BA	TDK	CAP, CERM, 1000 pF, 50 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0402	0402
C96	1	4.7uF	CGA6P3X7R1H475K250AB	TDK	CAP, CERM, 4.7 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1210	1210
C97, C107, C142, C143, CO1, CO2, CO3, CO4, CO5, CO8, CO10, CO11, CO12	13	0.1uF	08055C104JAT2A	AVX	CAP, CERM, 0.1 uF, 50 V, +/- 5%, X7R, 0805	0805
C98, C104, CO9	3	1000pF	8.85012E+11	Wurth Elektronik	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0603	0603
C99, C102	2	1uF	GCM188R71C105KA64D	MuRata	CAP, CERM, 1 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C100, C103	2	4.7uF	GRT188R61C475KE13D	MuRata	CAP, CERM, 4.7 uF, 16 V, +/- 10%, X5R, AEC-Q200 Grade 3, 0603	0603
C113	1	0.1uF	06033C104JAT2A	AVX	CAP, CERM, 0.1 uF, 25 V, +/- 5%, X7R, 0603	0603
C114	1	4.7uF	TPSC475K035R0600	AVX	CAP, TA, 4.7 uF, 35 V, +/- 10%, 0.6 ohm, SMD	6032-28
CBoot1	1	0.1uF	06035C104KAT2A	AVX	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
CO6, CO7	2		GRM32ER71A476ME15L	Murata	47uF ±20% 10V Ceramic Capacitor X7R 1210 (3225 Metric)	1210
D1, D2, D3, D5, D11, D16, D34, D35, D37, D38, D39	11	Red	150060RS75000	Wurth Elektronik	LED, Red, SMD	LED_0603
D4, D6	2	40V	1N5819HW-7-F	Diodes Inc.	Diode, Schottky, 40 V, 1 A, SOD-123	SOD-123
D7, D8, D12, D13	4		PESD5V0L2BT,215	Nexperia	28V Clamp 13A (8/20µs) Ipp Tvs Diode Surface Mount TO-236AB	SOT23-3
D9, D14, D23, D28, D29, D30	6	3.3V	SZMM3Z3V3ST1G	ON Semiconductor	Diode, Zener, 3.3 V, 300 mW, AEC-Q101, SOD-323	SOD-323
D10, D15, D19, D26, D27	5	Green	150060VS75000	Wurth Elektronik	LED, Green, SMD	LED_0603
D17	1	36V	SMAJ36CA	Littelfuse	Diode, TVS, Bi, 36 V, 58.1 Vc, 400 W, 6.9 A, SMA (non-polarized)	SMA (non-polarized)
D18	1	33V	SMCJ33CA	Littelfuse	Diode, TVS, Bi, 33 V, SMC	SMC
D20, D21, D22	3	Super Red	150060SS75000	Wurth Elektronik	LED, Super Red, SMD	LED_0603
D24	1	30V	BAT54WSQ-7-F	Diodes Inc.	Diode, Schottky, 30 V, 0.1 A, AEC-Q101, SOD-323	SOD-323
D25	1	60V	RB058L-60TE25	Rohm	Diode, Schottky, 60 V, 3 A, AEC-Q101, SMA	SMA
D31, D32, D33	3	75V	1N4148WS-7-F	Diodes Inc.	Diode, Switching, 75 V, 0.15 A, AEC-Q101, SOD-323	SOD-323
D36	1	36V	SMCJ36CA	Littelfuse	Diode, TVS, Bi, 36 V, 58.1 Vc, SMC	SMC
D40, D41, D42, D43	4	8V	TSD05CDYFR	Bourns	Diode, TVS, Bi, 8 V, 18.5 Vc, SOD-323	SOD323, 2-Leads, Body 1.9x1.45mm, No Polarity Mark
F1, F2	2		BLM31KN121SZ1L	Murata	Chip Ferrite Bead, 1206, 120Ω @ 100MHz, 0.009Ω, 25%, 6A	1206
FID1, FID2, FID3, FID4, FID5, FID6	6		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

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
J1, J2, J30, J31	4		70551-0038	Molex	Header(shrouded), 2.54mm, 4x1, R/A, Gold, TH	Header(shrouded), 2.54mm, 4x1, R/A, TH
J3	1		TSW-104-07-G-S	Samtec	Header, 100mil, 4x1, Gold, TH	4x1 Header
J5, J7, J10, J12	4		TSW-102-07-G-S	Samtec	Header, 100mil, 2x1, Gold, TH	2x1 Header
J6, J11	2		TSW-105-07-G-S	Samtec	Header, 100mil, 5x1, Gold, TH	5x1 Header
J14, J27	2		TSW-103-07-G-S	Samtec	Header, 100mil, 3x1, Gold, TH	3x1 Header
J16	1		1714955	Phoenix Contact	Terminal Block, 2x1, 6.35mm, Green, TH	Terminal Block, 2x1, 6.35mm, Green, TH
J17, J18, J28	3		TSW-107-07-G-D	Samtec	Header, 100mil, 7x2, Gold, TH	7x2 Header
J19, J45, J47, J48, J50	5		TSW-104-07-G-D	Samtec	Header, 100mil, 4x2, Gold, TH	4x2 Header
J20	1		TSW-102-07-G-D	Samtec	Header, 100mil, 2x2, Gold, TH	2x2 Header
J21, J22, J23, J24	4		ED555/3DS	On-Shore Technology	Terminal Block, 3.5mm Pitch, 3x1, TH	10.5x8.2x6.5mm
J25	1		TSW-110-07-G-D	Samtec	Header, 100mil, 10x2, Gold, TH	10x2 Header
J29	1		HSEC8-160-01-L-DV-A-BL	Samtec	180 pin (120 + 60) HSEC8 socket, samtec	
J46, J49	2		TSW-106-07-G-D	Samtec	Header, 100mil, 6x2, Gold, TH	6x2 Header
L1, L2, L6	3	51uH	ACT45B-510-2P-TL003	TDK	Coupled inductor, 51 $\mu$ H, 0.2 A, 1 ohm, AEC-Q200 Grade 0, SMD	SMD, 4-Leads, Body 4.7 x 3.7 mm
L3, L7	2		BLM18SG121TZ1D	MuRata	Inductor, Ferrite Bead, Ferrite, 3 A, 120 ohm, AEC-Q200 Grade 1, SMD	0603
L4	1	2.2uH	IHLP2525CZER2R2M5A	Vishay-Dale	Inductor, Shielded, 2.2 uH, 8.1 A, 0.0183 ohm, AEC-Q200 Grade 1, SMD	6.86x6.47mm
L5	1	4.7uH	74437368047	Würth Elektronik	Inductor, Shielded Drum Core, Powdered Iron, 4.7 uH, 7 A, 0.015 ohm, SMD	10x3.8x10mm
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
Q1, Q2, Q6, Q9	4	30V	RJU003N03FRAT106	Rohm	MOSFET, N-CH, 30 V, 0.3 A, AEC-Q101, SOT-323	SOT-323
Q5	1	60V	SIR662DP-T1-GE3	Vishay-Semiconductor	MOSFET, N-CH, 60 V, 60 A, PowerPAK SO-8	PowerPAK SO-8
Q7, Q8, Q11	3	45 V	BC847BW,115	NXP Semiconductor	Transistor, NPN, 45 V, 0.1 A, AEC-Q101, SOT-323	SOT-323
Q10	1	-50V	BSS84AKW,115	Nexperia	MOSFET, P-CH, -50 V, -0.15 A, AEC-Q101, SOT-323	SOT-323
R1, R161, R217, R218, R219, R220	6	0	RK73Z1ETTP	KOA Speer	RES, 0, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R2, R16, R29, R52, R53, R69, R70, R125, R126, R144, R147, R149, R207	13	3.3k	CRCW04023K30JNED	Vishay-Dale	RES, 3.3 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402

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R3, R5, R6, R7, R9, R10, R12, R15, R17, R19, R20, R21, R23, R25, R28, R30, R32, R33, R34, R36, R71, R72, R73, R74, R127, R129, R130, R131, R136, R151, R204, R208, R209, R211, R212, R214, R215	37	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R4, R14, R18, R27, R31, R82, R88, R89, R206, R230, R231, R232, R233	13	0	CRCW04020000Z0EDHP	Vishay-Dale	RES, 0, 0%, 0.2 W, AEC-Q200 Grade 0, 0402	0402
R8, R13, R22, R26, R35, R205	6	59	CRCW120659R0FKEA	Vishay-Dale	RES, 59.0, 1%, 0.25 W, 1206	1206
R11, R24, R203	3	120	CRCW2512120RFKEG	Vishay-Dale	RES, 120, 1%, 1 W, AEC-Q200 Grade 0, 2512	2512
R37, R40, R43, R51, R54, R57, R60, R68	8	51	CRCW060351R0JNEA	Vishay-Dale	RES, 51, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R38, R55	2	10	CRCW060310R0JNEA	Vishay-Dale	RES, 10, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R39, R45, R56, R62	4	1.0k	CRCW06031K00JNEA	Vishay-Dale	RES, 1.0 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R41, R46, R47, R48, R49, R58, R63, R64, R65, R66, R120, R128, R134, R135, R141, R142, R143, R146	18	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R42, R59, R122, R123, R150	5	100k	CRCW0402100KJNED	Vishay-Dale	RES, 100 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R44, R61	2	39k	CRCW040239K0JNED	Vishay-Dale	RES, 39 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R50, R67	2	10.0Meg	CRCW040210M0FKED	Vishay-Dale	RES, 10.0 M, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R75	1	0	RMC1JPTE	Kamaya	RES, 0, 0%, 1 W, AEC-Q200 Grade 0, 2512	2512
R76, R77, R78, R79, R80, R199, R200, R201, R202	9	10.0k	RC0402FR-0710KL	Yageo America	RES, 10.0 k, 1%, 0.063 W, 0402	0402
R81	1	820	RC0402FR-07820RL	Yageo America	RES, 820, 1%, 0.063 W, 0402	0402
R83	1	16.0k	RC0603FR-0716KL	Yageo	RES, 16.0 k, 1%, 0.1 W, 0603	0603
R84	1	4.99k	CRCW06034K99FKEAC	Vishay-Dale	RES, 4.99 k, 1%, 0.1 W, 0603	0603
R85, R86, R87, R95	4	1.00k	RC0402FR-071KL	Yageo America	RES, 1.00 k, 1%, 0.0625 W, 0402	0402
R90	1	15.0k	RC0402FR-0715KL	Yageo America	RES, 15.0 k, 1%, 0.063 W, 0402	0402

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R117, R118, R119	3	33	CRCW040233R0JNED	Vishay-Dale	RES, 33, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R121	1	100	CRCW0402100RJNED	Vishay-Dale	RES, 100, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R124	1	34.0k	RC0603FR-0734KL	Yageo	RES, 34.0 k, 1%, 0.1 W, 0603	0603
R132, R139, R140	3	1.0k	CRCW04021K00JNED	Vishay-Dale	RES, 1.0 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R133	1	49.9k	RC0603FR-0749K9L	Yageo	RES, 49.9 k, 1%, 0.1 W, 0603	0603
R137	1	10Meg	RC0603FR-1310ML	YAGEO	RES, 10 M, 0.5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R138	1	1.00Meg	CRCW06031M00DHEAP	Vishay-Dale	RES, 1.00 M, 0.5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R145, R148	2	6.8k	RC0402JR-076K8L	YAGEO	RES, 6.8 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R152, R153, R154, R155, R163, R164, R165, R166, R167, R168, R169, R170, R171, R172, R173, R174, R175, R176, R177, R178, R179, R180, R181, R182	24	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R156, R157, R158	3	4.7k	CRCW04024K70JNED	Vishay-Dale	RES, 4.7 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R160, R222, R223	3	4.75k	CRCW04024K75FKED	Vishay-Dale	RES, 4.75 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R183, R184, R185, R186, R187, R188, R189, R190, R191, R192, R193, R194, R195, R196, R197, R198, R226, R227, R228, R229	20	220	CRCW0402220RJNED	Vishay-Dale	RES, 220, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R210, R216	2	910	RR1220P-911-D	Susumu Co Ltd	RES, 910, 0.5%, 0.1 W, 0805	0805
R213	1	120	ESR10EZPF1200	Rohm	RES, 120, 1%, 0.4 W, 0805	0805
T1	1	105uH	750315371	Würth Elektronik	Transformer, 105uH, TH	12.6x8.3mm
T2, T3	2		HMU2129NL	Pulse	BMS TRANSFORMER	
U1, U4, U7	3		UCC12050DVE	Texas Instruments	500 mW, High-Efficiency, Low-Emissions, 5 kVRMS Isolated DC-DC Converter, DVE0016A (SO-MOD-16)	DVE0016A
U2, U5, U8	3		ISO1042DWVR	Texas Instruments	Isolated CAN Transceiver With 70-V Bus Fault Protection and Flexible Data Rate, DWV0008A (SOIC-8)	DWV0008A
U3, U6, U9	3		ESD762DBZR	Texas Instruments	24-V, 2-Channel, ESD Protection With 5.7 A of 8/20 $\mu$ s Surge Protection in a SOT-23 Package	SOT23-3
U10, U11	2		BQ79600PWQ1	Texas Instruments	BQ79600PWQ1, PW0016A (TSSOP-16)	PW0016A
U13	1		TPS4H160BQPWPRQ1	Texas Instruments	40-V/160-mohm Quad Channels Smart High-Side Switch, PWP0028C (TSSOP-28)	PWP0028C

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U14	1		LM74701QDDFQ1	Texas Instruments	Low IQ Reverse Battery Protection Ideal Diode Controller with Integrated VDS Clamp	SOT23-8
U15, U16	2		ULN2803CDWR	Texas Instruments	50-V, EIGHT-CHANNEL DARLINGTON A	
U19	1		SN74HCS21PWR	Texas Instruments	Dual 4-Input AND Gates with Schmitt-Trigger Inputs	TSSOP14
U21	1		LMR51450SDRRR	Texas Instruments	4-V to 36-V, 5-A Synchronous Step-Down DC/DC Converter with Low IQ	WSON12
U22	1		TPS7B8133QDRVRQ1	Texas Instruments	Automotive 150-mA high-voltage ultra-low-IQ low-dropout (LDO) linear regulator, DRV0006A (WSON-6)	DRV0006A
U23	1		TPS7A1601DGNR	Texas Instruments	60V, 5uA Iq, 100mA Low-Dropout (LDO) Voltage Regulator With Enable and Power Good, DGN0008C (VSSOP-8)	DGN0008C
U24	1		TPS3823-33DBVR	Texas Instruments	Voltage supervisor (reset IC) with watchdog and manual reset, DBV0005A (SOT-23-5)	DBV0005A
U25, U26	2		TPD4E001QDBVRQ1	Texas Instruments	Automotive Low-Capacitance 4-Channel +/-15-kV ESD Protection Array for High-Speed Data Interfaces, DBV0006A (SOT-23-6)	DBV0006A
U27	1		BQ32000DR	Texas Instruments	Serial RTC with Battery Backup and Trickle Charge, D0008A (SOIC-8)	D0008A
U28	1		SN74LVC2G17QDCKRQ1	Texas Instruments	Automotive Catalog Dual Schmitt-Trigger Buffer, DCK0006A (SOT-SC70-6)	DCK0006A
U29	1		TPS76338DBVT	Texas Instruments	Single Output LDO, 150 mA, Fixed 3.8 V Output, 2.7 to 10 V Input, with Low IQ, 5-pin SOT-23 (DBV), -40 to 125 degC, Green (RoHS & no Sb/Br)	DBV0005A
U30	1		SN6505BQDBVTQ1	Texas Instruments	Transformer Driver PMIC SOT-23-6	SOT-23-6
U31	1		ISO1410DWR	Texas Instruments	5-kVRMS Reinforced and Basic Isolated RS-485/RS-422 Transceiver With Robust-EMC, DW0016B (SOIC-16)	DW0016B
U32	1		HDC3020DEF	Texas Instruments	Integrated Humidity and Temperature Digital Sensor	WSON8
Y1	1		MC-306 32.7680K-A0:ROHS	Epson	Crystal, 32.768 kHz, 12.5pF, SMD	8x2.54x3.8mm
C60, C61	0	10uF	EEE-FK1H100P	Panasonic	CAP, AL, 10 uF, 50 V, +/- 20%, 0.88 ohm, AEC-Q200 Grade 2, SMD	SMT Radial D
C62, C63, C64, C65	0	0.1uF	C1005X7R1H104K050BE	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0402	0402
C66, C67, C69, C70	0	470pF	GRM155R71H471KA01D	MuRata	CAP, CERM, 470 pF, 50 V, +/- 10%, X7R, 0402	0402
J4, J8, J9, J13, J26, SW1	0					
R91, R92, R96, R97, R99, R101, R102, R103, R104, R105, R107, R109, R110, R112, R114, R115, R116	0	0	CRCW04020000Z0EDHP	Vishay-Dale	RES, 0, 0%, 0.2 W, AEC-Q200 Grade 0, 0402	0402
R93, R94, R111, R113	0	10.0k	RC0402FR-0710KL	Yageo America	RES, 10.0 k, 1%, 0.063 W, 0402	0402
R98	0	5.6k	CRCW04025K60JNED	Vishay-Dale	RES, 5.6 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R100	0	12k	CRCW040212K0JNED	Vishay-Dale	RES, 12 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R106, R108	0	8.25k	CRCW04028K25FKED	Vishay-Dale	RES, 8.25 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R159	0	4.75k	CRCW04024K75FKED	Vishay-Dale	RES, 4.75 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402

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