4.3 Bill of Materials

Table 5 contains the bill of materials.

Table 5. Bill of Materials

COUNT						RefDes	Value	Description	Size	Part Number	RefDes
-001	-003	-004	-005	-006	-007						
1	1	1	1	1	1	C1	1.0uF	Capacitor, Ceramic, 25V, X7R, 10%	1206	STD	STD
0	0	0	0	0	0	C2	OPEN	Capacitor, Ceramic,	0603	STD	STD
0	0	0	0	0	0	C3, C12	OPEN	Capacitor, Ceramic, 10V, X5R, 10%	1206	STD	STD
1	1	1	1	1	1	C4	6.8uF	Capacitor, Ceramic, 25V, X5R, 10%	0805	STD	STD
1	1	1	1	1	1	C5	47nF	Capacitor, Ceramic, 16V, X7R, 10%	0603	STD	STD
1	1	1	1	1	1	C6	4.7uF	Capacitor, Ceramic, 10V, X5R, 10%	0603	STD	STD
2	2	2	2	2	2	C7, C8	10uF	Capacitor, Ceramic, 10V X5R, 10%	0805	STD	STD
1	1	1	1	1	1	C9	0.1uF	Capacitor, Ceramic, 25V, X7R, 10%	0603	STD	STD
0	0	0	0	0	0	C13-14, C19	0.1uF	Capacitor, Ceramic, 25V, X7R, 10%	0603	STD	STD
1	1	1	1	1	1	C10	1.0uF	Capacitor, Ceramic, 10V, X7R, 10%	0805	STD	STD
1	1	1	1	1	1	C11	10uF	Capacitor, Ceramic, 10V, X5R, 10%	0603	STD	STD
1	1	1	1	1	1	C15	2.2uF	Capacitor, Ceramic, 25V, X5R, 10%	0805	STD	STD
0	0	0	0	0	0	C16, C17, C18	47uF	Capacitor, Ceramic, 10V, X5R, 20%	1206	STD	STD
2	2	2	2	2	2	D1, D2	LTST-C190GKT	Diode, LED, Green, 2.1-V, 20-mA, 6-mcd	0603	LTST-C190GKT	Lite On
0	0	0	0	0	0	D3	ZLLS350	Diode, Schottky, 1.16A, 40-V	SOD-523	ZLLS350TA	Zetex
2	2	2	2	2	2	J1,2	ED120/3DS	Terminal Block, 3-pin, 15-A, 5.1mm	0.60 x 0.35 inch	ED120/3DS	OST
1	1	1	1	1	1	J3	N2510-6002RB	Connector, Male Straight 2x5 pin, 100mil spacing, 4 Wall	0.338 x 0.788 inch	N2510-6002RB	3M
1	1	1	1	1	1	J4	ED555/4DS	Terminal Block, 4-pin, 6-A, 3.5mm	0.55 x 0.25 inch	ED555/4DS	OST
2	2	2	2	2	2	J5-6	PEC02SAAN	Header, Male 2-pin, 100mil spacing,	0.100 inch x 2	PEC02SAAN	Sullins
1	1	1	1	1	1	J7	56579-0519	Connector, USB-B, Mini, 5-pins	0.354 X 0.307 Inches	56579-0519	Molex
3	3	3	3	3	3	JP1-2, JP10	PEC03SAAN	Header, Male 3-pin, 100mil spacing,	0.100 inch x 3	PEC03SAAN	Sullins
7	7	7	7	7	7	JP3-9	PEC02SAAN	Header, Male 2-pin, 100mil spacing,	0.100 inch x 2	PEC02SAAN	Sullins
1	1	1	1	1	1	L1	2.2uH	Inductor, SMT, 4.2A, 45.6-milliohm	0.216 x 0.204 inch	IHLP2020BZER2R2M01	Vishay
1	1	1	1	1	1	R1	0	Resistor, Chip, 1/16W,	0603	STD	STD
1	1	1	1	1	1	R2	0	Resistor, Chip, 0.5W	2010	STD	STD
6	6	6	6	6	6	R3 R5 R8 R11 R17 R20	10.0k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
4	4	4	4	4	4	R4 R10 R12 R13	200	Resistor, Chip, 1/16W, 1%	0603	STD	STD
0	0	0	0	0	0	R6 R23	OPEN	Resistor, Chip, 1/16W,	0603	STD	STD
1	1	1	1	1	1	R7	169	Resistor, Chip, 1/16W, 1%	0603	STD	STD
0	1	1	1	1	1	R9	200	Resistor, Chip, 1/16W, 1%	0603	STD	STD
2	2	2	2	2	2	R14, R16	2.21k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	1	1	1	1	1	R15	10.0k	Potentiometer, 3/8 Cermet, Single-Turn	0.25x0.17 inch	3266W-1-103LF	Bourns
0	0	0	1	0	0	R21	6.81k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
0	0	0	1	0	0	R22	2.26k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	1	1	0	1	1	R21	30.1k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	1	1	0	1	1	R22	5.23k	Resistor, Chip, 1/16W, 1%	0603	STD	STD

Table 5. Bill of Materials (continued)

COUNT						RefDes	Value	Description	Size	Part Number	RefDes
-001	-003	-004	-005	-006	-007						
1	1	1	1	1	1	R18	30.1k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	1	1	1	1	1	R19	5.23k	Resistor, Chip, 1/16W, 1%	0603	STD	STD
1	1	1	1	1	1	R24	768	Resistor, Chip, 1/16W, 1%	0603	STD	STD
16	16	16	16	16	16	TP1 TP3-11 TP13-17 TP19	5002	Test Point, White, Thru Hole Color Keyed	0.100 x 0.100 inch	5002	Keystone
1	1	1	1	1	1	TP2	131-4244-00	Adaptor, 3.5-mm probe clip (or 131-5031-00)	0.200 inch	131-4244-00	Tektronix
2	2	2	2	2	2	TP12 TP18	5001	Test Point, Black, Thru Hole Color Keyed	0.100 x 0.100 inch	5001	Keystone
1	0	0	0	0	0	U1	BQ24190RGE	IC, I2C Controlled 4A Single Cell USB / Adaptor Charger With Narrow VDC Power Path Management and USB OTG	QFN-24	BQ24190RGE	TI
0	0	0	0	0	0	U1	BQ24191RGE	IC, I2C Controlled 4A Single Cell USB / Adaptor Charger With Narrow VDC Power Path Management	QFN-24	BQ24191RGE	TI
0	1	0	0	0	0	U1	BQ24192RGE	IC, I2C Controlled 4A Single Cell USB / Adaptor Charger With Narrow VDC Power Path Management and USB OTG	QFN-24	BQ24192RGE	TI
0	0	1	0	0	0	U1	BQ24192IRGE	IC, I2C Controlled 4A Single Cell USB / Adaptor Charger With Narrow VDC Power Path Management and USB OTG	QFN-24	BQ24192IRGE	TI
0	0	0	1	0	0	U1	BQ24193RGE	IC, I2C Controlled 4A Single Cell USB / Adaptor Charger With Narrow VDC Power Path Management and USB OTG	QFN-24	BQ24193RGE	TI
0	0	0	0	1	0	U1	BQ24196RGE	IC, I2C Controlled 2.5A Single Cell USB / Adaptor Charger With Narrow VDC Power Path Management and USB OTG	QFN-24	BQ24196RGE	TI
0	0	0	0	0	1	U1	BQ24292iRGE	IC, I2C Controlled 4A Single Cell USB / Adaptor Charger With Narrow VDC Power Path Management and USB OTG	QFN-25	BQ24292iRGE	TI
10	10	10	10	10	10	--		Shunt, 100-mil, Black	0.100	929950-00	3M
1	1	1	1	1	1	--		PCB, bq2419xEVM-021, 3"x3"		PWR021	Any
1	1	1	1	1	1	--		Label (See note 5)	1.25 x 0.25 inch	THT-13-457-10	Brady
4	4	4	4	4	4	-	SJ-5303	Rubber foot (see note 6)	.044" X 0.20"	SJ-5303	3M

Notes:
1. These assemblies are ESD sensitive, observe ESD precautions.
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 **Label Information**.
6. Install after final wash.

Label Information

Assembly number	Text
PWR021-001	bq24190EVM-021
PWR021-003	bq24192EVM-021
PWR021-004	bq24192IEVM-021
PWR021-005	bq24193EVM-021
PWR021-006	bq24196EVM-021
PWR021-007	bq24292iEVM-021

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