

# Bill of Materials PAC1921 Power Monitor EVB

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**Engineer:** Wayne Little  
**Drawn By:** Wayne Little

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Quantity	Designator	Description	Manufacturer 1	Manufacturer Part Number 1	Supplier 1	Supplier Part Number 1
8	C1, C5, C6, C16, C17, C18, C19, C20	CAP CER 0.1uF 16V 10% X7R SMD 0603	NIC Components	MC0603X7R104K16TRP	Digi-Key	PCC1762CT-ND
3	C2, C8, C15	CAP CER 1uF 16V 10% X7R SMD 0603	Taiyo Yuden	EMK107B7105KA-T	Digi-Key	587-1241-1-ND
1	C3	CAP CER 0.001uF 50V 20% X7R SMD 0603	KEMET	C0603C102M5RAC	Digi-Key	PCC1772TR-ND
2	C4, C7	CAP CER 10uF 10V 20% X5R SMD 0603	Panasonic	ECJ-1VB1A106M	Digi-Key	PCC2479CT-ND
3	C8, C12, C13	CAP CER 2200pF 50V 10% X7R SMD 0603	KEMET	C0603C222K5RACTU	Digi-Key	399-1085-1-ND
1	C10	CAP CER 0.47uF 6.3V 10% X5R SMD 0603	Murata	GRM188R60J474KA01D	Digi-Key	490-1548-1-ND
1	C14	CAP CER 0.022uF 50V 10% X7R SMD 0603	TDK	C1608X7R1H223K	Digi-Key	445-1312-1-ND
1	C21	CAP CER 100pF 50V 1% COG SMD 0603	TDK	C1608C0G1H101F	Digi-Key	445-5368-1-ND
1	D1	DIO TVSARR ESD5V3U2U 5.3V SMD SOT-883	Infineon Technologies	ESD5V3U2U-03LRH E63	Digi-Key	ESD5V3U2U-03LRHE6327INCT-ND
1	FB1	FERRITE 500mA 0.1R SMD 0603	Laird-Signal Integrity	LI0603E470R-10	Digi-Key	240-2557-1-ND
3	J1, J2, J11	CON TERMINAL 5.08mm 15A Female 1x2 TH R/A	On Shore Technology Inc	ED2250/2	Digi-Key	ED1973-ND
6	J3, J4, J5, J6, J7, J8	CON HDR-2.54 Male 1x3 Tin 5.84MH TH VERT	Samtec	TSW-103-07-T-S	Digi-Key	SAM1035-03-ND
1	J13	CON HDR-2.54 Male 2x5 0.100" (2.54mm) TH VERT	Samtec	TSW-105-07-G-D	Digi-Key	SAM1028-05-ND
10	JP3, JP4, JP5, JP6, JP7, JP8, JP9, JP10, JP11, JP12	MECH HW JUMPER 2.54mm 1x2 Handle Gold	TE Connectivity	881545-2	Digi-Key	A26242-ND
2	LD1, LD2	DIO LED RED 1.95V 20mA 220mcd Clear SMD 0805	Kingbright	APT2012SURCK	Digi-Key	754-1133-1-ND
1	LD6	DIO LED GREEN 2V 30mA 120mcd Diffuse SMD 0805	Avago Technologies US Inc.	H5MM-C170	Digi-Key	516-1435-1-ND
1	P1	CON USB MINI-B Female SMD R/A	Hirose Electric Co Ltd	UX60SC-MB-5ST(80)	Digi-Key	H11671CT-ND
4	PAD1, PAD2, PAD3, PAD4	MECH HW RUBBER PAD CYLINDRICAL D7.9 H5.3 BLACK	3M	SJ61A11	Digi-Key	SJ5747-0-ND
1	R1	RES TKF 100R 1% 1/10W SMD 0603	ROHM	MCR03EZPFX1000	Digi-Key	RHM100HCT-ND
2	R2, R3	RES TKF 2R 5% 3/4W SMD 2010	Panasonic	ERJ-12ZYJ2R0U	Digi-Key	P2.0WCT-ND
4	R4, R5, R37, R38	RES TKF 120R 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF1200V	Digi-Key	P120HTR-ND
13	R6, R7, R8, R9, R10, R11, R18, R19, R26, R41, R48, R50,	RES TKF 12.1k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF1212V	Digi-Key	P12.1KHCT-ND
2	R12,	RES TKF 2k 1% 1/10W SMD 0603	Stackpole Electronics Inc	RMCF0603FT2K00	Digi-Key	RMCF0603FT2K00TR-ND
2	R20, R21	RES TKF 1k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF1001V	Digi-Key	P1.0KHCT-ND
1	R27	RES TKF 1M 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF1004V	Digi-Key	P1.0MHCT-ND
2	R40, R49	RES TKF 15.4k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF1542V	Digi-Key	P15.4KHCT-ND
2	R43, R46	RES TKF 7.5k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF7501V	Digi-Key	P7.5KHCT-ND
2	R44, R47	RES TKF 3.32k 1% 1/10W SMD 0603	ROHM	MCR03EZPFX3321	Digi-Key	RHM3.32KHCT-ND
2	R70, R72	RES TKF 20R 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF20R0V	Digi-Key	P20.0HCT-ND
2	R73, R74	RES TRIMMER Cermet 10k 10% 500mW TH 3386F	Bourns	3386F-1-103TLF	Digi-Key	3386F-103TLF-ND
1	RS1	RES SHUNT 0.005R 1% 2W 1% 2412	Ohmite	LVK25R005FER	Digi-Key	LVK25R005FERCT-ND
1	TP1	CON TP LOOP Orange TH	Keystone	5013	Digi-Key	5013K-ND
2	TP2, TP7	CON TP LOOP Yellow TH	Keystone	5014	Digi-Key	5014K-ND
2	TP3, TP4	CON TP LOOP White TH	Keystone	5012	Digi-Key	5012K-ND
1	TP5	CON TP LOOP Red TH	Keystone	5010	Digi-Key	5010K-ND
1	TP6	CON TP LOOP Black TH	Keystone	5011	Digi-Key	5011K-ND

### Microchip Parts listed below

2	Q1, Q2	MCHP ANALOG PWM CONTROLLER 1MHz MCP87050-U/MF PDFN-8	Microchip	MCP87050T-U/MF	Microchip	MCP87050T-U/MF
1	U1	MCHP ANALOG CURRENT SENSE MONITOR PAC1921-1-AIA-TR DFN-10	Microchip Technology	PAC1921-1-AIA-TR	Microchip	PAC1921-1-AIA-TR-ND
1	U2	MCHP INTERFACE USB I2C UART MCP2221-I/ST TSSOP-14	Microchip Technology	MCP2221-I/ST	Microchip Technology	MCP2221-I/ST
1	U3	MCHP ANALOG LDO 3.3V MCP1825ST-3302E/DB SOT-223-3	Microchip	MCP1825S-3302E/DB	Microchip	MCP1825S-3302E/DB
1	U4	MCHP ANALOG OPAMP 4-Ch 1MHz MCP6004-I/SL SOIC-14	Microchip	MCP6004-I/SL	Microchip	MCP6004-I/SL

### Mechanical Parts to be added in the package

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### Do Not Populate Parts listed below

1	R51	RES TKF 12.1k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF1212V	Digi-Key	
1	R25	RES TKF 2k 1% 1/10W SMD 0603	Stackpole Electronics Inc	RMCF0603FT2K00	Digi-Key	

Approved \_\_\_\_\_ Notes \_\_\_\_\_