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TIDA-00914 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	C1, C4, C7, C9, C19, C26, C29, C33, C35, C38, C41, C44, C47, C57, C58, C59, C61, C62, C64, C67, C80, C85, C95, C96	24	4.7uF	C2012X7R1V475K125AC	TDK	CAP, CERM, 4.7 µF, 35 V, +/- 10%, X7R, 0805	0805
2	C2, C6, C8, C14, C17, C21, C25, C27, C30, C36, C42, C63, C65, C66, C68, C70, C71, C79, C82, C87, C89, C91, C97	23	0.1uF	C1608X7R1H104K	TDK	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603	0603
3	C3, C23, C32, C34, C40, C46	6	0.47uF	C1608X7R1H474K080AC	TDK	CAP, CERM, 0.47 µF, 50 V, +/- 10%, X7R, 0603	0603
4	C5	1	10uF	UMK325AB7106KM-T	Taiyo Yuden	CAP, CERM, 10 µF, 50 V, +/- 10%, X7R, 1210	1210
5	C24	1	100uF	C1210C107M4PAC7800	Kemet	CAP, CERM, 100 µF, 16 V, +/- 20%, X5R, 1210	1210
6	C101, C102, C103, C104, C105, C106	6	12pF	GRM1885C1H120JA01D	MuRata	CAP, CERM, 12 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
7	C111, C112	2	3uF	B32774D1305K000	TDK	CAP, Film, 3 µF, 1300 V, +/- 10%, 0.016 ohm, TH	31.5x18mm
8	D1	1	30V	B0530W-7-F	Diodes Inc.	Diode, Schottky, 30 V, 0.5 A, SOD-123	SOD-123
9	D12, D13, D14	3	1300V	BYG23T-M3/TR	Vishay-Semiconductor	Diode, Ultrafast, 1300 V, 1 A, SMA	SMA
10	H5, H6, H7, H8	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
11	J1	1		5747461-1	AMP	Connector, TH, DB25 parallel port, plastic, right angle	Amp_DB25
12	J2	1		282834-2	TE Connectivity	Terminal Block, 2x1, 2.54mm, TH	Terminal Block, 2x1, 2.54mm, TH
13	J4	1		1904150	Phoenix Contact	Terminal Block, 9.52mm, 3x1, R/A, TH	Terminal Block, 3x1, Pitch 9.52mm
14	J7	1		800-10-003-10-001000	Mill-Max	Header, 100mil, 3x1, TH	Header, 3x1, 100mil, TH
15	J8	1		1902547	Phoenix Contact	Terminal Block, 9.52mm, 2x1, R/A, TH	Terminal Block, 2x1, Pitch 9.52mm
16	R1, R3, R6, R9, R15, R23, R29, R35, R44	9	0	CRCW12060000Z0EA	Vishay-Dale	RES, 0, 5%, 0.25 W, 1206	1206
17	R4, R10, R16, R24, R30, R36, R79, R80, R82, R83, R85, R86, R91, R92, R93, R110	16	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603

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18	R7, R46, R47, R52, R53, R55, R56, R58, R59	9	22	CRCW060322R0JNEA	Vishay-Dale	RES, 22, 5%, 0.1 W, 0603	0603
19	R12, R20, R26, R32, R38, R112	6	10k	CRCW060310K0JNEA	Vishay-Dale	RES, 10 k, 5%, 0.1 W, 0603	0603
20	R13, R19, R21, R27, R33, R39	6	12.0	RC1206FR-0712RL	Yageo America	RES, 12.0, 1%, 0.25 W, 1206	1206
21	R41, R42, R43	3	1.00	CRCW12061R00FKEA	Vishay-Dale	RES, 1.00, 1%, 0.25 W, 1206	1206
22	R45, R48, R49, R50, R51, R54, R57	7	100k	CRCW1206100KJNEAHP	Vishay	RES, 100 k, 5%, 0.75 W, 1206	1206
23	R98, R108, R122, R125, R127, R128, R129	7	820k	RC1206FR-07820KL	Yageo America	RES, 820 k, 1%, 0.25 W, 1206	1206
24	R106	1	160k	CRCW0603160KFKEA	Vishay-Dale	RES, 160 k, 1%, 0.1 W, 0603	0603
25	R107, R109, R139, R140, R141, R142, R143, R144	8	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, 0603	0603
26	R118, R120	2	0.004	PU5931FKMP70R004L	Yageo America	RES, 0.004, 1%, 7 W, AEC-Q200 Grade 0, 15x7.75mm	15x7.75mm
27	TP1, TP2, TP3, TP4, TP5, TP6, TP7, TP10, TP11, TP15, TP29, TP31, TP32, TP36, TP37	15		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
28	U1, U2, U5, U6, U7, U8	6		UCC5310MCDWV	Texas Instruments	5-kVRMS Single-Channel Isolated Gate Drivers, DWV0008A (SOIC-8)	DWV0008A
29	U3	1		TLV1117-33IDRJR	Texas Instruments	LDO with 4.7 to 15 V Input and 3.3 V Output, -40 to 125 degC, 8-Pin SON (DRJ), Green (RoHS & no Sb/Br)	DRJ0008A
30	U4	1		SN74LVC1G17DCKR	Texas Instruments	SINGLE SCHMITT-TRIGGER BUFFER, DCK0005A (SOT-5)	DCK0005A
31	U9	1		TLV521	Texas Instruments	Nanopower 400nA, 1.8V, R-R I/O CMOS Op Amp, DCK0005A	DCK0005A
32	U12, U13, U14, U15	4		AMC1306E25DWVR	Texas Instruments	Small, High-Precision, Reinforced Isolated Delta-Sigma Modulator with Manchester Coded Output, DWV0008A	DWV0008A
33	U20, U22	2		LM3480IM3-5.0/NOPB	Texas Instruments	100 mA, Quasi Low-Dropout Linear Voltage Regulator, 3-pin SOT-23, Pb-Free	MF03A
34	U23	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
35	U24	1		CM100TX-24S1	Mitsubishi	IGBT Module,High Power Switching Use Insulated Type, TH	121.7x62mm
36	XF1, XF2	2	5AG	3566	Keystone	Fuse Holder, 5AG, TH	11.07x19x12.29mm
37		1	30A	90.003	Schurter Inc.	Fuse Cartridge, 30A, 1KVDC, 5AG	10mm x 38.1mm
38	C10	0	12pF	GRM1885C1H120JA01D	MuRata	CAP, CERM, 12 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
39	C11, C94	0	0.1uF	C1608X7R1H104K	TDK	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603	0603
40	C12, C15, C18, C22, C28, C37, C43, C49	0	4.7uF	C2012X7R1V475K125AC	TDK	CAP, CERM, 4.7 µF, 35 V, +/- 10%, X7R, 0805	0805
41	C13, C16, C20, C31, C39, C45, C48, C50, C51, C52, C53, C54, C56	0	0.47uF	C1608X7R1H474K080AC	TDK	CAP, CERM, 0.47 µF, 50 V, +/- 10%, X7R, 0603	0603

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
42	C72, C73, C74, C75, C76, C77, C78	0	0.01uF	CGA3E2C0G1H103J080AA	TDK	CAP, CERM, 0.01 µF, 50 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0603	0603
43	C81, C83, C84, C92	0	47pF	GRM1885C1H470JA01D	MuRata	CAP, CERM, 47 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
44	D2, D3, D4, D5, D6, D7	0	30V	MSS2P3-M3/89A	Vishay-Semiconductor	Diode, Schottky, 30 V, 2 A, AEC-Q101, MicroSMP	MicroSMP
45	D9	0	1200V	RHRG30120	Fairchild Semiconductor	Diode, Ultrafast, 1200 V, 30 A, TH	TO-247-2
46	D10, D11	0	200V	1SMB5956BT3G	ON Semiconductor	Diode, Zener, 200 V, 550 mW, SMB	SMB
47	J3	0		1902547	Phoenix Contact	Terminal Block, 9.52mm, 2x1, R/A, TH	Terminal Block, 2x1, Pitch 9.52mm
48	J5, J6, J13	0		800-10-003-10-001000	Mill-Max	Header, 100mil, 3x1, TH	Header, 3x1, 100mil, TH
49	Q1	0	1200 V	NGTB25N120IHLWG	Infineon Technologies	Transistor, IGBT, 1200 V, 9.9 A, TO-247	TO-247
50	R2, R5, R14, R22, R28, R34, R40, R99, R100, R101, R102, R103, R105	0	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
51	R8, R90	0	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, 0603	0603
52	R11, R17, R18, R25, R31, R37	0	12.0	RC1206FR-0712RL	Yageo America	RES, 12.0, 1%, 0.25 W, 1206	1206
53	R71, R94	0	16.5	CRCW120616R5FKEA	Vishay-Dale	RES, 16.5, 1%, 0.25 W, 1206	1206
54	R81	0	12.1k	CRCW060312K1FKEA	Vishay-Dale	RES, 12.1 k, 1%, 0.1 W, 0603	0603
55	R96	0	10k	CRCW060310K0JNEA	Vishay-Dale	RES, 10 k, 5%, 0.1 W, 0603	0603
56	U10	0		UCC5320SCDWV	Texas Instruments	5-kVRMS Single-Channel Isolated Gate Drivers, DWV0008A (SOIC-8)	DWV0008A

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