

TIDA-00847_AC_DC REV E1 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C1, C3, C5	3	0.1uF	06033C104JAT2A	AVX	CAP, CERM, 0.1uF, 25V, +/-5%, X7R, 0603	0603
C2, C4, C6, C7	4	100pF	06035A101FAT2A	AVX	CAP, CERM, 100pF, 50V, +/-1%, C0G/NP0, 0603	0603
C8, C9, C10, C11	4	0.01uF	C1608C0G1E103J	TDK	CAP, CERM, 0.01uF, 25V, +/-5%, C0G/NP0, 0603	0603
C12, C15, C16, C18, C19, C28	6	0.1uF	C0603C104K5RACTU	Kemet	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	0603
C13, C26, C27	3	10uF	T491B106K016AT	Vishay-Sprague	CAP, TA, 10 uF, 16 V, +/- 10%, 2 ohm, SMD	3528-21
C14, C17, C20	3	1uF	C1608X7R1C105K080AC	TDK Corporation	CAP CER 1UF 16V X7R 0603	0603
C21	1	470pF	GRM188R71H471KA01D	MuRata	CAP, CERM, 470 pF, 50 V, +/- 10%, X7R, 0603	0603
C22, C23	2	1uF	UMK107AB7105KA-T	Taiyo Yuden	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, 0603	0603
C24, C25	2	1000pF	CGA3E2C0G1H102J080AD	TDK Corporation	CAP CER 1000PF 50V C0G 0603	0603
D1, D2	2	400V	SMCJ400CA	Bourns Inc	TVS DIODE 400VWM 648VC SMC	SMC
D7, D8	2	15V	PTZTE2515B	Rohm Semiconductor	DIODE ZENER 15.4V 1W PMDS	SMA
D9, D13	2	3.9V	PTZTE253.9B	Rohm Semiconductor	DIODE ZENER 4.1V 1W PMDS	DO-214AC, SMA
D10, D11	2	3.3V	PESD3V3L1BA,115	Nexperia USA Inc	TVS DIODE 3.3VWM 26VC SOD323	SOD323
D12, D14	2	Green	LG L29K-G2J1-24-Z	OSRAM	LED, Green, SMD	1.7x0.65x0.8mm
J1	1		5-146280-3	Mill-Max	Header, 100mil, 3x1, TH	Header, 3x1, 100mil, TH
J2	1		61300411121	Würth Elektronik	Header, 2.54 mm, 4x1, Gold, TH	Header, 2.54mm, 4x1, TH
J3, J4	2		ED120/2DS	On-Shore Technology	TERMINAL BLOCK 5.08MM VERT 2POS, TH	TERM_BLK, 2pos, 5.08mm
Q1, Q2	2	600V	AOD2N60	Alpha & Omega	MOSFET N-CH 600V 2A TO252	TO-252, (D-Pak)
Q3, Q4	2	0.6V	FCX458	Diodes Inc.	Transistor, NPN, 400V, 500mA, SOT-89	SOT-89
R1, R2, R5, R6, R9, R10, R61, R62, R63, R64, R65, R66	12	100k	RC1206FR-07100KL	Yageo America	RES, 100 k, 1%, 0.25 W, 1206	1206
R3, R4, R75, R76	4	2.20k	RC0603FR-072K2L	Yageo America	RES, 2.20 k, 1%, 0.1 W, 0603	0603
R7, R8, R13	3	0	RC0603JR-070RL	Yageo America	RES, 0, 5%, 0.1 W, 0603	0603
R11, R12	2	100k	CRCW1206100KFKEA	Vishay-Dale	RES, 100k ohm, 1%, 0.25W, 1206	1206
R14, R45, R47, R48	4	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0k ohm, 1%, 0.1W, 0603	0603
R15, R18	2	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100 ohm, 1%, 0.1W, 0603	0603
R16	1	470	CRCW0603470RJNEA	Vishay-Dale	RES, 470 ohm, 5%, 0.1W, 0603	0603
R17	1	30k	CRCW060330K0JNEA	Vishay-Dale	RES, 30k ohm, 5%, 0.1W, 0603	0603
R19, R26, R27, R32	4	160k	CRCW0603160KFKEA	Vishay-Dale	RES, 160 k, 1%, 0.1 W, 0603	0603
R20, R21, R22, R23, R24, R25, R28, R29, R30, R31, R33, R34	12	47.0k	RC0603FR-0747KL	Yageo America	RES, 47.0 k, 1%, 0.1 W, 0603	0603
R35, R42	2	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100k ohm, 1%, 0.1W, 0603	0603
R36, R37, R38, R39	4	10.0	CRCW060310R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.1 W, 0603	0603
R40, R41, R49, R55, R56, R57, R58, R59, R77, R78, R80, R86, R87, R88, R89, R90, R91, R92, R93, R95	20	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R43, R44	2	2.61k	CRCW06032K61FKEA	Vishay-Dale	RES, 2.61k ohm, 1%, 0.1W, 0603	0603
R60	1	47k	RC0603JR-0747KL	Yageo America	RES, 47 k, 5%, 0.1 W, 0603	0603
R67, R68, R69, R70, R71, R72, R73, R74	8	10K	MCR18ERTF1002	Rohm Semiconductor	RES SMD 10K OHM 1% 1/4W 1206	1206
R81, R94	2	300	CRCW0603300RJNEA	Vishay-Dale	RES, 300 ohm, 5%, 0.1W, 0603	0603
R82	1	4.7	CRCW06034R70JNEA	Vishay-Dale	RES, 4.7, 5%, 0.1 W, 0603	0603

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TP25, TP27, TP29	3	5001	5001	Keystone	Test Point, Black, Thru Hole Color Keyed	0.100 x 0.100 inch
U1	1	LMV551MF	LMV551MF	TI	3MHz Single Micropower R-R Out Op Amp	MF05A_L
U2	1	LM4041BIDBZ	LM4041BIDBZ	TI	IC, Micropower Shunt Voltage Reference 100 ppm/°C, 45µA-12mA, Adjustable	SOT23
U3	1		LMV614MT	Texas Instruments	Quad 1.4 MHz, Low Power General Purpose, 1.8V Op Amp, PW0014A	PW0014A
U5	1		MSP430G2332IPW20	TI	IC MCU 16BIT 4KB FLASH 20TSSOP	20-TSSOP
U6	1		ISOW7841FDWE	Texas Instruments	High Speed, 5000 VRMS Quad-Channel Digital Isolators, DW0016B	DW0016B
D3, D4	0	5.1V	PTZTE255.1B	Rohm Semiconductor	DIODE ZENER 5.4V 1W PMDS	SMA
D5	0	3.9V	PTZTE253.9B	Rohm Semiconductor	DIODE ZENER 4.1V 1W PMDS	DO-214AC, SMA
D6	0	30V	BAT54C-7-F	Diodes Inc.	Diode, Schottky, 30V, 0.2A, SOT-23	SOT-23
R46, R50, R51, R53	0	0	RC0402JR-070RL	Yageo	RES, 0, 5%, 0.063 W, 0402	0402
R54, R79, R83, R84, R85, R96, R97	0	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
T1	0		750313638	TE connectivity	TRANSFORMER SMD	
U4	0		TPS70933DBVT	Texas Instruments	IC REG LDO 3.3V 0.15A SOT23-5	DBV0005A
U7	0		SN6505BDBVR	Texas Instruments	Low-Noise 1 A, 420 kHz Transformer Driver, DBV0006A (SOT-6)	DBV0006A