Filename: PMP7004REVC_BILLOFMATERIALS_bom.xls										
Date: 10	/24/2011									
		PMP7004	REVC_BILLOFMATERIALS E	ROM						
COUNT	RefDes	Value	Description	Size	Part Number	MFR				
1	C1	2200pF	Capacitor, Ceramic, 2kV, X7R, 20%	1812	std	AVX				
1	C5	100uF	Capacitor, Aluminum, SM, 50-V, FK series	8x10mm	EEVFK1H101P	Panasonic				
1	C8	330pF	Capacitor, Ceramic,	0603	C1608C0G2E331K	STD				
1	C9	10nF	Capacitor, Ceramic, 250-V, X7R	1206	C3216X7R2E103M	TDK				
1	C12	3.3nF	Capacitor, Ceramic,	0603	C1608X7R1H332K	STD				
1	C13	22pF	Capacitor, Ceramic,	0603	C1608C0G1H220J	STD				
1	C14	10uF	Capacitor, Ceramic, 16V, X7R, 20%	1210	C3225X7R1C106M	TDK				
1	C15	1uF	Capacitor, Ceramic, 50V, X7R, 20%	1206	C3216X7R1H105M	TDK				
1	C19	330pF	Capacitor, Ceramic,	0603	C1608X7R1H331K	STD				
1	C20	4.7nF	Capacitor, Ceramic,	0603	C1608X7R1H472K	STD				
3	C10 C16-17	1uF	Capacitor, Ceramic,	0603	C1608X7R1C105M	STD				
2	C11 C18	100nF	Capacitor, Ceramic,	0603	C1608X7R1H104K	STD				
3	C2-4	2.2uF	Capacitor, Ceramic, 100V, X5R, 20%	1210	C3225X5R2A225M	TDK				
2	C6-7	4.7uF	Capacitor, Ceramic, 50V, X5R, 20%	1210	C3225X5R1H475M					
1	D1	6CWQ20	Diode, Dual Schottky, 2x 3-A, 200-V	DPAK	6CWQ20	IRF				
1	D6	12V	Diode, Zener, xx-V, 150-mW	SOT-523	BZX84C12LT1	Diodes				
4	D2-5	BAS16	Diode, Switching, 75V, 200mA	SOT23	BAS16LT1	On Semiconductor				
1	J3	PEC04DAAN	Header, Male 2x4-pin, 100mil spacing	0.20 x 0.40 inch	PEC04DAAN	Sullins				
2	J1-2		Terminal Block, 2-pin, 6-A, 3.5mm	0.27 x 0.25""	ED1514	OST				
1	L1	250uH	Inductor, SMT, 250uH, 1.5A, 230milliohm	0.940 inch	PE-54035SNL	Pulse				
1	Q1	SI2325		SOT-23	SI2325	Vishay				
1	Q2	Si4848DY	MOSFET, N-ch, 150V, 3.7A, 85milliohm	SO8	Si4848DY	Vishay				
1	Q3	FZT491	Bipolar, NPN, 60-V, 1-A	SOT223	FZT491	Zetex				
4	Q4-7	2N7002	MOSFET, N-ch, 60-V, 115-mA, 1.2-Ohms	SOT23	2N7002	Diodes				
1	R1	100	Resistor, Chip, 1W, 5%	2512	Std	Std				
1	R3	49.9	Resistor, Chip, 1/16W, x%	0603	Std	Std				
1	R4	0.15	Resistor, Chip, 1/2W, 5%	2010	Std	Std				
1	R5	7.5k	Resistor, Chip, 1/10W, 1%	0805	Std	Std				

1 R10 221k Resistor, Chip, 1/16W, 1% 0603 Std Std Std 1 R12 2.15k Resistor, Chip, 1/16W, 0.1% Std Std Std Std 1 R13 3.65k Resistor, Chip, 1/16W, 0.1% 0603 Std Std 1 R15 1.74k Resistor, Chip, 1/16W, 0.1% 0603 Std Std 1 R17 12.7k Resistor, Chip, 1/16W, 1% 0603 Std Std 1 R18 25.5k Resistor, Chip, 1/16W, 1% 0603 Std Std 1 R19 51.1k Resistor, Chip, 1/16W, 1% 0603 Std Std 1 R20 102k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R11 R28 1k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R11 R28 1k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R14 R16 100k Resistor, Chip, 1/16				I=	T	T	T			
1 R12 2.15k Resistor, Chip, 1/16W, 1% Std Std Std 1 R13 3.65k Resistor, Chip, 1/16W, 0.1% 0603 Std Std 1 R15 1.74k Resistor, Chip, 1/16W, 1% 0603 Std Std 1 R17 12.7k Resistor, Chip, 1/16W, 1% 0603 Std Std 1 R18 25.5k Resistor, Chip, 1/16W, 1% 0603 Std Std 1 R19 51.1k Resistor, Chip, 1/16W, 1% 0603 Std Std 1 R20 102k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R11 R28 1k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R14 R26 1k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R14 R26 1k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R14 R26 1k Resistor, Chip, 1/16W, 1% 0603 S	1	R9	10k	Resistor, Chip, 1/10W, 1%	0805	Std	Std			
1	1									
1 R15 1.74k Resistor, Chip, 1/16W, 0.1% 0603 Std Std 1 R17 12.7k Resistor, Chip, 1/16W, 1% 0603 Std Std 1 R18 25.5k Resistor, Chip, 1/16W, 1% 0603 Std Std 1 R19 51.1k Resistor, Chip, 1/16W, 1% 0603 Std Std 1 R20 102k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R11 R28 11k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R14 R16 100k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R2 R7 10k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R22-23 90.9k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R22-23 90.9k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R22-23 100k Resistor, Chip, 1/16W, 1% 0603	1									
1 R17 12.7k Resistor, Chip, 1/16W, 1% 0603 Std Std 1 R18 25.5k Resistor, Chip, 1/16W, 1% 0603 Std Std 1 R19 51.1k Resistor, Chip, 1/16W, 1% 0603 Std Std 1 R20 102k Resistor, Chip, 1/16W, 1% 0603 Std Std 1 R21 11k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R14 R16 100k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R14 R16 100k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R2 R2 R7 10k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R22-23 90.9k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R22-27 R29 100k Resistor, Chip, 1/16W, 1% 0603 Std Std 1 T1 240 uH Transformer, Forward ±30% 0.860 x 1.15	1		3.65k							
1 R18 25.5k Resistor, Chip, 1/16W, 1% 0603 Std Std 1 R19 51.1k Resistor, Chip, 1/16W, 1% 0603 Std Std 1 R20 102k Resistor, Chip, 1/16W, 1% 0603 Std Std 1 R21 11k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R11 R28 1k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R14 R16 100k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R2 R7 10k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R22-23 90.9k Resistor, Chip, 1/16W, 1% 0603 Std Std 5 R24-27 R29 100k Resistor, Chip, 1/16W, 1% 0603 Std Std 4 T8 R8 20k Resistor, Chip, 1/16W, 1% 0603 Std Std 5 R24-27 R29 100k Resistor, Chip, 1/16W, 1%	1					1				
1 R19 51.1k Resistor, Chip, 1/16W, 1% 0603 Std Std Std 1 R20 102k Resistor, Chip, 1/16W, 1% 0603 Std Std Std 1 R21 111k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R11 R28 1k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R14 R16 100k Resistor, Chip, 1/16W, 1% 0603 Std Std Std 2 R14 R16 100k Resistor, Chip, 1/16W, 1% 0603 Std Std Std 2 R2 R7 10k Resistor, Chip, 1/16W, 1% 0603 Std Std Std 2 R2 R2 R7 10k Resistor, Chip, 1/16W, 1% 0603 Std Std Std 5 R24-27 R29 100k Resistor, Chip, 1/16W, 1% 0603 Std Std Std 5 R24-27 R29 100k Resistor, Chip, 1/16W, 1% 0603 Std Std Std 1 T1 240 uH Transformer, Forward ±30% 0.860 x 1.150 inch PH9219NLS MX1 Pulse 1 TP7 5000 Test Point, Red, Thru Hole Color Keyed 0.100 x 0.100 inch 240-345 Keystone 2 TP1-2 5005 Test Point, Red, Thru Hole Compact Style 0.125 x 0.125 inch 240-345 Keystone 2 TP3-4 5006 Test Point, Black, Thru Hole Compact Style 0.125 x 0.125 inch 240-333 Keystone 2 TP5-6 5001 Test Point, Black, Thru Hole Compact Style 0.125 x 0.125 inch 240-333 Keystone 1 U1 H11A817B IC, Optocoupler, 5300-V, 130-260% CTR 0.435 x 0.210 H11A817B QT Optoelectronics 1 U2 TL431ADBZ IC, Precision Adjustable Shunt Regulator SOT23-3 TL431ADBZ TI 1 U3 UCC2897APW IC, Current-Mode Active Clamp PWM Controller 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.	1	R17	12.7k							
1 R20 102k Resistor, Chip, 1/16W, 1% 0603 Std Std 1 R21 11k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R14 R16 100k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R14 R16 100k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R2 R7 10k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R22-23 90.9k Resistor, Chip, 1/16W, 1% 0603 Std Std 5 R24-27 R29 100k Resistor, Chip, 1/16W, 1% 0603 Std Std 4 T R6 R8 20k Resistor, Chip, 1/16W, 1% 0603 Std Std 1 T1 240 uH Transformer, Forward ±30% 0.860 x 1.150 inch PH9219NLS MX1 Pulse 1 TP7 5000 Test Point, Red, Thru Hole Color Keyed 0.100 x 0.100 inch 240-345 Keystone 2 TP3-4 5006	1									
1 R21 11k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R11 R28 1k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R14 R16 100k Resistor, Chip, 1/16W, 1% 0805 Std Std 2 R2 R7 10k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R22-23 90.9k Resistor, Chip, 1/16W, 1% 0603 Std Std 5 R24-27 R29 100k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R6 R8 20k Resistor, Chip, 1/16W, 1% 0603 Std Std 1 T1 240 uH Transformer, Forward ±30% 0.860 x 1.150 inch PH9219NLS MX1 Pulse 1 TP7 5000 Test Point, Red, Thru Hole Color Keyed 0.100 x 0.100 inch 240-345 Keystone 2 TP3-4 5006 Test Point, Black, Thru Hole Color Keyed 0.125 x 0.125 inch 240-333 Keystone 1 U1<	1	R19	51.1k	Resistor, Chip, 1/16W, 1%	0603	Std	Std			
2 R11 R28 1k Resistor, Chip, 1/16W, 1% 0603 Std Std Std 2 R14 R16 100k Resistor, Chip, 1/10W, 0.1% 0805 Std Std Std 2 R2 R7 10k Resistor, Chip, 1/16W, 1% 0603 Std Std Std 5 R24-27 R29 100k Resistor, Chip, 1/16W, 1% 0603 Std Std Std 5 R24-27 R29 100k Resistor, Chip, 1/16W, 1% 0603 Std Std Std 2 R6 R8 20k Resistor, Chip, 1/16W, 1% 0603 Std Std Std 1 T1 240 uH Transformer, Forward ±30% 0.860 x 1.150 inch PH9219NLS MX1 Pulse 1 TP7 5000 Test Point, Red, Thru Hole Color Keyed 0.100 x 0.100 inch 240-345 Keystone 2 TP1-2 5005 Test Point, Red, Thru Hole Compact Style 0.125 x 0.125 inch 240-333 Keystone 2 TP3-4 5006 Test Point, Black, Thru Hole Compact Style 0.125 x 0.125 inch 140-333 Keystone 2 TP5-6 5001 Test Point, Black, Thru Hole Color Keyed 0.100 x 0.100 inch 240-333 Keystone 1 U1 H11A817B IC, Optocoupler, 5300-V, 130-260% CTR 0.435 x 0.210 H11A817B QT Optoelectronics 1 U2 TL431ADBZ IC, Precision Adjustable Shunt Regulator SOT23-3 TL431ADBZ TI 1 U3 UCC2897APW IC, Current-Mode Active Clamp PWM Controller 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.	1	R20	102k	Resistor, Chip, 1/16W, 1%	0603	Std	Std			
2 R14 R16 100k Resistor, Chip, 1/10W, 0.1% 0805 Std Std Std 2 R2 R7 10k Resistor, Chip, 1/16W, 1% 0603 Std Std Std 5 R24-27 R29 100k Resistor, Chip, 1/16W, 1% 0603 Std Std Std 5 R24-27 R29 100k Resistor, Chip, 1/16W, 1% 0603 Std Std Std 2 R6 R8 20k Resistor, Chip, 1/16W, 1% 0603 Std Std Std 1 T1 240 uH Transformer, Forward ±30% 0.860 x 1.150 inch PH9219NLS MX1 Pulse 1 TP7 5000 Test Point, Red, Thru Hole Color Keyed 0.100 x 0.100 inch 240-345 Keystone 2 TP1-2 5005 Test Point, Red, Thru Hole Compact Style 0.125 x 0.125 inch 240-345 Keystone 2 TP3-4 5006 Test Point, Black, Thru Hole Color Keyed 0.100 x 0.100 inch 240-333 Keystone 2 TP5-6 5001 Test Point, Black, Thru Hole Color Keyed 0.100 x 0.100 inch 240-333 Keystone 1 U1 H11A817B IC, Optocoupler, 5300-V, 130-260% CTR 0.435 x 0.210 H11A817B QT Optoelectronics 1 U2 TL431ADBZ IC, Precision Adjustable Shunt Regulator SOT23-3 TL431ADBZ TI 1 U3 UCC2897APW IC, Current-Mode Active Clamp PWM Controller 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.	1	R21	11k	, , ,	0603					
2 R2 R7 10k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R22-23 90.9k Resistor, Chip, 1/16W, 1% 0603 Std Std 5 R24-27 R29 100k Resistor, Chip, 1/16W, 1% 0603 Std Std 2 R6 R8 20k Resistor, Chip, 1/16W, 1% 0603 Std Std 1 T1 240 uH Transformer, Forward ±30% 0.860 x 1.150 inch PH9219NLS MX1 Pulse 1 TP7 5000 Test Point, Red, Thru Hole Color Keyed 0.100 x 0.100 inch 240-345 Keystone 2 TP1-2 5005 Test Point, Red, Thru Hole Compact Style 0.125 x 0.125 inch 240-345 Keystone 2 TP3-4 5006 Test Point, Black, Thru Hole Color Keyed 0.100 x 0.100 inch 240-333 Keystone 2 TP5-6 5001 Test Point, Black, Thru Hole Color Keyed 0.100 x 0.100 inch 240-333 Keystone 1 U1 H11A817B IC, Optocoupler, 5300-V, 130-260% CTR 0.435 x 0.210 </td <td>2</td> <td>R11 R28</td> <td>1k</td> <td></td> <td>0603</td> <td>1</td> <td></td>	2	R11 R28	1k		0603	1				
2 R22-23 90.9k Resistor, Chip, 1/16W, 1% 0603 Std Std Std 5 R24-27 R29 100k Resistor, Chip, 1/16W, 1% 0603 Std Std Std 2 R6 R8 20k Resistor, Chip, 1/16W, 1% 0603 Std Std Std 1 T1 240 uH Transformer, Forward ±30% 0.860 x 1.150 inch PH9219NLS MX1 Pulse 1 TP7 5000 Test Point, Red, Thru Hole Color Keyed 0.100 x 0.100 inch 240-345 Keystone 2 TP1-2 5005 Test Point, Red, Thru Hole Compact Style 0.125 x 0.125 inch 240-345 Keystone 2 TP3-4 5006 Test Point, Black, Thru Hole Compact Style 0.125 x 0.125 inch 240-333 Keystone 2 TP5-6 5001 Test Point, Black, Thru Hole Color Keyed 0.100 x 0.100 inch 240-333 Keystone 1 U1 H11A817B IC, Optocoupler, 5300-V, 130-260% CTR 0.435 x 0.210 H11A817B QT Optoelectronics 1 U2 TL431ADBZ IC, Precision Adjustable Shunt Regulator SOT23-3 TL431ADBZ TI 1 U3 UCC2897APW IC, Current-Mode Active Clamp PWM Controller PW20 TI 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.	2	R14 R16	100k	Resistor, Chip, 1/10W, 0.1%	0805	Std	Std			
5 R24-27 R29 100k Resistor, Chip, 1/16W, 1% 0603 Std Std Std 2 R6 R8 20k Resistor, Chip, 1/16W, 1% 0603 Std Std Std 1 T1 240 uH Transformer, Forward ±30% 0.860 x 1.150 inch PH9219NLS MX1 Pulse 1 TP7 5000 Test Point, Red, Thru Hole Color Keyed 0.100 x 0.100 inch 240-345 Keystone 2 TP1-2 5005 Test Point, Red, Thru Hole Compact Style 0.125 x 0.125 inch 240-345 Keystone 2 TP3-4 5006 Test Point, Black, Thru Hole Compact Style 0.125 x 0.125 inch 240-333 Keystone 2 TP5-6 5001 Test Point, Black, Thru Hole Color Keyed 0.100 x 0.100 inch 240-333 Keystone 1 U1 H11A817B IC, Optocoupler, 5300-V, 130-260% CTR 0.435 x 0.210 H11A817B QT Optoelectronics 1 U2 TL431ADBZ IC, Precision Adjustable Shunt Regulator SOT23-3 TL431ADBZ TI 1 U3 UCC2897APW IC, Current-Mode Active Clamp PWM Controller PW20 TI 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.	2	R2 R7	10k	Resistor, Chip, 1/16W, 1%	0603	Std	Std			
2 R6 R8 20k Resistor, Chip, 1/16W, 1% 0603 Std Std Std 1 T1 240 uH Transformer, Forward ±30% 0.860 x 1.150 inch 1 TP7 5000 Test Point, Red, Thru Hole Color Keyed 0.100 x 0.100 inch 2 TP1-2 5005 Test Point, Red, Thru Hole Compact Style 0.125 x 0.125 inch 240-345 Keystone 2 TP3-4 5006 Test Point, Black, Thru Hole Compact Style 0.125 x 0.125 inch 240-333 Keystone 2 TP5-6 5001 Test Point, Black, Thru Hole Color Keyed 0.100 x 0.100 inch 240-333 Keystone 1 U1 H11A817B IC, Optocoupler, 5300-V, 130-260% CTR 0.435 x 0.210 H11A817B QT Optoelectronics 1 U2 TL431ADBZ IC, Precision Adjustable Shunt Regulator SOT23-3 TL431ADBZ TI 1 U3 UCC2897APW IC, Current-Mode Active Clamp PWM Controller 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.	2	R22-23	90.9k	Resistor, Chip, 1/16W, 1%	0603	Std	Std			
1 T1 240 uH Transformer, Forward ±30% 0.860 x 1.150 inch PH9219NLS MX1 Pulse 1 TP7 5000 Test Point, Red, Thru Hole Color Keyed 0.100 x 0.100 inch 240-345 Keystone 2 TP1-2 5005 Test Point, Red, Thru Hole Compact Style 0.125 x 0.125 inch 240-345 Keystone 2 TP3-4 5006 Test Point, Black, Thru Hole Compact Style 0.125 x 0.125 inch 240-333 Keystone 2 TP5-6 5001 Test Point, Black, Thru Hole Color Keyed 0.100 x 0.100 inch 240-333 Keystone 1 U1 H11A817B IC, Optocoupler, 5300-V, 130-260% CTR 0.435 x 0.210 H11A817B QT Optoelectronics 1 U2 TL431ADBZ IC, Precision Adjustable Shunt Regulator SOT23-3 TL431ADBZ TI 1 U3 UCC2897APW IC, Current-Mode Active Clamp PWM Controller PW20 TI 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.	5	R24-27 R29	100k	Resistor, Chip, 1/16W, 1%	0603	Std	Std			
1 TP7 5000 Test Point, Red, Thru Hole Color Keyed 0.100 x 0.100 inch 240-345 Keystone 2 TP1-2 5005 Test Point, Red, Thru Hole Compact Style 0.125 x 0.125 inch 240-345 Keystone 2 TP3-4 5006 Test Point, Black, Thru Hole Compact Style 0.125 x 0.125 inch 240-333 Keystone 2 TP5-6 5001 Test Point, Black, Thru Hole Color Keyed 0.100 x 0.100 inch 240-333 Keystone 1 U1 H11A817B IC, Optocoupler, 5300-V, 130-260% CTR 0.435 x 0.210 H11A817B QT Optoelectronics 1 U2 TL431ADBZ IC, Precision Adjustable Shunt Regulator SOT23-3 TL431ADBZ TI U3 UCC2897APW IC, Current-Mode Active Clamp PWM Controller PW20 TI 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.	2	R6 R8	20k	Resistor, Chip, 1/16W, 1%	0603	Std	Std			
TP1-2 5005 Test Point, Red, Thru Hole Compact Style 0.125 x 0.125 inch 240-345 Keystone TP3-4 5006 Test Point, Black, Thru Hole Compact Style 0.125 x 0.125 inch 240-333 Keystone TP5-6 5001 Test Point, Black, Thru Hole Color Keyed 0.100 x 0.100 inch 240-333 Keystone TP5-6 IU1 H11A817B IC, Optocoupler, 5300-V, 130-260% CTR 0.435 x 0.210 H11A817B QT Optoelectronics IU2 TL431ADBZ IC, Precision Adjustable Shunt Regulator SOT23-3 TL431ADBZ II IU3 UCC2897APW IC, Current-Mode Active Clamp PWM Controller PW20 TI 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.	1	T1	240 uH	Transformer, Forward ±30%	0.860 x 1.150 inch	PH9219NLS MX1	Pulse			
2 TP3-4 5006 Test Point, Black, Thru Hole Compact Style 0.125 x 0.125 inch 240-333 Keystone 2 TP5-6 5001 Test Point, Black, Thru Hole Color Keyed 0.100 x 0.100 inch 240-333 Keystone 1 U1 H11A817B IC, Optocoupler, 5300-V, 130-260% CTR 0.435 x 0.210 H11A817B QT Optoelectronics 1 U2 TL431ADBZ IC, Precision Adjustable Shunt Regulator SOT23-3 TL431ADBZ TI 1 U3 UCC2897APW IC, Current-Mode Active Clamp PWM Controller PW20 TI 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.	1	TP7	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	240-345	Keystone			
2 TP5-6 5001 Test Point, Black, Thru Hole Color Keyed 0.100 x 0.100 inch 240-333 Keystone 1 U1 H11A817B IC, Optocoupler, 5300-V, 130-260% CTR 0.435 x 0.210 H11A817B QT Optoelectronics 1 U2 TL431ADBZ IC, Precision Adjustable Shunt Regulator SOT23-3 TL431ADBZ TI 1 U3 UCC2897APW IC, Current-Mode Active Clamp PWM Controller PW20 TI 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.	2	TP1-2	5005	Test Point, Red, Thru Hole Compact Style	0.125 x 0.125 inch	240-345	Keystone			
1 U1 H11A817B IC, Optocoupler, 5300-V, 130-260% CTR 0.435 x 0.210 H11A817B QT Optoelectronics 1 U2 TL431ADBZ IC, Precision Adjustable Shunt Regulator SOT23-3 TL431ADBZ TI 1 U3 UCC2897APW IC, Current-Mode Active Clamp PWM Controller PW20 TI 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.		TP3-4	5006	Test Point, Black, Thru Hole Compact Style	0.125 x 0.125 inch	240-333	Keystone			
1 U2 TL431ADBZ IC, Precision Adjustable Shunt Regulator SOT23-3 TL431ADBZ TI 1 U3 UCC2897APW IC, Current-Mode Active Clamp PWM Controller PW20 TI 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.	2	TP5-6	5001	Test Point, Black, Thru Hole Color Keyed	0.100 x 0.100 inch	240-333	Keystone			
1 U3 UCC2897APW IC, Current-Mode Active Clamp PWM Controller PW20 TI 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.	1	U1	H11A817B	IC, Optocoupler, 5300-V, 130-260% CTR		H11A817B	QT Optoelectronics			
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.	1		TL431ADBZ	IC, Precision Adjustable Shunt Regulator	II	TL431ADBZ	TI			
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.	1	U3	UCC2897APW	IC, Current-Mode Active Clamp PWM Controller	PW20		TI			
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.										
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4. Ref designators marked with an asterisk ('**') cannot be substituted.										
All other components can be substituted with equivalent MFG's components.		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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