

Bill of Materials

TI DESIGNS
TIDA-00227

Fitted	Quantity	Designator	Description	PartNumber	Manufacturer	RoHS	PackageReference
Fitted	1	!PCB1	Printed Circuit Board	TIDA-00227	Any	O	
Fitted	3	B1, B2, B3	FERRITE CHIP 70 OHM 4000MA 0603	CIS10P700AC	Samsung		
Fitted	3	C1, C7, C37	CAP ALUM 33UF 35V 20% RADIAL	35YXJ33M5X11	Rubycon		
Fitted	4	C2, C4, C9, C15	CAP FILM 0.47UF 560VDC RADIAL	R46K1347050P1M	Kemet		
Fitted	1	C3	CAP ALUM 33UF 450V 20% RADIAL	EKXG451ELL330MM20S	Nippon		18x25 mm
Fitted	1	C6	CAP ALUM 15UF 450V 20% RADIAL	EEU-EE2W150	Panasonic	Y	12.5x25
Fitted	4	C8, C13, C14, C17	CAP CER 2200PF 300VAC 20% RADIAL	VY2222M35Y5US63V7	Vishay		
Fitted	2	C12, C16	CAP ALUM 470UF 35V 20% RADIAL	EEU-FM1V471	Panasonic		
Fitted	1	C18	CAP, CERM, 0.068uF, 50V, +/-10%, X7R, 0603	GRM188R71H683KA93D	MuRata	Y	0603
Fitted	1	C19	CAP CER 0.1UF 50V 10% X7R 0603	C0603C104K5RACTU	Kemet		
Fitted	2	C20, C30	CAP, CERM, 2200pF, 50V, +/-10%, X7R, 0603	C0603C222K5RAC	Kemet		
Fitted	1	C22	CAP CER 1UF 25V 10% X7R 0603	C0603C105K3RACTU	Kemet		
Fitted	1	C23	CAP, CERM, 22uF, 16V, +/-10%, X5R, 0805	C2012X5R1C226K125AC	TDK	Y	0805
Fitted	1	C24	CAP CER 470PF 50V 5% NP0 0603	06035A471JAT2A	AVX Corporation		
Fitted	1	C27	Corporation CAP CER 10000PF 630V 10% CH 1812	C4532CH2J103K160KA	TDK Corporation		1812
Fitted	1	C31	CAP, CERM, 4.7uF, 50V, +/-10%, X5R, 0805	C2012X5R1H475K125AB	TDK	Y	0805
Fitted	1	C32	CAP, CERM, 1uF, 25V, +/-10%, X5R, 0805	08053D105KAT2A	AVX	Y	0805
Fitted	1	C33	CAP, CERM, 1000pF, 100V, +/-5%, X7R, 0603	06031C102JAT2A	AVX	Y	0603
Fitted	1	C34	CAP, CERM, 4700pF, 100V, +/-5%, X7R, 0603	06031C472JAT2A	AVX	Y	0603
Fitted	1	C36	CAP, CERM, 10uF, 25V, +/-20%, X5R, 0603	GRM188R61E106MA73	MuRata	Y	0603
Fitted	1	D1	RECT BRIDGE GPP 8A 600V GBU	GBU8J-BPMS	Micro Commercial Co		0.880 x 0.140 inch
Fitted	1	D2	Diode, Zener, 27V, 3W, SMA	3SMAJ5935B-TP	Micro Commercial Components	Y	SMA
Fitted	2	D3, D13	Diode, Signal, 300-mA, 75-V, 350-mW	1N4148W-7-F	Diodes		SOD-123
Fitted	1	D4	Diode, Zener, 15-V, 1W	SMAZ15	Diodes		SMA
Fitted	1	D5	Diode, Ultrafast, 600V, 8A, DDPACK	STTH8L06G	ST Microelectronics	Y	DDPAK
Fitted	3	D6, D8, D9	Diode, Ultrafast, 600V, 1A, SMA	MURA160T3G	ON Semiconductor	Y	SMA
Fitted	1	D10	Diode, P-N, 200V, 200A, SOT-23	BAS21-TP	Micro Commercial Components	Y	SOT-23
Fitted	1	D11	Diode Schottky, 8A, 100V	SS8PH10-M3/86A	Vishay		
Fitted	1	D12	Diode, Zener, 9.1V, 500mW, SOD-123	MMSZ5239B-7-F	Diodes Inc.	Y	SOD-123
Fitted	1	D14	TVS DIODE 102VWMM 165VC SMD	P6SMB120A	General		SMB
Fitted	1	F1	FUSE SLOW 250VAC 5A RADIAL	RST 5	BEL		
Fitted	1	HT1	HEATSINK TO-220 W/PINS 1.5" TALL	513102B02500G	Aavid Thermalloy		1.500x1.375in.
Fitted	1	with HT1	TO-220 Mounting Kit	4880G	Aavid Thermalloy		

Fitted	1	J1	Terminal Block, 30A, 9.52mm (.375) Pitch, 2-Pos, TH	OSTT7022150	On-Shore Technology	Y	19.62x21.5x12.5mm
Fitted	1	J2	TERMINAL BLOCK 5.08MM VERT 2POS, TH	ED120/2DS	On-Shore Technology	Y	TERM_BLK, 2pos, 5.08mm
Fitted	1	L1	INDUCTOR 150UH 4.0A 10%	AIRD-06-151K	Abracon Corporation	Y	21 X 21 mm
Fitted	1	L2	Coupled inductor, 10mH, 5A, 0.055 ohm, TH	744825510	Würth Elektronik eiSos	y	30x35x21mm
Fitted	1	L3	INDUCTOR 2.2UH 4.1A RADIAL	LHL08TB2R2M	Taiyo Yuden		
Fitted	1	Q1	MOSFET, Nch, 600-V, 20A, 0.199 Ohms	AOTF20S60L	Alpha&Omega		
Fitted	1	Q2	DISCRETE, MOSFET N-CH 500V 200MA, DPAK	IXTY02N50D	IXYS	Y	-
Fitted	2	Q4, Q7	MOSFET N-CH 60V 260MA SOT-23	2N7002ET1G	OnSemi		
Fitted	1	Q5	MOSFET N-CH 600V 21MA SOT23	BSS126 H6327	Infineon		
Fitted	1	Q6	MOSFET, N-CH, 600V, 7A, DPAK	AOD7N60	AOS	Y	DPAK
Fitted	1	R2	RES, 0 ohm, 5%, 0.25W, 1206	RC1206JR-070RL	Yageo America	Y	1206
Fitted	3	R3, R10, R11	RES 649K OHM 1/4W 1% 1206 SMD	RC1206FR-07649KL	Yageo		
Fitted	1	R4	RES, 383k ohm, 1%, 0.1W, 0603	CRCW0603383KFKEA	Vishay-Dale	Y	0603
Fitted	1	R5	RES 0.02 OHM 1W 1% 2512 SMD	LRMAM2512-R02FT4	TT/Welwyn		
Fitted	1	R6	RES, 1.27k ohm, 1%, 0.1W, 0603	CRCW06031K27FKEA	Vishay-Dale	Y	0603
Fitted	1	R7	RES 3.83K OHM 1/10W 1% 0603 SMD	RC0603FR-073K83L	Yageo		
Fitted	1	R8	RES, 220 ohm, 1%, 0.1W, 0603	RC0603FR-07220RL	Yageo America	Y	0603
Fitted	1	R9	RES 44.2K OHM 1/10W 1% 0603 SMD	RC0603FR-0744K2L	Yageo		
Fitted	1	R12	RES 1.33M OHM 1/10W 1% 0603 SMD	CRCW06031M33FKEA	Vishay Dale		
Fitted	1	R13	RES, 40.2k ohm, 1%, 0.1W, 0603	CRCW060340K2FKEA	Vishay-Dale	Y	0603
Fitted	1	R14	RES 15.0 OHM 1/8W 1% 0805 SMD	RC0805FR-0715RL	Yageo		
Fitted	1	R15	RES, 4.02k ohm, 1%, 0.1W, 0603	RC0603FR-074K02L	Yageo America	Y	0603
Fitted	1	R16	RES, 1.00Meg ohm, 1%, 0.1W, 0603	CRCW06031M00FKEA	Vishay-Dale	Y	0603
Fitted	1	R17	RES, 127k ohm, 1%, 0.1W, 0603	CRCW0603127KFKEA	Vishay-Dale	Y	0603
Fitted	1	R18	RES, 402k ohm, 1%, 0.1W, 0603	CRCW0603402KFKEA	Vishay-Dale	Y	0603
Fitted	2	R20, R25	RES 30.1K OHM 1/10W 1% 0603 SMD	RC0603FR-0730K1L	Yageo		
Fitted	1	R21	RES 1.00M OHM 1/10W 1% 0603 SMD	RC0603FR-071ML	Yageo		
Fitted	1	R23	RES, 1.20 ohm, 1%, 1W, 2512	ERJ-1TRQF1R2U	Panasonic	Y	2512
Fitted	1	R24	RES 301K OHM 1/10W 1% 0603 SMD	RC0603FR-07301KL	Yageo		
Fitted	1	R26	RES, 78.7k ohm, 1%, 0.1W, 0603	CRCW060378K7FKEA	Vishay-Dale	Y	0603
Fitted	2	R27, R41	RES, 1.00k ohm, 1%, 0.1W, 0603	CRCW06031K00FKEA	Vishay-Dale	Y	0603
Fitted	1	R28	RES 10.0 OHM 1/8W 1% 0805 SMD	RC0805FR-0710RL	Yageo		
Fitted	1	R29	RES, 30.1k ohm, 1%, 0.1W, 0603	CRCW060330K1FKEA	Vishay-Dale	Y	0603
Fitted	5	R30, R34, R38, R40, R43	RES, 0 ohm, 5%, 0.1W, 0603	CRCW06030000Z0EA	Vishay-Dale	Y	0603
Fitted	1	R31	RES, 24.3k ohm, 1%, 0.1W, 0603	CRCW060324K3FKEA	Vishay-Dale	Y	0603
Fitted	1	R32	RES, 8.2 ohm, 5%, 0.75W, 2010	CRCW20108R20JNEF	Vishay-Dale	Y	2010
Fitted	1	R33	RES, 110k ohm, 5%, 0.1W, 0603	CRCW0603110KJNEA	Vishay-Dale	Y	0603
Fitted	1	R35	RES, 226k ohm, 1%, 0.1W, 0603	CRCW0603226KFKEA	Vishay-Dale	Y	0603
Fitted	1	R37	RES, 44.2k ohm, 1%, 0.1W, 0603	CRCW060344K2FKEA	Vishay-Dale	Y	0603
Fitted	1	R42	RES, 10k ohm, 5%, 0.1W, 0603	CRCW060310K0JNEA	Vishay-Dale	Y	0603
Fitted	1	R44	RES, 4.99k ohm, 1%, 0.1W, 0603	CRCW06034K99FKEA	Vishay-Dale	Y	0603
Fitted	3	RT1, RT2, RT3	MOV, 300V	MOV-10D471KTR	Bourns		

Fitted	1	T1	TRANSFOERMER, 856uH, +/-10%, TH, 14-PIN	750342415	WURTH ELEKTRONIK	Y	-
Fitted	1	U1	Opto-Isolator, 1 Channel, TH	LTV-817	Lite-On	Y	DIP-4
Fitted	1	U2	IC REG CTRLR BST FLYBK CM 10MSOP	TPS40210DGQ	TI		
Fitted	2	U3, U4	IC DETECTOR UNDER VOLT 3V SC70-5	LMS33460MG/NOPB	TI		
Fitted	1	U5	Constant-Current Flyback Controller Using Opto-Coupler	UCC28740D	Texas Instruments	Y	D0007A
Fitted	1	U6	IC VREF SHUNT PREC ADJ SOT23-3	TL431AIDBZT	TI		
Fitted	8	H1, H2, H3, H4, H5, H6, H7, H8	Mounting Hole M3 3.5mm	STD	STD	Y	Screw
Not Fitted	1	LBL1	al Transfer Printable Labels, 0.650" W x 0.200" H - 10,000	THT-14-423-10	Brady	Y	PCB Label 0.650"H x 0.200"W
Not Fitted	6	FID1, FID2, FID3, FID4, FID5, FID6	Fiducial mark. There is nothing to buy or mount.	N/A	N/A		Fiducial
Not Fitted	0	C5, C26, C28, C35	CAP, CERM, 0.01uF, 1000V, +/-10%, X7R, 1210	GRM32QR73A103KW01L	MuRata	Y	1210
Not Fitted	0	C10, C11	CAP CER 330PF 300VAC 10% RADIAL	VY2331K29Y5SS63V7	Vishay		
Not Fitted	0	C21	CAP CER 470PF 50V 5% NP0 0603	06035A471JAT2A	AVX Corporation		
Not Fitted	0	C25, C29	CAP, CERM, 0.068uF, 50V, +/-10%, X7R, 0603	GRM188R71H683KA93D	MuRata	Y	0603
Not Fitted	0	D7	Diode, TVS, Uni, 120V, 1500W, SMC	SMCJ120A-TP	Micro Commercial Components	Y	SMC
Not Fitted	0	Q3	MOSFET N-CH 600V 120MA SOT-223	BSP135 L6327	Infineon		
Not Fitted	0	R1, R36	RES 330 OHM 1W 5% 2512	RC6432J331CS	Samsung		
Not Fitted	0	R19	RES 68 OHM 2W 1% 2512	RHC2512FT68R0	Stackpole Electronics Inc	Y	2512
Not Fitted	0	R22	RES 162 OHM 1.5W 1% 2512 SMD	CRCW2512162RFKEGHP	Vishay-Dale	Y	2512
Not Fitted	0	R39	RES, 0 ohm, 5%, 0.1W, 0603	CRCW06030000Z0EA	Vishay-Dale	Y	0603

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