

Bill of Materials

TI DESIGNS TIDA-00280

Item	Qty	Reference	Value	Part Description	Size	Manufacturer Part Number	Manufacturer
1	1	C1	1.0uF	Capacitor, Ceramic, 25V, X7R, 10%	1206	STD	STD
2	0	C2	OPEN	Capacitor, Ceramic,	0603	STD	STD
3	0	C3, C12	OPEN	Capacitor, Ceramic, 10V, X5R, 10%	1206	STD	STD
4	1	C4	6.8uF	Capacitor, Ceramic, 25V, X5R, 10%	0805	STD	STD
5	1	C5	47nF	Capacitor, Ceramic, 16V, X7R, 10%	0603	STD	STD
6	1	C6	4.7uF	Capacitor, Ceramic, 10V, X5R, 10%	0603	STD	STD
7	2	C7, C8	10uF	Capacitor, Ceramic, 10V X5R, 10%	0805	STD	STD
8	1	C9	0.1uF	Capacitor, Ceramic, 25V, X7R, 10%	0603	STD	STD
9	0	C13-14, C19	0.1uF	Capacitor, Ceramic, 25V, X7R, 10%	0603	STD	STD
10	1	C10	1.0uF	Capacitor, Ceramic, 10V, X7R, 10%	0805	STD	STD
11	1	C11	10uF	Capacitor, Ceramic, 10V, X5R, 10%	0603	STD	STD
12	1	C15	2.2uF	Capacitor, Ceramic, 25V, X5R, 10%	0805	STD	STD
13	0	C16, C17, C18	47uF	Capacitor, Ceramic, 10V, X5R, 20%	1206	STD	STD
14	2	D1, D2	LTST-C190GKT	Diode, LED, Green, 2.1-V, 20-mA, 6-mcd	0603	LTST-C190GKT	Lite On
15	0	D3	ZLLS350	Diode, Schottky, 1.16A, 40-V	SOD-523	ZLLS350TA	Zetex
16	2	J1,2	ED120/3DS	Terminal Block, 3-pin, 15-A, 5.1mm	0.60 x 0.35 inch	ED120/3DS	OST
17	1	J3	N2510-6002RB	Connector, Male Straight 2x5 pin, 100mil spacing, 4 Wall	0.338 x 0.788 inch	N2510-6002RB	3M
18	1	J4	ED555/4DS	Terminal Block, 4-pin, 6-A, 3.5mm	0.55 x 0.25 inch	ED555/4DS	OST
19	2	J5-6	PEC02SAAN	Header, Male 2-pin, 100mil spacing,	0.100 inch x 2	PEC02SAAN	Sullins
20	1	J7	56579-0519	Connector, USB-B, Mini, 5-pins	0.354 X 0.307 Inches	56579-0519	Molex
21	3	JP1-2, JP10	PEC03SAAN	Header, Male 3-pin, 100mil spacing,	0.100 inch x 3	PEC03SAAN	Sullins
22	7	JP3-9	PEC02SAAN	Header, Male 2-pin, 100mil spacing,	0.100 inch x 2	PEC02SAAN	Sullins
23	1	L1	1.0uH	Inductor, SMT, 4.4A, 46.5-milliohm	0.216 x 0.204 inch	IHLP2020ABER1R0M01	Vishay
24	1	R1	0	Resistor, Chip, 1/16W,	0603	STD	STD
25	1	R2	0	Resistor, Chip, 0.5W	2010	STD	STD
26	6	R3 R5 R8 R11 R17 R20	10.0k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
27	4	R4 R10 R12 R13	200	Resistor, Chip, 1/16W, 1%	0603	STD	STD
28	0	R6 R23	OPEN	Resistor, Chip, 1/16W,	0603	STD	STD
29	1	R7	130	Resistor, Chip, 1/16W, 1%	0603	STD	STD
30	0	R9	200	Resistor, Chip, 1/16W, 1%	0603	STD	STD
31	2	R14, R16	2.21k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
32	1	R15	10.0k	Potentiometer, 3/8 Cermet, Single-Turn	0.25x0.17 inch	3266W-1-103LF	Bourns
33	0	R21	6.81k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
34	0	R22	2.26k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
35	1	R21	30.1k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
36	1	R22	5.23k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
37	1	R18	30.1k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
38	1	R19	5.23k	Resistor, Chip, 1/16W, 1%	0603	STD	STD

Item	Qty	Reference	Value	Part Description	Size	Manufacturer Part Number	Manufacturer
39	1	R24	768	Resistor, Chip, 1/16W, 1%	0603	STD	STD
40	16	TP1 TP3-11 TP13-17 TP19	5002	Test Point, White, Thru Hole Color Keyed	0.100 x 0.100 inch	5002	Keystone
41	1	TP2	131-4244-00	Adaptor, 3.5-mm probe clip (or 131-5031-00)	0.200 inch	131-4244-00	Tektronix
42	2	TP12 TP18	5001	Test Point, Black, Thru Hole Color Keyed	0.100 x 0.100 inch	5001	Keystone
43	1	U1	BQ24296RGE or BQ24297RGE	IC, I2C Controlled 2.5A Single Cell USB / Adaptor Charger With Narrow VDC Power Path Management and USB OTG	QFN-24	BQ24296RGE or BQ24297RGE	TI
44	10	--		Shunt, 100-mil, Black	0.100	929950-00	3M
45	1	--		PCB, bq2419xEVM-021, 3"x3"		PWR021	Any
46	1	--		Label (See note 5)	1.25 x 0.25 inch	THT-13-457-10	Brady
47	4	-	SJ-5303	Rubber foot (see note 6)	.044" X 0.20"	SJ-5303	3M

- Notes:
1. These assemblies are ESD sensitive, ESD precautions shall be observed.
 2. These assemblies must be clean and free from flux and all contaminants.
Use of no clean flux is not acceptable.
 3. These assemblies must comply with workmanship standards IPC-A-610 Class 2.
 4. Ref designators marked with an asterisk (***) cannot be substituted.
All other components can be substituted with equivalent MFG's components.
 5. Install label after final wash. Text shall be 8 pt font. Text shall be per Table 1.
 6. Install after final wash.

Table 1

Assembly number	Text
PWR021-009	bq24296EVM-021
PWR021-010	bq24297EVM-021

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