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TIDA-00519 / UCC24630EVM-636

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
IPC	1		Printed Circuit Board		PWR636	Any		
C1	1	0.33uF	CAP, Film, 0.33uF, 630V, +/-20%, TH	B32922 14.5mm	B32922C3334M	EPCOS Inc		
C2, C3	2	100uF	CAP, AL, 100uF, 400V, +/-20%, TH	RCAP, 16x30mm	400KXW100MEFC16X30	Rubycon		
C4	1	470pF	CAP, CERM, 470pF, 630V, +/-5%, C0G/NP0, 1206	1206	C3216C0G2J471J	TDK		
C5	1	47pF	CAP, CERM, 47 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603	06035A470JAT2A	AVX		
C6, C17, C18	3	0.01uF	CAP, CERM, 0.01uF, 25V, +/-5%, C0G/NP0, 0603	0603	C1608C0G1E103J	TDK		
C7	1	10uF	CAP, CERM, 10uF, 25V, +/-20%, X7R, 1812	1812	CA532X7R1E106M	TDK		
C8, C9	2	680uF	CAP, AL, 680 uF, 25 V, +/- 20%, 0.023 ohm, TH	TH, 2-Leads, Body 10x20mm, Pin Spacing 5mm	EKZE250ELL681MJ20S	Nippon Chemi-Con		
C10	1	0.047uF	CAP, CERM, 0.047uF, 25V, +/-5%, X7R, 0603	0603	06033C473JAT2A	AVX		
C11	1	1000pF	CAP, CERM, 1000pF, 50V, +/-5%, C0G/NP0, 0402	0402	GRM1555C1H102JA01D	MuRata		
C12	1	100pF	CAP, CERM, 100 pF, 50 V, +/- 10%, X7R, 0402	0402	CC0402KRX7R9BB101	Yageo America		
C13	1	0.1uF	CAP, CERM, 0.1uF, 50V, +/-5%, X7R, 0805	0805	08055C104JAT2A	AVX		
C14	1	4.7uF	CAP, CERM, 4.7uF, 25V, +/-10%, X7R, 1206	1206	C3216X7R1E475K	TDK		
C15	1	22uF	CAP, AL, 22uF, 25V, +/-20%, TH	5.0x9.0mm	URZ1E220MDD1TD	Nichicon		
C16	1	36pF	CAP, CERM, 36pF, 100V, +/-5%, C0G/NP0, 0603	0603	GRM1885C2A360JA01D	MuRata		
C19	1	2200pF	CAP, CERM, 2200pF, 250V, +/-20%, E, Radial D8x5mm	Radial D8x5mm	DE2E3KY222MA2BM01	MuRata		
D1	1	800V	Diode, Switching-Bridge, 800 V, 3 A, TH	GBU	GBU4K-E3/51	Vishay-Semiconductor		
D2	1	600V	Diode, Ultrafast, 600V, 1A, SMB	SMB	MURS160-13-F	Diodes Inc.		
D3	1	15V	Diode, Zener, 15V, 500mW, SOD-123	SOD-123	MMSZ5245B-7-F	Diodes Inc.		
D4	1	100V	Diode, Ultrafast, 100V, 0.15A, SOD-123	SOD-123	1N4148W-7-F	Diodes Inc.		
D5	1	100V	Diode, Ultrafast, 100V, 0.25A, SOD-323	SOD-323	BAS316, 115	NXP Semiconductor		
F1	1		Fuse, 3.15A, 250V, TH	8x8.5x4mm	39213150000	Littelfuse		
H1, H2, H3, H4	4		Standoff, Hex, 1"L #4-40 Nylon	Standoff	1902E	Keystone		
H5, H6, H7, H8	4		HEX STANDOFF 4-40 NYLON 1-1/2"	250x1500 mil	4810	Keystone		
H10	1		MACHINE SCREW PAN PHILLIPS, 5/16", 4-40		PMSSS 440 0031 PH	B&F Fastener Supply		
H11	1		Washer, Split Lock, #4		4693	Keystone		
H12	1		Nut, Hex, 1/4" Thick, #4-40		HNSS440	B&F Fastener Supply		
HS1	1		Heat Sink, TO-220 Vertical	9.52x19.05x19.05 mm	7173DG	Aavid		
J1	1		AC Receptacle, 2.5A, R/A, TH	AC, Reception 14.5x15x22 mm	770W-X2/10	Qualtek Electronics Corporation		
J2	1		Terminal Block, 2x1, 5.08mm, TH	12.16x8.8x12mm	20020110-H021A01LF	FCI		
J3	1		TERM BLOCK PLUG 2POS 5.08MM		20020006-H021B01LF	FCI		
L1	1	4.5mH	Coupled inductor, 4.5 mH, A, 0.05 ohm, TH	TH, 19.3x13mm	G144083LF	GCI Technologies		
L2	1	47.7uH	Inductor, Toroid, 47.7 uH, 7 A, 0.04 ohm, TH	TH, 14.5x8.5mm	G144082LF	GCI Technologies		
Q1	1	100V	MOSFET, N-CH, 100V, 16A, SON 5x6mm	SON 5x6mm	CSD19531Q5A	Texas Instruments		None
Q2	1	600V	MOSFET, N-CH, 600 V, 0.12 A, SOT-223	SOT-223	BSP135H6327XTSA1	Infineon Technologies		None
Q3	1	650V	MOSFET, N-CH, 650V, 15A, TO-220 FullPAK	TO-220 FullPAK	SPA15N65C3	Infineon Technologies		None
Q4, Q5	2	60V	MOSFET, N-CH, 60V, 0.17A, SOT-23	SOT-23	2N7002-7-F	Diodes Inc.		None
R1, R2	2	1.00Meg	RES, 1.00Meg ohm, 1%, 0.25W, 1206	1206	CRCW12061M00FKFA	Vishay-Dale		
R3	1	100k	RES, 100 k, 1%, 0.25 W, 1206	1206	CRCW1206100FKFA	Vishay-Dale		
R4	1	10.0k	RES, 10.0k ohm, 0.5%, 0.1W, 0603	0603	RT0603DRE0710KL	Yageo America		
R5	1	10.0k	RES, 10.0k ohm, 1%, 1W, 2512	2512	CRCW251210K0FKEG	Vishay-Dale		
R6	1	2.00Meg	RES, 2.00Meg ohm, 1%, 0.25W, 1206	1206	CRCW12062M00FKFA	Vishay-Dale		
R7	1	0	RES, 0.5%, 0.125 W, 0805	0805	CRCW08050000Z0EA	Vishay-Dale		
R8	1	4.7	RES, 4.7 ohm, 5%, 0.25W, 1206	1206	CRCW12064R70JNEA	Vishay-Dale		
R9	1	47.0	RES, 47.0 ohm, 1%, 0.25W, 1206	1206	RC1206FR-0747RL	Yageo America		
R10	1	2.2k	RES, 2.2k ohm, 5%, 0.1W, 0603	0603	CRCW06032K20JNEA	Vishay-Dale		
R11	1	20.0k	RES, 20.0 k, 1%, 0.1 W, 0603	0603	CRCW060320K0FKEA	Vishay-Dale		
R12	1	0.15	RES, 0.15 ohm, 1%, 0.5W, 1210	1210	MCR25JZHFLR150	Rohm		
R13	1	20.0k	RES, 20.0k ohm, 1%, 0.125W, 0805	0805	CRCW080520K0FKEA	Vishay-Dale		
R14	1	5.1k	RES, 5.1k ohm, 5%, 0.1W, 0603	0603	CRCW06035K10JNEA	Vishay-Dale		
R15	1	576k	RES, 576k ohm, 1%, 0.125W, 0805	0805	CRCW0805576KFKFA	Vishay-Dale		
R16, R20	2	10.0k	RES, 10.0k ohm, 1%, 0.1W, 0603	0603	CRCW060310K0FKEA	Vishay-Dale		
R17	1	590k	RES, 590 k, 1%, 0.1 W, 0603	0603	CRCW0603590KFKFA	Vishay-Dale		
R18	1	47k	RES, 47 k, 5%, 0.1 W, 0603	0603	CRCW060347K0JNEA	Vishay-Dale		
R19	1	18k	RES, 18 k, 5%, 0.1 W, 0603	0603	CRCW060318K0JNEA	Vishay-Dale		
R21, R26	2	0	RES, 0 ohm, 5%, 0.1W, 0603	0603	CRCW06030000Z0EA	Vishay-Dale		
R22	1	10.2k	RES, 10.2k ohm, 1%, 0.1W, 0603	0603	CRCW060310K2FKFA	Vishay-Dale		
R23	1	36.0k	RES, 36.0k ohm, 1%, 0.1W, 0603	0603	RC0603FR-0736KL	Yageo America		
R24	1	1.50	RES, 1.50, 1%, 0.1 W, 0603	0603	CRCW06031R50FKFA	Vishay-Dale		
R25, R27	2	10Meg	RES, 10 M, 5%, 0.25 W, 1206	1206	CRCW120610M0JNEA	Vishay-Dale		
R28	1	5.1Meg	RES, 5.1 M, 5%, 0.25 W, 1206	1206	CRCW12065M10JNEA	Vishay-Dale		
R29	1	2.00Meg	RES, 2.00 M, 1%, 0.1 W, 0603	0603	CRCW06032M00FKFA	Vishay-Dale		
R30	1	115k	RES, 115 k, 1%, 0.1 W, 0603	0603	CRCW0603115KFKFA	Vishay-Dale		
R31	1	560k	RES, 560 k, 1%, 0.1 W, 0603	0603	RC0603FR-07560KL	Yageo America		
R32	1	1.15Meg	RES, 1.15 M, 1%, 0.1 W, 0603	0603	CRCW06031M15FKFA	Vishay-Dale		
T1	1	200 uH	Transformer, 200 uH, TH	TH, 40x32.4mm	750315092	Würth Elektronik eiSos		
TP1, TP2, TP3, TP7, TP9, TP13	6	Red	Test Point, Compact, Red, TH	Red Compact Testpoint	5005	Keystone		
TP4, TP5, TP6, TP12	4	White	Test Point, Compact, White, TH	White Compact Testpoint	5007	Keystone		
TP8, TP10, TP11, TP15, TP16	5	Black	Test Point, Compact, Black, TH	Black Compact Testpoint	5006	Keystone		
U1	1		AC-DC Quasi-Resonant Current Mode PWM Controller, DGK0008A	DGK0008A	LM5023MMX-2/NOPB	Texas Instruments		Texas Instruments
U2	1		SYNCHRONOUS RECTIFIER CONTROLLER WITH LOW POWER STANDBY, DBV0006A	DBV0006A	UCC24630DBV	Texas Instruments		None
U3	1		Low Input Current, High CTR Photocoupler	PS2811-1	PS2811-1-M-A	California Eastern Laboratories		
U4	1		Low-Voltage (1.24V) Adjustable Precision Shunt Regulator, 3-pin SOT-23	MF03A	LMV431BIMF	Texas Instruments		
U5	1		Micropower Undervoltage Sensing Circuits, Open Drain Active Low Output, 2.0V Threshold, 5-pin SOT-23	MF05A	LM8364BALMF20	Texas Instruments		
V1	1	430V	Varistor, 430V, 4.5KA, TH	Disc, 14x5mm	B72214S0271K101	EPCOS Inc		
FID1, FID2, FID3	0		Fiducial mark. There is nothing to buy or mount.	Fiducial	N/A	N/A		

Notes:

Unless otherwise noted in the Alternate PartNumber and/or Alternate Manufacturer columns, all parts may be substituted with equivalents.

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