

# Bill of Materials

**TI DESIGNS**
**TIDA-00127**

Fitted	Description	Designator	Manufacturer	PartNumber	Quantity	RoHS	PackageReference
Fitted	Printed Circuit Board	IPCB1	Any	TIDA-00127	1	O	
Fitted	FERRITE CHIP 70 OHM 4000MA 0603	B1, B2, B3, B4, B5, B6	Samsung	CIS10P700AC	6		
Fitted	CAP FILM 0.47UF 560VDC RADIAL	C1, C2, C5, C21	Kemet	R46KI347050P1M	4		
Fitted	CAP CER 100PF 1KV 10% RADIAL	C3, C42	muRata	DEBB33A101KP2A	2		
Fitted	CAP ALUM 33UF 450V 20% RADIAL	C4	Nichicon	UCS2W330MHD6	1		
Fitted	CAP ALUM 68UF 450V 20% RADIAL	C6	United Chemicon	EKXG451ELL680MMN3S	1		
Fitted	CAP CER 330PF 300VAC 10% RADIAL	C7, C8	Vishay	VY2331K29Y5SS63V7	2		
Fitted	CAP CER 2200PF 300VAC 20% RADIAL	C9, C10, C19, C26	Vishay	VY2222M35Y5US63V7	4		
Fitted	CAP CER 10000PF 1KV 20% RADIAL	C11, C20	Vishay	S103M47Z5UN63J7R	2		
Fitted	CAP ALUM 33UF 35V 20% RADIAL	C12	Rubycon	35YXJ33M5X11	1		
Fitted	CAP CER 470PF 50V 5% NP0 0603	C13	AVX Corporation	06035A471JAT2A	1		
Fitted	CAP, CERM, 22uF, 16V, +/-10%, X5R, 0805	C14	TDK	C2012X5R1C226K125AC	1	Y	0805
Fitted	CAP CER 0.1UF 50V 10% X7R 0603	C16, C24, C29, C32	Kemet	C0603C104K5RACTU	4		
Fitted	CAP, CERM, 2200pF, 50V, +/-10%, X7R, 0603	C17	Kemet	C0603C222K5RAC	1		
Fitted	CAP CER 1UF 25V 10% X7R 0603	C18, C45	Kemet	C0603C105K3RACTU	2		
Fitted	CAP CER 1000PF 500VAC 20% RADIAL	C22	Vishay	VY1102M35Y5UQ63V0	1		
Fitted	CAP ALUM 220UF 35V 20% RADIAL	C25, C31	Panasonic	EEU-FM1V221L	2		
Fitted	CAP, CERM, 4700pF, 2000V, +/-10%, X7R, 1812	C28	AVX	1812GC472KAT1A	1	Y	1812
Fitted	CAP ALUM 56UF 35V 20% RADIAL	C30	Nichicon	UHE1V560MED	1		
Fitted	CAP ALUM 33UF 35V 20% RADIAL	C33	Rubycon	35YXJ33M5X11	1		
Fitted	CAP ALUM 470UF 35V 20% RADIAL	C35, C36	Panasonic	EEU-FM1V471	2		
Fitted	CAP ALUM 220UF 25V 20% RADIAL	C37	United Chemicon	EKY-250ELL221MHB5D	1		
Fitted	CAP CER 0.33UF 25V 10% X7R 0603	C39	TDK	C1608X7R1E334K080AC	1		

Fitted	CAP CER 0.022UF 50V 10% X7R 0603	C40	Kemet	C0603C223K5RACTU	1		
Fitted	CAP CER 0.033UF 50V 10% X7R 0603	C41	AVX Corporation	06035C333KAT2A	1		
Fitted	CAP CER 330PF 50V 5% NP0 0603	C43	AVX Corporation	06035A331JAT2A	1		
Fitted	CAP CER 100PF 50V 10% NP0 0603	C44	AVX Corporation	06035A101KAT2A	1		
Fitted	CAP, CERM, 0.01uF, 1000V, +/-10%, X7R, 1210	C46	MuRata	GRM32QR73A103KW01L	1	Y	1210
Fitted	CAP, CERM, 0.068uF, 16V, +/-10%, X7R, 0603	C47	MuRata	GRM188R71C683KA01D	1	Y	0603
Fitted	Diode, Ultrafast, Power Rectifier, 600V, 4A	D1	OnSemi	MUR460RLG	1		
Fitted	Diode, Rectifier, 600V, 6A	D2, D3, D4, D5	Diodes	6A6-T	4		
Fitted	Diode, Rectifier, 800V, 1A	D6	Diodes	1N4006-T	1		
Fitted	DIODE, Zener, 18V, .5W, 5%	D7	Fairchild	1N5248B	1		
Fitted	DIODE, Zener, 15V, .5W, 5%	D8	Fairchild	1N5245BTR	1		
Fitted	Diode, Schottky, 2-A, 80-V	D9	MCC	CDBB280-G	1		
Fitted	DIODE, Transient Voltage Suppressor, 120V, 600W	D10	Littelfuse	P6KE120A	1		
Fitted	Diode, Fast, 600V, 1A	D11, D14	Fairchild	1N4937	2		
Fitted	Diode, Rectifier, Trr 20 ns, Vrrm 200V, 3A	D12	Fairchild	ES3D-E3/57T	1		
Fitted	Diode Schottky, 8A, 100V	D13	Vishay	SS8PH10-M3/86A	1		
Fitted	Diode, Signal, 200-mA, 100-V, 350-mW	D15	Fairchild	1N4148TA	1		
Fitted	Diode, Schottky, 40V, 1A, SOD-123	D16	Diodes Inc.	1N5819HW-7-F	1	Y	SOD-123
Fitted	Diode, Signal, 300-mA, 75-V, 350-mW	D17	Diodes	1N4148W-7-F	1		SOD-123
Fitted	FUSE SLOW 250VAC 5A RADIAL	F1	BEL	RST 5	1		
Fitted	Fiducial mark. There is nothing to buy or mount.	FID1, FID2, FID3, FID4, FID5, FID6	N/A	N/A	6		Fiducial
Fitted	Mounting Hole M3 3.5mm	H1, H2, H3, H4	STD	STD	4	Y	Screw
Fitted	Heatsink, TO-220	HT1, HT2	Ohmite	R2A-CT2-38E	2		1.181 x 2.402 inch
Fitted	Terminal Block, 2x1, 5.08mm, TH	J1, J2	On-Shore Technology	OSTTC022162	2	Y	
Fitted	Terminal Block, 3x1, 5.08 mm, TH	J3	On-Shore Technology	OSTTC032162	1	Y	
Fitted	Inductor, 82uH	L1	WE	750342278	1		
Fitted	Inductor, Power Choke SS30V	L2	Kemet	SS30V-R350047	1		1.220 x 0.886 inch
Fitted	CHOKE TOROID 1.0mH 10A VERT	L3	WE	744824101	1		0.728 x 1083 inch
Fitted	INDUCTOR 2.2UH 4.1A RADIAL	L5	Taiyo Yuden	LHL08TB2R2M	1		
Fitted	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	LBL1	Brady	THT-14-423-10	1	Y	PCB Label 0.650"H x 0.200"W
Fitted	MOSFET N-CH 600V 120MA SOT-223	Q1	Infineon	BSP135 L6327	1		

Fitted	MOSFET N-CH 600V 21MA SOT23	Q2	Infineon	BSS126 H6327	1		
Fitted	MOSFET, Nch, 600-V, 20A, 0.199 Ohms	Q3	Alpha&Omega	AOTF20S60L	1		
Fitted	MOSFET N-CH 60V 260MA SOT-23	Q4, Q5	OnSemi	2N7002ET1G	2		
Fitted	MOSFET, Nch, 600-V, 4A, 0.9 Ohms	Q6	Alpha&Omega	AOTF4S60	1		
Fitted	RES 330 OHM 1W 5% 2512	R1	Samsung	RC6432J331CS	1		
Fitted	RES, 220 ohm, 1%, 0.1W, 0603	R2	Yageo America	RC0603FR-07220RL	1	Y	0603
Fitted	RES 44.2K OHM 1/10W 1% 0603 SMD	R3, R30	Yageo	RC0603FR-0744K2L	2		
Fitted	RES 1.33M OHM 1/10W 1% 0603 SMD	R4	Vishay Dale	CRCW06031M33FKEA	1		
Fitted	RES 649K OHM 1/4W 1% 1206 SMD	R5, R7, R11	Yageo	RC1206FR-07649KL	3		
Fitted	RES 30.1K OHM 1/10W 1% 0603 SMD	R6, R25	Yageo	RC0603FR-0730K1L	2		
Fitted	RES 1.00M OHM 1/10W 1% 0603 SMD	R8	Yageo	RC0603FR-071ML	1		
Fitted	RES 15.0 OHM 1/8W 1% 0805 SMD	R9	Yageo	RC0805FR-0715RL	1		
Fitted	RES, 402k ohm, 1%, 0.1W, 0603	R10	Vishay-Dale	CRCW0603402KFKEA	1	Y	0603
Fitted	RES, 1.00Meg ohm, 1%, 0.1W, 0603	R12	Vishay-Dale	CRCW06031M00FKEA	1	Y	0603
Fitted	RES 226 OHM 1/10W 1% 0603 SMD	R13	Yageo	RC0603FR-07226RL	1		
Fitted	RES 348K OHM 1/10W 1% 0603 SMD	R14	Yageo	RC0603FR-07348KL	1		
Fitted	RES 0.02 OHM 1W 1% 2512 SMD	R15	TT/Welwyn	LRMAM2512-R02FT4	1		
Fitted	RES, 127k ohm, 1%, 0.1W, 0603	R16	Vishay-Dale	CRCW0603127KFKEA	1	Y	0603
Fitted	RES 3.83K OHM 1/10W 1% 0603 SMD	R17	Yageo	RC0603FR-073K83L	1		
Fitted	RES 301K OHM 1/10W 1% 0603 SMD	R20	Yageo	RC0603FR-07301KL	1		
Fitted	RES 71.5K OHM 1/10W 1% 0603 SMD	R21	Yageo	RC0603FR-0771K5L	1		
Fitted	RES 1.21K OHM 1/10W 1% 0603 SMD	R22	Yageo	RC0603FR-071K21L	1		
Fitted	RES 8.20 OHM 1/4W 1% 1206 SMD	R23	Yageo	RC1206FR-078R2L	1		
Fitted	RES 10.5K OHM 1/10W 1% 0603 SMD	R24	Yageo	RC0603FR-0710K5L	1		
Fitted	RES 162K OHM 1/10W 1% 0603 SMD	R26	Yageo	RC0603FR-07162KL	1		
Fitted	RES 3.01K OHM 1/10W 1% 0603 SMD	R28	Yageo	RC0603FR-073K01L	1		
Fitted	RES 3.65K OHM 1/10W 1% 0603 SMD	R29	Yageo	RC0603FR-073K65L	1		
Fitted	RES 49.9 OHM 1/10W 1% 0603 SMD	R31	Yageo	RC0603FR-0749R9L	1		
Fitted	RES 162 OHM 1.5W 1% 2512 SMD	R32	Vishay-Dale	CRCW2512162RFKEGHP	1	Y	2512
Fitted	RES 1.00K OHM 1/10W 1% 0603 SMD	R33	Yageo	RC0603FR-071KL	1		
Fitted	RES 10.0 OHM 1/8W 1% 0805 SMD	R34	Yageo	RC0805FR-0710RL	1		
Fitted	RES 100K OHM 1/10W 1% 0603 SMD	R35	Yageo	RC0603FR-07100KL	1		
Fitted	RES 9.53K OHM 1/10W 1% 0603 SMD	R36	Yageo	RC0603FR-079K53L	1		
Fitted	RES 1.62K OHM 1/10W 1% 0603 SMD	R37	Yageo	RC0603FR-071K62L	1		

Fitted	RES 0.33 OHM 1W 1% 2010	R38	Stackpole	CSRN2010FKR330	1		
Fitted	RES 2.49K OHM 1/10W 1% 0603 SMD	R39	Yageo	RC0603FR-072K49L	1		
Fitted	RES 68 OHM 2W 1% 2512	R40	Stackpole Electronics Inc	RHC2512FT68R0	1	Y	2512
Fitted	RES, 27.0k ohm, 1%, 0.1W, 0603	R41	Yageo America	RC0603FR-0727KL	1	Y	0603
Fitted	RES, 4.30k ohm, 1%, 0.1W, 0603	R42	Yageo America	RC0603FR-074K3L	1	Y	0603
Fitted	MOV, 300V	RT1, RT2, RT3	Bourns	MOV-10D471KTR	3		
Fitted	Transformer, EI-30, Vertical	T1	Würth	750342279	1		
Fitted	IC REG CTRLR BST FLYBK CM 10MSOP	U1	TI	TPS40210DGQ	1		
Fitted	IC DETECTOR UNDER VOLT 3V SC70-5	U2, U4	TI	LMS33460MG/NOPB	2		
Fitted	IC REG LDO NEG ADJ 1.5A TO252	U3	TI	LM337KVURG3	1		
Fitted	IC CTRLR PWM GREEN CM OVP 8SOIC	U5	TI	UCC28600DR	1		
Fitted	OPTOCOUPLER TRANS 5KVRMS 4DIP	U6	Lite-On	LTV-817A	1		
Fitted	IC VREF SHUNT PREC ADJ SOT23-3	U7	TI	TL431AIDBZT	1		
Not Fitted	CAP CER 470PF 50V 5% NP0 0603	C15	AVX Corporation	06035A471JAT2A	0		
Not Fitted	CAP CER 330PF 250V 5% NP0 0603	C23, C27	TDK	C1608C0G2E331J080AA	0		
Not Fitted	CAP CER 1000PF 250V 5% NP0 0603	C34	TDK	C1608C0G2E102J080AA	0		
Not Fitted	CAP CERAMIC, 25V, C0G, 10%	C38	STD	STD	0		
Not Fitted	CAP, CERM, 0.068uF, 16V, +/-10%, X7R, 0603	C48, C49	MuRata	GRM188R71C683KA01D	0	Y	0603
Not Fitted	RES 33 OHM 1W 5% 2512	R18, R19	Samsung	RC6432J330CS	0		
Not Fitted	RES 8.20 OHM 1W 5% 2512	R27	TE Connectivity	6-1622820-6	0		

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