

TIDA-010065_DC_V_I_Fault REV E2 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C1	1	10uF	TAJA106M010RNJ	AVX	CAP, TA, 10 uF, 10 V, +/- 20%, 3 ohm, SMD	3216-18
C2, C4, C5, C6, C8, C9, C11, C27, C29	9	0.1uF	885012206095	Würth Elektronik	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
C3, C7, C10, C13, C28	5	10uF	C3225X7R1H106M250AC	TDK	CAP, CERM, 10 uF, 50 V, +/- 20%, X7R, 1210	1210
C12, C16, C30	3	4.7uF	GRM21BR61H475KE51L	MuRata	CAP, CERM, 4.7 uF, 50 V, +/- 10%, X5R, 0805	0805
C14, C19, C20, C22	4	0.01uF	885012206040	Würth Elektronik	CAP, CERM, 0.01 uF, 16 V, +/- 10%, X7R, 0603	0603
C15, C17, C18, C21, C25, C26, C37, C38	8	0.1uF	GRM188R71H104KA93D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
C24	1	0.1uF	885012205037	Würth Elektronik	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, 0402	0402
C31, C32, C33	3	0.1uF	C1608X7R1E104K080AA	TDK	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, 0603	0603
C34, C35	2	0.01uF	CL10B103KB8NCNC	Samsung Electro-Mechanics	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, 0603	0603
C36, C39	2	0.1uF	GCM188R71C104KA37J	MuRata	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
D1, D2	2	20V	B0520LW-7-F	Diodes Inc.	Diode, Schottky, 20 V, 0.5 A, SOD-123	SOD-123
D3	1	Green	150060VS55040	Würth Elektronik	LED, Green, SMD	1.6x0.8mm
D4	1	5.6V	MMSZ5232B-7-F	Diodes Inc.	Diode, Zener, 5.6 V, 500 mW, SOD-123	SOD-123
D5	1	3.3V	CDSOD323-T03SC	Bourns	Diode, TVS, Bi, 3.3 V, 10.9 Vc, SOD323, 2-Leads, Body 1.9x1.45mm, No Polarity Mark	SOD323, 2-Leads, Body 1.9x1.45mm, No Polarity Mark
DC-1, DC+1	2		PBC02SGBN	Sullins Connector Solutions	Header, 2.54 mm, 2x1, Gold, R/A, TH	Header, 2.54mm, 2x1, R/A, TH
J1	1		61300411021	Würth Elektronik	Header, 2.54 mm, 4x1, Gold, R/A, TH	Header, 2.54 mm, 4x1, R/A, TH
J2	1		PEC02SAAN	Sullins Connector Solutions	Header, 100mil, 2x1, Tin, TH	Header, 2 PIN, 100mil, Tin
L1	1	1000 ohm	742792662	Würth Elektronik	Ferrite Bead, 1000 ohm @ 100 MHz, 0.6 A, 0603	0603
L2	1	26 ohm	74279228260	Würth Elektronik	Ferrite Bead, 26 ohm @ 100 MHz, 6.5 A, 0603	0603
R1, R2, R4, R7, R9, R17	6	0	ERJ-3GEY0R00V	Panasonic	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R3	1	47k	RC0603JR-0747KL	Yageo	RES, 47 k, 5%, 0.1 W, 0603	0603
R5	1	2.20k	RC0603FR-072K2L	Yageo	RES, 2.20 k, 1%, 0.1 W, 0603	0603
R6	1	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R10	1	330	RC0603JR-07330RL	Yageo	RES, 330, 5%, 0.1 W, 0603	0603
R11, R12, R13, R14, R15, R16	6	332k	MMU01020C3323FB300	Vishay-Semiconductor	RES, 332 k, 1%, 0.2 W, AEC-Q200 Grade 0, 2.2x1.1mm	2.2x1.1mm
R18	1	7.50k	ERJ-3EKF7501V	Panasonic	RES, 7.50 k, 1%, 0.1 W, 0603	0603
R19, R27, R44, R45, R47, R48	6	39	CRCW060339R0JNEA	Vishay-Dale	RES, 39, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R20, R21, R24, R25	4	4.70k	RC0603FR-074K7L	Yageo	RES, 4.70 k, 1%, 0.1 W, 0603	0603
R22	1	3.60k	MMU01020C3601FB300	Vishay-Semiconductor	RES, 3.60 k, 1%, 0.3 W, AEC-Q200 Grade 0, 2.2x1.1mm	2.2x1.1mm
R23	1	100	ERJ-3EKF1000V	Panasonic	RES, 100, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R26	1	3.16k	RC0603FR-073K16L	Yageo	RES, 3.16 k, 1%, 0.1 W, 0603	0603
R29	1	15.0k	RC0603FR-0715KL	Yageo	RES, 15.0 k, 1%, 0.1 W, 0603	0603

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R30	1	196k	RT0603BRD07196KL	Yageo America	RES, 196 k, 0.1%, 0.1 W, 0603	0603
R31, R35, R41, R49	4	3.30k	ERJ-2RKF3301X	Panasonic	RES, 3.30 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0402	0402
R32, R36	2	10.0k	CRCW040210K0DHEDP	Vishay-Dale	RES, 10.0 k, 0.5%, 0.063 W, 0402	0402
R33, R37	2	3.32Meg	CRCW04023M32FKED	Vishay-Dale	RES, 3.32 M, 1%, 0.063 W, 0402	0402
R34, R38	2	102k	RT0603BRD07102KL	Yageo America	RES, 102 k, 0.1%, 0.1 W, 0603	0603
R39, R40	2	49.9	TNPW060349R9BEEA	Vishay-Dale	RES, 49.9, 0.1%, 0.1 W, AEC-Q200 Grade 1, 0603	0603
R42, R43	2	20.0k	CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, 0603	0603
R46	1	0.002	WSLP39212L000FEA	VISHAY DALE	RES 0.002 OHM 1% 5W 3921	
R50	1	0	ERJ-3GEY0R00V	Panasonic	RES, 0, 5%, 0.1 W, 0603	0603
T1	1	340uH	750313638	Würth Elektronik	Transformer, 340 uH, SMT	8x9.14mm
TP1, TP2, TP5, TP7	4		5012	Keystone	Test Point, Multipurpose, White, TH	White Multipurpose Testpoint
TP3, TP4, TP6, TP8	4		5003	Keystone	Test Point, Miniature, Orange, TH	Orange Miniature Testpoint
TP9, TP10	2	5001	5001	Keystone	Test Point, Black, Thru Hole Color Keyed	0.100 x 0.100 inch
U1	1		TPS22944DCKR	Texas Instruments	Low-Input Voltage 100 mA Current Limited Load Switch, 400 mOhms rDS(On), -40 to 85 degC, 5-pin SC70 (DCK), Green (RoHS & no Sb/Br)	DCK0005A
U2	1		SN6505BDBVR	Texas Instruments	Low-Noise 1 A, 420 kHz Transformer Driver, DBV0006A (SOT-23-6)	DBV0006A
U3	1		TLV70433DBVT	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
U4	1		AMC1311DWVR	Texas Instruments	Precision, 2-V Input, Reinforced Isolated Amplifier, DWV0008A (SOIC-8)	DWV0008A
U5	1		TLV6001IDCKR	Texas Instruments	1-MHz, Low-Power Operational Amplifier for Cost-Sensitive Systems, DCK0005A (SOT-SC70-5)	DCK0005A
U6	1		TLV3202AID	Texas Instruments	Dual, 40ns, microPower, Rail-to-Rail input Comparator with Push-pull outputs, D0008A (SOIC-8)	D0008A
U7	1		ISO7720DR	Texas Instruments	High Speed, Robust EMC Dual-Channel Digital Isolator, D0008B (SOIC-8)	D0008B
U8	1		TPS76350DBVR	Texas Instruments	Single Output LDO, 150 mA, Fixed 5 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
U9	1		AMC1302DWVR	Texas Instruments	Precision Reinforced Isolated Amplifier for Current Sensing, DWV0008A (SOIC-8)	DWV0008A
U10, U12	2		INA301A2IDGKR	Texas Instruments	Overcurrent protection high-speed, precision current sense amplifier with integrated comparator, DGK0008A (VSSOP-8)	DGK0008A
U11	1		ISO7721DWV	Texas Instruments	High Speed, Robust EMC Reinforced Dual-Channel Digital Isolator, DWV0008A (SOIC-8)	DWV0008A
C23	0	0.1uF	GRM188R71H104KA93D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
R8	0	47k	RC0603JR-0747KL	Yageo	RES, 47 k, 5%, 0.1 W, 0603	0603
R28	0	31.6k	CRCW060331K6FKEA	Vishay-Dale	RES, 31.6 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603