

# Bill of Materials

TIDA-00242 Main Board

TI DESIGNS

Item	Quantity	Reference	Value	Part Description	Manufacturer	Manufacturer PartNumber	Alternate Part	PCB Footprint	Note
1	1	IPCB1		Printed Circuit Board	Any	TIDA-00242			
2	2	C1, C5	4.7uF	CAP, CERM, 4.7uF, 6.3V, +/-20%, X5R, 0402	TDK	C1005X5R0J475M050BC		0402	
3	3	C2, C4, C8	0.1uF	CAP, CERM, 0.1uF, 10V, +/-10%, X7R, 0402	MuRata	GRM155R71A104KA01D		0402	
4	4	C3, C9, C10, C13	100uF	CAP, CERM, 100uF, 6.3V, +/-20%, X5R, 1210	Kemet	C1210C107M9PACTU		1210	
5	1	C6	0.01uF	CAP, CERM, 0.01uF, 10V, +/-10%, X5R, 0402	MuRata	GRM155R61A103KA01D		0402	
6	1	C7	22uF	CAP, CERM, 22uF, 10V, +/-20%, X5R, 0603	Samsung	CL10A226MP8NUNE		0603	
7	1	C11	47000uF	CAP, Electric Double Layer, 47000uF, 5.5V, +80/-20%, TH	Elna	DX-5R5H473U		DX-H_1150x500	
8	1	C12	1uF	CAP, CERM, 1uF, 6.3V, +/-20%, X5R, 0402	TDK	C1005X5R0J105M		0402	
9	1	D1	4.7V	Diode, Zener, 4.7V, 300mW, SOD-523	Diodes Inc.	BZT52C4V7T-7		SOD-523	
10	1	FID1		Fiducial mark. There is nothing to buy or mount.	N/A	N/A		Fiducial6.4-20	
11	1	J1		Header, 50mil, 4x1, R/A, TH	Sullins Connector Solutions	GRP041VWCN-RC		Sullins_GRP041VWCN	
12	3	J2, J4, J5		Header, 100mil, 2x1, Tin plated, TH	Molex	90120-0122		CONN_90120-0122	
13	1	J3		Header, 50mil, 6x1, R/A, TH	Sullins Connector Solutions	GRP061VWCN-RC		Sullins_GRP061VWCN	
14	1	L1	22uH	Inductor, Shielded Drum Core, Ferrite, 22uH, 0.83A, 0.36 ohm, SMD	Coilcraft	LPS4018-223MLB		LPS4018	
15	1	L2	10uH	Inductor, Shielded Drum Core, Ferrite, 10uH, 1.25A, 0.2 ohm, SMD	Coilcraft	LPS4018-103MLB		LPS4018	
16	1	LBL1		Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	Brady	THT-14-423-10		Label_650x200	
17	4	R1, R2, R3, R13	0	RES, 0 ohm, 5%, 0.1W, 0603	Panasonic	ERJ-3GEY0R00V		0603	
18	1	R4	100	RES, 100 ohm, 5%, 0.063W, 0402	Vishay-Dale	CRCW0402100RJNED		0402	
19	1	R5	3.01Meg	RES, 3.01Meg ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06033M01FKEA		0603	
20	1	R6	5.62Meg	RES, 5.62Meg ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06035M62FKEA		0603	
21	1	R7	5.90Meg	RES, 5.90Meg ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06035M90FKEA		0603	
22	1	R8	7.87Meg	RES, 7.87Meg ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06037M87FKEA		0603	
23	1	R9	1.24Meg	RES, 1.24Meg ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06031M24FKEA		0603	
24	1	R10	7.32Meg	RES, 7.32Meg ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06037M32FKEA		0603	
25	1	R11	4.02Meg	RES, 4.02Meg ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06034M02FKEA		0603	
26	1	R12	5.36Meg	RES, 5.36Meg ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06035M36FKEA		0603	
27	1	U1		Ultra Low Power Harvester Power Management IC with Boost Charger, and Nano-Powered Buck Converter, RGR0020A	Texas Instruments	BQ25570RGR		RGR0020A	

# Bill of Materials

TIDA-00242 Solar Board

TI DESIGNS

Item	Quantity	Reference	Value	Part Description	Manufacturer	Manufacturer PartNumber	Alternate Part	PCB Footprint	Note
1	1	!PCB1		Printed Circuit Board	Any	TIDA-00242 SOL			
2	1	FID1		Fiducial mark. There is nothing to buy or mount.	N/A	N/A		Fiducial10-20	
3	4	J1, J3, J4, J5		Header, 100mil, 2x1, Tin plated, TH	Molex	90120-0122		CONN_90120-0122	
4	1	J2		Receptacle, 50mil, 4x1, R/A, TH	Sullins Connector Solutions	LPPB041NGCN-RC		Sullins_LPPB041NGCN	
5	1	LBL1		Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	Brady	THT-14-423-10		Label_650x200	
6	4	R1, R2, R3, R4	DNP	RES, 0 ohm, 5%, 0.125W, 0805	Vishay-Dale	CRCW08050000Z0EA		0805_HV	
7	4	U1, U2, U3, U4	1.5V	MONOCRYSTALLINE SOLAR CELL, 22MM X 7MM, SMD	IXYS	KXOB22-04X3L		KXOB22-04X3	

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