

Filename: PMP-1129_REVA_bom.xls

Date: 02/04/2005

PMP-1129_REVA BOM

COUNT	RefDes	Description	Size	MFR	Part Number	Value
2	C1	Capacitor, Ceramic, 3.3-uF, 50-V, X7R	1210	TDK		3.3UF
1	C2	Capacitor, Ceramic, 3.3-uF, 16-V, X7R	1206	muRata	GRM42-6yyyxxxKvv	3.3UF
	C3	Capacitor, Ceramic, 3.3-uF, 50-V, X7R	1210	TDK		3.3UF
5	C4	Capacitor, Aluminum, 470-uF, 25-V, 20% (FM Series) 8*20mm		Panasonic	EEUFM1E471L	470UF
	C5	Capacitor, Aluminum, 470-uF, 25-V, 20% (FM Series) 8*20mm		Panasonic	EEUFM1E471L	470UF
1	C7	Capacitor, Ceramic, .1uF, 100V, [temp], [tol]	1206	Panasonic	ECJ-3YB2A104K	0.1uF
6	C8	Capacitor, Ceramic, .1-uF, 50-V, X7R, 10%	603			0.1UF
1	C9	Capacitor, Ceramic, .1-uF, 25-V, [temp], [tol]	805	muRata	GRM40X7R104K25	.1uF
1	C11	Capacitor, Aluminum, 22-uF, 16-V, 20%	0.177 x 0.177	Panasonic	EEVFK1C220U	22u
2	C12	Capacitor, Ceramic, 1-uF, 16-V, X7R	805	muRata	GRM40X7R105K16PT	1uF
	C13	Capacitor, Ceramic, .1-uF, 50-V, X7R, 10%	603			0.1UF
	C14	Capacitor, Ceramic, .1-uF, 50-V, X7R, 10%	603			0.1UF
1	C15	Capacitor, Ceramic, 10-uF, 6.3-V, X7R	603	Std	Std	10uF
	C16	Capacitor, Ceramic, .1-uF, 50-V, X7R, 10%	603			0.1UF
	C17	Capacitor, Ceramic, .1-uF, 50-V, X7R, 10%	603			0.1UF
4	C18	Capacitor, Ceramic, .33-uF, 16-V, X7R, 10%	603			0.33UF
2	C19	Capacitor, Ceramic, 1000-pF, 50-V, NPO, 5%	603			1000pF
4	C20	Capacitor, Ceramic, 470-pF, 50-V, NPO, 5%	603			470pF
	C21	Capacitor, Ceramic, 1-uF, 16-V, X7R	805	muRata	GRM40X7R105K16PT	1uF
	C22	Capacitor, Ceramic, 470-pF, 50-V, NPO, 5%	603			470pF
1	C23	Capacitor, Ceramic, 6800pF, 50-V, X7R, 10%	603			6800pF
	C24	Capacitor, Ceramic, .1-uF, 50-V, X7R, 10%	603			0.1UF
1	C25	Capacitor, Ceramic, 1UF, 16-V, X7R	603	TDK		1UF
	C26	Capacitor, Aluminum, 470-uF, 25-V, 20% (FM Series) 8*20mm		Panasonic	EEUFM1E471L	470UF
	C27	Capacitor, Aluminum, 470-uF, 25-V, 20% (FM Series) 8*20mm		Panasonic	EEUFM1E471L	470UF
1	C28	Capacitor, Ceramic, 22pF, 50V, NPO, 10%	603			22pF
1	C29	Capacitor, Ceramic, 1000pF, 50-V, X7R, 10%	603			1000pF
3	C30	Capacitor, Ceramic, 10pF, 50V, NPO, 10%	603			10pF
	C31	Capacitor, Ceramic, 10pF, 50V, NPO, 10%	603			10pF
	C32	Capacitor, Aluminum, 470-uF, 25-V, 20% (FM Series) 8*20mm		Panasonic	EEUFM1E471L	470UF
4	C33	Capacitor, Aluminum, 180-uF, 50-V, 20% (FM Series) 8*20mm		Panasonic	EEUFM1H181L	180UF
	C34	Capacitor, Aluminum, 180-uF, 50-V, 20% (FM Series) 8*20mm		Panasonic	EEUFM1H181L	180UF
	C35	Capacitor, Ceramic, 1000-pF, 50-V, NPO, 5%	603			1000pF
	C36	Capacitor, Aluminum, 180-uF, 50-V, 20% (FM Series) 8*20mm		Panasonic	EEUFM1H181L	180UF
	C37	Capacitor, Aluminum, 180-uF, 50-V, 20% (FM Series) 8*20mm		Panasonic	EEUFM1H181L	180UF
	C38	Capacitor, Ceramic, .33-uF, 16-V, X7R, 10%	603			0.33UF

	C39	Capacitor, Ceramic, .33-uF, 16-V, X7R, 10%	603			0.33UF
1	C40	Capacitor, Ceramic, 1-uF, 16-V, X7R, 10%	603			1UF
	C41	Capacitor, Ceramic, 470-pF, 50-V, NPO, 5%	603			470pF
	C42	Capacitor, Ceramic, 470-pF, 50-V, NPO, 5%	603			470pF
	C43	Capacitor, Ceramic, 10pF, 50V, NPO, 10%	603			10pF
	C44	Capacitor, Ceramic, .33-uF, 16-V, X7R, 10%	603			0.33UF
1	D1	Diode, Zener, xx-V, yy-mA, zz-mW, q%	SOT23	Motorola	MMBZxxxxBLT1	10V
1	D2	Diode, UltraFast Rectifier, 1-A, 200-V	SMB	On Semi	MURS120T3	MURS120T3
1	D3	Diode, Dual Schottky, 40A, 80-V	TO-247AC	IR	40CPQ080	40CPQ080
1	D4	Diode, Zener, xx-V, yy-mA, zz-mW, q%	SOT23	Fairchild	MMBD4148	MMBD4148
1	D5	Diode, xx-V, yy-mA, zz-mW, q%	SOT23	Fairchild	MMBD4148	MMBD4148
2	D6	Diode. LED, Green, 2.1-V, 25-mcd,SM	1210	Lumex	SML-LX2832GC-TR	Green
	D7	Diode. LED, Green, 2.1-V, 25-mcd,SM	1210	Lumex	SML-LX2832GC-TR	Green
3	D8	Diode, LED, Red, 1.7-V, 40-mcd, SM	1210	Lumex	SML-LX2832SRC-TR	Red
	D9	Diode, LED, Red, 1.7-V, 40-mcd, SM	1210	Lumex	SML-LX2832SRC-TR	Red
	D10	Diode, LED, Red, 1.7-V, 40-mcd, SM	1210	Lumex	SML-LX2832SRC-TR	Red
1	D11	Diode, Switching, 10-mA, 85-V, 350-mW	SOT23	Vishay-Liteon	BAS16	BAS16
4	D12	Diode, Rectifier, 1A, 200-V	SMA		MURA120	MURA120
	D13	Diode, Rectifier, 1A, 200-V	SMA		MURA120	MURA120
1	D14	Diode, Schottky, 200-mA, 30-V	SOT23	Vishay-Liteon	BAT54	BAT54
	D15	Diode, Rectifier, 1A, 200-V	SMA		MURA120	MURA120
	D16	Diode, Rectifier, 1A, 200-V	SMA		MURA120	MURA120
1	HS1	Heatsink, TO-220, Vertical-mount	0.520 x 0.515	Aavid	7136D	7136D
6	J1	Terminal Block, 2-pin, 6-A, 3.5mm	0.27 x 0.25	OST	ED1514	
	J2	Terminal Block, 2-pin, 6-A, 3.5mm	0.27 x 0.25	OST	ED1514	
1	J3	Header, Latch Assy 2x7, Low Profile	1.000 x 0.360	AMP	1-103308-2	1-103308-2
	J4	Terminal Block, 2-pin, 6-A, 3.5mm	0.27 x 0.25	OST	ED1514	
1	J5	Header, 2-pin, 5mm spacing	0.197 x 2"	OST	ED1660	
	J6	Terminal Block, 2-pin, 6-A, 3.5mm	0.27 x 0.25	OST	ED1514	
	J7	Terminal Block, 2-pin, 6-A, 3.5mm	0.27 x 0.25	OST	ED1514	
	J8	Terminal Block, 2-pin, 6-A, 3.5mm	0.27 x 0.25	OST	ED1514	
2	K1	Relay, Reed, DPST 1.5A, 200V, xx Ohm,	0.210 x 0.810	Cotorelay	23xx-xx-0x0	23xx-xx-0x0
	K2	Relay, Reed, DPST 1.5A, 200V, xx Ohm,	0.210 x 0.810	Cotorelay	23xx-xx-0x0	23xx-xx-0x0
1	Q1	Bipolar, NPN, xx-V, yy-mA, zz-W	SOT223	Zetex	FZT653	FZT653
1	Q2	MOSFET, N-ch, 75-V, 130-A, 6.3-milliOhms	TO-220V		IRFB3307	IRFB3307
11	Q3	MOSFET, Nch, 100V, 0.17A, 6 Ohm	SOT23	Fairchild	BSS123	BSS123
	Q4	MOSFET, Nch, 100V, 0.17A, 6 Ohm	SOT23	Fairchild	BSS123	BSS123
1	Q5	MOSFET, P-Ch, 0.98 Vgs, 0.015 Rds, 10A	SOP-8	Vishey	Si4463DY	SI4463DY
1	Q7	MOSFET, Pch, -40V, -10.5A, 15milliohm	SO8	IR	IRF7240	IRF7240
	Q8	MOSFET, Nch, 100V, 0.17A, 6 Ohm	SOT23	Fairchild	BSS123	BSS123
	Q9	MOSFET, Nch, 100V, 0.17A, 6 Ohm	SOT23	Fairchild	BSS123	BSS123
	Q10	MOSFET, Nch, 100V, 0.17A, 6 Ohm	SOT23	Fairchild	BSS123	BSS123

2	Q11	MOSFET, Pch, -50V, -130 mA, 10 Ohms	SOT23	Fairchild	BSS84	BSS84
	Q12	MOSFET, Nch, 100V, 0.17A, 6 Ohm	SOT23	Fairchild	BSS123	BSS123
	Q13	MOSFET, Nch, 100V, 0.17A, 6 Ohm	SOT23	Fairchild	BSS123	BSS123
	Q14	MOSFET, Nch, 100V, 0.17A, 6 Ohm	SOT23	Fairchild	BSS123	BSS123
	Q15	MOSFET, Nch, 100V, 0.17A, 6 Ohm	SOT23	Fairchild	BSS123	BSS123
	Q16	MOSFET, Nch, 100V, 0.17A, 6 Ohm	SOT23	Fairchild	BSS123	BSS123
	Q17	MOSFET, Nch, 100V, 0.17A, 6 Ohm	SOT23	Fairchild	BSS123	BSS123
	Q18	MOSFET, Pch, -50V, -130 mA, 10 Ohms	SOT23	Fairchild	BSS84	BSS84
1	R1	Resistor, Chip, 100KOhms, 1/10-W, yy%	805	Std	Std	51.1k
1	R2	Resistor, Chip, 10KOhms, 1/10-W, yy%	805	Std	Std	10k
2	R3	Resistor, Chip, 200-Ohms, 1/8W, 1%	1206	Vishay	CRCW1206-xxxx-F	200
	R4	Resistor, Chip, 200-Ohms, 1/8W, 1%	1206	Vishay	CRCW1206-xxxx-F	200
1	R6	Resistor, Chip, 11K-Ohms, 1/16-W, 1%	603	Std	Std	11K
1	R7	Resistor, Chip, 3.9-Ohms, 1/8W, 5%	1206	Vishay	crcw1206-xxx-J	3.9
1	R8	Resistor, Chip, 182K-Ohms, 1/16-W, 1%	603	Std	Std	182K
1	R10	Resistor, Chip, 24.9k-Ohms, 1/16-W, 1%	603	Std	Std	24.9k
1	R11	Resistor, Chip, 10k-Ohms, 1/16-W, 1%	603	Std	Std	10k
1	R12	Potentiometer, 18-Turn, Top-Adjust	0.378 x 0.217	Copal	CT-9W 10K	10K
3	R13	Resistor, Chip, 51.1Ohms, 1/16-W, yy%	603	Std	Std	51.1
2	R14	Resistor, Chip, xx-Ohms, 1W, 1%	2512	Vishay	CRCW2512xxxxF	0.02
	R15	Resistor, Chip, xx-Ohms, 1W, 1%	2512	Vishay	CRCW2512xxxxF	0.02
1	R16	Resistor, Chip, 12.7K-Ohms, 1/16-W, 1%	603	Std	Std	12.7K
1	R17	Resistor, Chip, 3.74K-Ohms, 1/16-W, 1%	603	Std	Std	3.74K
1	R18	Resistor, Chip, xx-Ohms, 1/8W, 1%	1206	Vishay	CRCW1206-xxxx-F	0.05
6	R19	Resistor, Chip, 1K-Ohms, 1/10W, 1%	805	Vishay	CRCW0805-xxxx-F	1K
1	R20	Resistor, Chip, 2.94K-Ohms, 1/16-W, yy%	603	Std	Std	2.94K
	R21	Resistor, Chip, 51.1Ohms, 1/16-W, yy%	603	Std	Std	51.1
1	R22	Resistor, Chip, xx-Ohms, 1/8W, 1%	1206	Vishay	CRCW1206-xxxx-F	0.006
3	R23	Resistor, Chip, 10KOhms, 1/16-W, yy%	603	Std	Std	10k
1	R24	Resistor, Chip, 30.1K-Ohms, 1/16-W, yy%	603	Std	Std	30.1K
	R25	Resistor, Chip, 10KOhms, 1/16-W, yy%	603	Std	Std	10k
3	R26	Resistor, Chip, 20K-Ohms, 1/16-W, yy%	603	Std	Std	20K
1	R27	Resistor, Chip, 0 Ohms, 1/16-W, yy%	603	Std	Std	0
	R28	Resistor, Chip, 10KOhms, 1/16-W, yy%	603	Std	Std	10k
1	R29	Resistor, Chip, 0-Ohms, 1/16-W, yy%	603	Std	Std	0
1	R30	Resistor, Chip, 17.8KOhms, 1/16-W, yy%	603	Std	Std	17.8K
2	R31	Resistor, Chip, 523K-Ohms, 1/10W, 0.1%	805	Vishay	TNPW0805xxxxByy	523K
4	R32	Resistor, Chip, 49.9k, 1/16-W, 1%, 0603	603	Std	Std	49.9k
1	R33	Resistor, Chip, 15.8k, 1/16-W, 1%, 0603	603	Std	Std	15.8k
1	R38	Potentiometer, 18-Turn, Top-Adjust	0.378 x 0.217	Copal	CT-9W 100K	100K
	R40	Resistor, Chip, 49.9K, 1/16-W, 1%, 0603	603	Std	Std	49.9K
15	R41	Resistor, Chip, 100K, 1/16-W, 1%, 0603	603	Std	Std	100K

	R42	Resistor, Chip, 100K, 1/16-W, 1%, 0603	603	Std	Std	100K
	R43	Resistor, Chip, 100K, 1/16-W, 1%, 0603	603	Std	Std	100K
2	R44	Resistor, Chip, 11.8K-Ohms, 1/16-W, 0.1%	603	Vishay	TNPW0603xxxxBT9	11.8K
2	R45	Resistor, Chip, 68.1K-Ohms, 1/16-W, 0.1%	603	Vishay	TNPW0603xxxxBT9	68.1K
	R46	Resistor, Chip, 68.1K-Ohms, 1/16-W, 0.1%	603	Vishay	TNPW0603xxxxBT9	68.1K
	R47	Resistor, Chip, 523K-Ohms, 1/10W, 0.1%	805	Vishay	TNPW0805xxxxByy	523K
	R48	Resistor, Chip, 11.8K-Ohms, 1/16-W, 0.1%	603	Vishay	TNPW0603xxxxBT9	11.8K
	R49	Resistor, Chip, 100K, 1/16-W, 1%, 0603	603	Std	Std	100K
	R50	Resistor, Chip, 100K, 1/16-W, 1%, 0603	603	Std	Std	100K
2	R51	Resistor, Chip, 20K, 1/16-W, 1%, 0603	603	Std	Std	20K
1	R52	Resistor, Chip, 30.1K-Ohms, 1/16-W, yy%	603	Std	Std	30.1K
	R53	Resistor, Chip, 20K-Ohms, 1/16-W, yy%	603	Std	Std	20K
1	R54	Resistor, Chip, 10K-Ohms, 1/16-W, 0.1%	603	Vishay	TNPW0603xxxxBT9	10K
2	R55	Resistor, Chip, 49.9K-Ohms, 1/16-W, 0.1%	603	Vishay	TNPW0603xxxxBT9	49.9K
	R56	Resistor, Chip, 49.9K-Ohms, 1/16-W, 0.1%	603	Vishay	TNPW0603xxxxBT9	49.9K
1	R57	Resistor, Chip, 100KOhms, 1/16-W, yy%	603	Std	Std	100K
1	R58	Resistor, Chip, OPEN, 1/16-W, 1%	603	Std	OPEN	OPEN
2	R59	Thermistor NTC, Chip, 47K-Ohms @25C, 1/16-W, 3%	603	Vishay	2322 615 36473	47K@25C
	R60	Thermistor NTC, Chip, 47K-Ohms @25C, 1/16-W, 3%	603	Vishay	2322 615 36473	47K@25C
1	R61	Resistor, Chip, 113k, 1/16-W, 1%, 0603	603	Std	Std	113K
1	R62	Resistor, Chip, 80.6K, 1/16-W, 1%, 0603	603	Std	Std	80.6K
1	R63	Resistor, Chip, 3.74K-Ohms, 1/16-W, yy%	603	Std	Std	3.74K
	R64	Resistor, Chip, 20K, 1/16-W, 1%, 0603	603	Std	Std	20K
	R65	Resistor, Chip, 100K, 1/16-W, 1%, 0603	603	Std	Std	100K
	R66	Resistor, Chip, 49.9K, 1/16-W, 1%, 0603	603	Std	Std	49.9K
2	R67	Resistor, Chip, 5.1-Ohms, 1/4W, yy%	1206	Std	Std	5.1
	R68	Resistor, Chip, 5.1-Ohms, 1/4W, yy%	1206	Std	Std	5.1
2	R69	Resistor, Chip, 10-Ohms, 1/16-W, yy%	603	Std	Std	10
	R70	Resistor, Chip, 10-Ohms, 1/16-W, yy%	603	Std	Std	10
	R71	Resistor, Chip, 51.1Ohms, 1/16-W, yy%	603	Std	Std	51.1
1	R72	Resistor, Chip, 40.2K-Ohms, 1/16-W, yy%	603	Std	Std	40.2K
	R73	Resistor, Chip, 20K-Ohms, 1/16-W, yy%	603	Std	Std	20K
23	R74	Resistor, Chip, 10, 1/16-W, 1%, 0603	603	Std	Std	10
	R75	Resistor, Chip, 10, 1/16-W, 1%, 0603	603	Std	Std	10
	R76	Resistor, Chip, 10, 1/16-W, 1%, 0603	603	Std	Std	10
	R77	Resistor, Chip, 10, 1/16-W, 1%, 0603	603	Std	Std	10
	R78	Resistor, Chip, 10, 1/16-W, 1%, 0603	603	Std	Std	10
	R79	Resistor, Chip, 10, 1/16-W, 1%, 0603	603	Std	Std	10
	R80	Resistor, Chip, 10, 1/16-W, 1%, 0603	603	Std	Std	10
	R81	Resistor, Chip, 10, 1/16-W, 1%, 0603	603	Std	Std	10
	R82	Resistor, Chip, 10, 1/16-W, 1%, 0603	603	Std	Std	10
	R83	Resistor, Chip, 10, 1/16-W, 1%, 0603	603	Std	Std	10

	R84	Resistor, Chip, 10, 1/16-W, 1%, 0603	603	Std	Std	10
	R85	Resistor, Chip, 10, 1/16-W, 1%, 0603	603	Std	Std	10
	R86	Resistor, Chip, 10, 1/16-W, 1%, 0603	603	Std	Std	10
	R87	Resistor, Chip, 10, 1/16-W, 1%, 0603	603	Std	Std	10
	R88	Resistor, Chip, 10, 1/16-W, 1%, 0603	603	Std	Std	10
	R89	Resistor, Chip, 10, 1/16-W, 1%, 0603	603	Std	Std	10
	R90	Resistor, Chip, 10, 1/16-W, 1%, 0603	603	Std	Std	10
	R91	Resistor, Chip, 10, 1/16-W, 1%, 0603	603	Std	Std	10
	R92	Resistor, Chip, 10, 1/16-W, 1%, 0603	603	Std	Std	10
	R93	Resistor, Chip, 10, 1/16-W, 1%, 0603	603	Std	Std	10
	R94	Resistor, Chip, 10, 1/16-W, 1%, 0603	603	Std	Std	10
	R95	Resistor, Chip, 10, 1/16-W, 1%, 0603	603	Std	Std	10
	R96	Resistor, Chip, 10, 1/16-W, 1%, 0603	603	Std	Std	10
	R97	Resistor, Chip, 49.9K, 1/16-W, 1%, 0603	603	Std	Std	49.9K
	R98	Resistor, Chip, 100K, 1/16-W, 1%, 0603	603	Std	Std	100K
2	R99	Resistor, Chip, 1K Ohms, 1/16-W, yy%	603	Std	Std	1K
	R100	Resistor, Chip, 1K Ohms, 1/16-W, yy%	603	Std	Std	1K
1	R101	Resistor, Chip, 24.9K Ohms, 1/16-W, yy%	603	Std	Std	24.9K
	R102	Resistor, Chip, 1K-Ohms, 1/10W, 1%	805	Vishay	CRCW0805-xxxx-F	1K
	R103	Resistor, Chip, 100K, 1/16-W, 1%, 0603	603	Std	Std	100K
	R104	Resistor, Chip, 100K, 1/16-W, 1%, 0603	603	Std	Std	100K
	R105	Resistor, Chip, 1K-Ohms, 1/10W, 1%	805	Vishay	CRCW0805-xxxx-F	1K
	R106	Resistor, Chip, 100K, 1/16-W, 1%, 0603	603	Std	Std	100K
	R107	Resistor, Chip, 1K-Ohms, 1/10W, 1%	805	Vishay	CRCW0805-xxxx-F	1K
	R108	Resistor, Chip, 100K, 1/16-W, 1%, 0603	603	Std	Std	100K
	R109	Resistor, Chip, 1K-Ohms, 1/10W, 1%	805	Vishay	CRCW0805-xxxx-F	1K
	R110	Resistor, Chip, 100K, 1/16-W, 1%, 0603	603	Std	Std	100K
	R111	Resistor, Chip, 1K-Ohms, 1/10W, 1%	805	Vishay	CRCW0805-xxxx-F	1K
	R112	Resistor, Chip, 100K, 1/16-W, 1%, 0603	603	Std	Std	100K
	R113	Resistor, Chip, 100K, 1/16-W, 1%, 0603	603	Std	Std	100K
	R114	Resistor, Chip, 100K, 1/16-W, 1%, 0603	603	Std	Std	100K
1	T1	XFMR, Continous Mode Flyback, 19A	1.050 X 1.050	COEV	MGPWT-00293-01	MGPWT-00293-01
1	T2	Transformer, Current Sense, 10 A, 1:50, 500uHy min	0.330 x 0.360	Pulse	P8205	P8205
37	TP2	Test Point, Red, 1mm	0.038",",","	Farnell	240-345	
	TP3	Test Point, Red, 1mm	0.038",",","	Farnell	240-345	
	TP4	Test Point, Red, 1mm	0.038",",","	Farnell	240-345	
	TP5	Test Point, Red, 1mm	0.038",",","	Farnell	240-345	
	TP6	Test Point, Red, 1mm	0.038",",","	Farnell	240-345	
1	TP7	Test Point, Black, 1mm	0.038",",","	Farnell	240-333	
	TP8	Test Point, Red, 1mm	0.038",",","	Farnell	240-345	
	TP9	Test Point, Red, 1mm	0.038",",","	Farnell	240-345	
	TP10	Test Point, Red, 1mm	0.038",",","	Farnell	240-345	

	TP11	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	
	TP12	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	
6	TP13	Test Point, Black, 1mm	0.038",",,"	Farnell	240-333	blk
	TP14	Test Point, Black, 1mm	0.038",",,"	Farnell	240-333	blk
	TP15	Test Point, Black, 1mm	0.038",",,"	Farnell	240-333	blk
	TP16	Test Point, Black, 1mm	0.038",",,"	Farnell	240-333	blk
6	TP17	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	red
	TP18	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	red
	TP19	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	red
	TP20	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	red
	TP21	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	
	TP22	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	
	TP23	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	
	TP24	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	
	TP25	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	
	TP26	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	
	TP27	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	
	TP28	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	
	TP29	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	
	TP30	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	
	TP31	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	
	TP32	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	
	TP33	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	
	TP34	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	
	TP35	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	
	TP36	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	
	TP37	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	
	TP38	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	
	TP39	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	
	TP40	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	
	TP41	Test Point, Black, 1mm	0.038",",,"	Farnell	240-333	blk
	TP42	Test Point, Black, 1mm	0.038",",,"	Farnell	240-333	blk
	TP43	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	red
	TP44	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	red
	TP45	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	
	TP46	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	
	TP47	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	
	TP48	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	
	TP49	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	
	TP50	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	
	TP51	Test Point, Red, 1mm	0.038",",,"	Farnell	240-345	
1	U1	IC, Low-Power BiCMOS Current-mode PWM, Von = xx V	SO8	TI	UCC2813-0D	UCC2813-0D

1	U3	IC, High-Side Measurement Current Shunt Monitor	SOT23-5	TI (Burr Brown)	INA193DBV	INA193DBV
2	U4	IC, Precision Dual Operational Amplifiers	SO8	TI	TLC272CD	TLC272CD
1	U5	IC, Mixed Signal Microcontroller	PW28	TI	MSP430F1232IPW	MSP430F1232IPW
	U6	IC, Precision Dual Operational Amplifiers	SO8	TI	TLC272CD	TLC272CD
1	U7	IC, Shunt Regulator, 2.5-V ref	SOT23-5	TI	TL431IDBVR	TL431IDBVR
1	X1	Crystal, 32.768 KHz	0.244 x 0.085	Citizen	CFS206-32.768KDZF	32.768 KHz

- 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.

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