

### PMP4625 REV\_A BOM

COUNT	RefDes	Value	Description	Size	Part Number	MFR	AREA
1	C1	0.22uF	Capacitor, X2 Class, 0.22uF, 275V, 20%	0.709 x 0.236 inch	B81130C1224M	Epcos	198,640
1	C2	2.2nF	Capacitor, Ceramic, 50V, X7R, 10%	0603	Std	Std	5650
1	C3	680nF	Capacitor, MKT, 0.68uF, 305Vac, 10%	0.885 in x 0.370 in	B32923A2684M	Epcos	327450
1	C4	DNP	Capacitor, Ceramic, 50V, X7R, 10%	0603	Std	Std	5650
2	C5	.1u	Capacitor, Ceramic, 16-V, [temp], [tol]	0805	std	muRata	10560
1	C6	10pF	Capacitor, Ceramic, 50V, NP0, 10%	0603	Std	muRata	5650
1	C7	100uF	Capacitor, Aluminum Electrolytic, 100uF, 25V	0.248 inch	EKY-250Exx101MF11D	Nippon ChemiCon	70,686
1	C9	1000pF Y1	Capacitor, Cer. Disc, 250V, Y1	0.394 X 0.315 inch Max.	ECK-ANA102MB	Panasonic	128
1	C10	47uF	Capacitor, Aluminum Electrolytic, 47uF, 25V	0.197 inch	EKY-250Exx470ME11D	Nippon ChemiCon	40,471
2	C11	820uF	Capacitor, Aluminum PTH, 63V, 2.8A, 24 milli-Ohm	18 x 25 mm	EKZE630xx821M	Nippon Chemicon	430,084
1	C12	100nF	Capacitor, Ceramic, 25V, X5R, +/-10%	0805	Std	Std	10560
1	C13	56uF	Capacitor, Aluminum Electrolytic, 56uF, 35V	0.248 inch	EKY-250Exx101MF11D	Nippon ChemiCon	70,686
1	C14	560pF	Capacitor, Ceramic, 50V, X7R, 10%	0603	Std	Std	5650
1	C15	820uF	Capacitor, Aluminum PTH, 63V, 2.8A, 24 milli-Ohm	18 x 25 mm	EKZE630xx821M	Nippon Chemicon	430,084
1	C100	47pF	Capacitor, Ceramic, 50V, NP0, 10%	0603	Std	muRata	5650
	C101	.1u	Capacitor, Ceramic, 16-V, [temp], [tol]	0805	std	muRata	10560
2	D1	BYG10J	Diode, Standard Rectifier, 1.5A, 600V	SMA	BYG10J	Vishay	29520
	D2	BYG10J	Diode, Standard Rectifier, 1.5A, 600V	SMA	BYG10J	Vishay	29520
1	D3	KBL06	Diode, Bridge Rectifier, 4 A, 600V	KBL	KBL06	Vishay	240700
1	D4	18V	Diode, Zener, 1W, 18V	SMA	SMAZ18-13	Diodes Inc.	37520
2	D5	MURA120T3	Diode, Rectifier, 1A, 200-V	SMA	MURA120T3	ON	29520
1	D6	MBR0520L	Diode, Schottky, 0.5A, 20V	SOD-123	MBR0520L	Fairchild	19380
1	D7	US1-K	Diode, Rectifier, 1-A, 800-V	SMA	US1-K	Diodes Inc.	29520
	D8	MURA120T3	Diode, Rectifier, 1A, 200-V	SMA	MURA120T3	ON	29520
3	D9	BAS16	Diode, Switching, 75V, 200mA	SOT23	BAS16LT1	On Semiconductor	14105
1	D10	BYV29-400	Diode, Ultrafast, 400V, 8A	TO-220AC	BYV29-400	Vishay	96800
	D100	BAS16	Diode, Switching, 75V, 200mA	SOT23	BAS16LT1	On Semiconductor	14105
	D101	BAS16	Diode, Switching, 75V, 200mA	SOT23	BAS16LT1	On Semiconductor	14105
3	D103	SMBJ75A	Diode, Transient Voltage Suppressor, 75V, 600Wpk	SMB	SMBJ75A	Fairchild	95000
	D104	SMBJ75A	Diode, Transient Voltage Suppressor, 75V, 600Wpk	SMB	SMBJ75A	Fairchild	95000
	D105	SMBJ75A	Diode, Transient Voltage Suppressor, 75V, 600Wpk	SMB	SMBJ75A	Fairchild	95000
1	F1	3.15A / 300V	Fuse, Time-Lag, 3.15A, 300V	0.335 inch	3831315000	Wickmann	
2	HS1	513201	Heatsink, TO-220, Vertical-mount, 15°C/W	0.5x1.37in.	411910B02500	Comair Rotron	
	HS2	513201	Heatsink, TO-220, Vertical-mount, 15°C/W	0.5x1.37in.	411910B02500	Comair Rotron	
1	J1	ED555/2DS	Terminal Block, 2-pin, 6-A, 3.5mm	0.27 x 0.25 inch	ED555/2DS	OST	70125
1	L1	3.7mH	Inductor, Common Mode, 3A	0.787 x 1.260 inch	ELF-21N030A	Panasonic	1,053,930
1	L2	33uH	Inductor, SMT, 1.1A, 310 milliohm	0.250 x 0.250 inch	MSS6132-333ML	Coilcraft	83,700
1	L3	470uH	Inductor, SMT, Isat 1.64-A, 786-milliohm	0.484 x 0.484 inch	MSS1278T-474KL	Coilcraft	269,336
1	Q1	SPP11N80	Trans, Cool MOS Power Nchan, 800V, 11A, 450 milliohm	TO-220AB	SPP11N80C3	Infineon	110700
1	Q100	MMBT3904LT1	Bipolar, NPN, xx-V, yy-mA, zz-W	SOT23	MMBT3904LT1	On Semi	14105
1	Q101	MMBT3906LT1	Bipolar, PNP, xx-V, yy-mA, zz-W	SOT23	MMBT3906LT1	On Semi	14105
1	R1	33	Resistor, Chip, 1/2W, 1% anti-surge	1210	ERJ-P14J330U	Panasonic	24200
3	R2	1.1M	Resistor, Metal Film, 1/4 watt, ± 1%	1206	Std	Std	20,000

	R3	1.1M	Resistor, Metal Film, 1/4 watt, ± 1%	1206	Std	Std	20,000
	R4	1.1M	Resistor, Metal Film, 1/4 watt, ± 1%	1206	Std	Std	20,000
1	R5	17.4K	Resistor, Chip, 1/16W, 1%	0603	Std	Std	9100
1	R6	150K	Resistor, Chip, 1/16W, 1%	0603	Std	Std	9100
1	R7	330	Resistor, Chip, 1/16W, 1%	0603	Std	Std	9100
1	R8	1.21M	Resistor, Chip, 1/16W, 1%	0603	Std	Std	9100
2	R9	470K	Resistor, Metal Film, 1/4 watt, ± 1%	1206	CRCW1206-xxxx-F	Vishay	20,000
	R10	470K	Resistor, Metal Film, 1/4 watt, ± 1%	1206	CRCW1206-xxxx-F	Vishay	20,000
1	R11	68K	Resistor, Chip, 1/16W, 1%	0603	Std	Std	9100
1	R14	2.2	Resistor, Chip, 1/10-W, 1%	0805	Std	Std	10560
1	R17	10	Resistor, Chip, 1/8W, 5%	1206	Std	Std	20000
1	R18	0.47	Resistor, Chip, 0.47-Ohms, 1-W, 1%	2512	Std	Std	35100
1	R19	2.21k	Resistor, Chip, 1/16W, 1%	0603	Std	Std	5650
3	R20	10k	Resistor, Chip, 1/16W, 1%	0603	Std	Std	5650
1	R21	2.67k	Resistor, Chip, 1/16W, 1%	0603	Std	Std	5650
1	R22	31.6k	Resistor, Chip, 1/16W, 1%	0603	Std	Std	5650
1	R23	49.9	Resistor, Chip, 1/16W, 1%	0603	Std	Std	5650
1	R24	294k	Resistor, Chip, 1/10W, 1%	0805	Std	Std	15,300
1	R25	15.4k	Resistor, Chip, 1/16W, 1%	0603	Std	Std	5650
1	R100	100	Resistor, Chip, 1/16W, 1%	0603	Std	Std	9100
1	R101	4.99k	Resistor, Chip, 1/16W, 1%	0603	Std	Std	9100
	R102	10k	Resistor, Chip, 1/16W, 1%	0603	Std	Std	5650
1	R103	20k	Resistor, Chip, 1/16W, 1%	0603	Std	Std	5650
	R104	10k	Resistor, Chip, 1/16W, 1%	0603	Std	Std	5650
1	T1	400 uH	Transformer, Forward	1.240 x 1.450 inch	G094023LF	GCI	1841500
10	TP1	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone	10
	TP2	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone	10
	TP3	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone	10
	TP4	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone	10
	TP5	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone	10
	TP6	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone	10
	TP7	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone	10
	TP8	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone	10
	TP9	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone	10
	TP11	5000	Test Point, Red, Thru Hole Color Keyed	0.100 x 0.100 inch	5000	Keystone	10
1	U1	UCC28810D	IC, LED LIGHTING POWER CONTROLLER	SO8	UCC28810D	TI	75900
1	U2	TCMT1107	IC, Photocoupler	MF4	TCMT1107	Vishay	47740
1	U3	TL431ADBZ	IC, Precision Adjustable Shunt Regulator	SOT23-3	TL431ADBZ	TI	16384

- 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.

## IMPORTANT NOTICE

Texas Instruments Incorporated and its subsidiaries (TI) reserve the right to make corrections, modifications, enhancements, improvements, and other changes to its products and services at any time and to discontinue any product or service without notice. Customers should obtain the latest relevant information before placing orders and should verify that such information is current and complete. All products are sold subject to TI's terms and conditions of sale supplied at the time of order acknowledgment.

TI warrants performance of its hardware products to the specifications applicable at the time of sale in accordance with TI's standard warranty. Testing and other quality control techniques are used to the extent TI deems necessary to support this warranty. Except where mandated by government requirements, testing of all parameters of each product is not necessarily performed.

TI assumes no liability for applications assistance or customer product design. Customers are responsible for their products and applications using TI components. To minimize the risks associated with customer products and applications, customers should provide adequate design and operating safeguards.

TI does not warrant or represent that any license, either express or implied, is granted under any TI patent right, copyright, mask work right, or other TI intellectual property right relating to any combination, machine, or process in which TI products or services are used. Information published by TI regarding third-party products or services does not constitute a license from TI to use such products or services or a warranty or endorsement thereof. Use of such information may require a license from a third party under the patents or other intellectual property of the third party, or a license from TI under the patents or other intellectual property of TI.

Reproduction of TI information in TI data books or data sheets is permissible only if reproduction is without alteration and is accompanied by all associated warranties, conditions, limitations, and notices. Reproduction of this information with alteration is an unfair and deceptive business practice. TI is not responsible or liable for such altered documentation. Information of third parties may be subject to additional restrictions.

Resale of TI products or services with statements different from or beyond the parameters stated by TI for that product or service voids all express and any implied warranties for the associated TI product or service and is an unfair and deceptive business practice. TI is not responsible or liable for any such statements.

TI products are not authorized for use in safety-critical applications (such as life support) where a failure of the TI product would reasonably be expected to cause severe personal injury or death, unless officers of the parties have executed an agreement specifically governing such use. Buyers represent that they have all necessary expertise in the safety and regulatory ramifications of their applications, and acknowledge and agree that they are solely responsible for all legal, regulatory and safety-related requirements concerning their products and any use of TI products in such safety-critical applications, notwithstanding any applications-related information or support that may be provided by TI. Further, Buyers must fully indemnify TI and its representatives against any damages arising out of the use of TI products in such safety-critical applications.

TI products are neither designed nor intended for use in military/aerospace applications or environments unless the TI products are specifically designated by TI as military-grade or "enhanced plastic." Only products designated by TI as military-grade meet military specifications. Buyers acknowledge and agree that any such use of TI products which TI has not designated as military-grade is solely at the Buyer's risk, and that they are solely responsible for compliance with all legal and regulatory requirements in connection with such use.

TI products are neither designed nor intended for use in automotive applications or environments unless the specific TI products are designated by TI as compliant with ISO/TS 16949 requirements. Buyers acknowledge and agree that, if they use any non-designated products in automotive applications, TI will not be responsible for any failure to meet such requirements.

Following are URLs where you can obtain information on other Texas Instruments products and application solutions:

### Products

Audio	<a href="http://www.ti.com/audio">www.ti.com/audio</a>
Amplifiers	<a href="http://amplifier.ti.com">amplifier.ti.com</a>
Data Converters	<a href="http://dataconverter.ti.com">dataconverter.ti.com</a>
DLP® Products	<a href="http://www.dlp.com">www.dlp.com</a>
DSP	<a href="http://dsp.ti.com">dsp.ti.com</a>
Clocks and Timers	<a href="http://www.ti.com/clocks">www.ti.com/clocks</a>
Interface	<a href="http://interface.ti.com">interface.ti.com</a>
Logic	<a href="http://logic.ti.com">logic.ti.com</a>
Power Mgmt	<a href="http://power.ti.com">power.ti.com</a>
Microcontrollers	<a href="http://microcontroller.ti.com">microcontroller.ti.com</a>
RFID	<a href="http://www.ti-rfid.com">www.ti-rfid.com</a>
OMAP Mobile Processors	<a href="http://www.ti.com/omap">www.ti.com/omap</a>
Wireless Connectivity	<a href="http://www.ti.com/wirelessconnectivity">www.ti.com/wirelessconnectivity</a>

### Applications

Communications and Telecom	<a href="http://www.ti.com/communications">www.ti.com/communications</a>
Computers and Peripherals	<a href="http://www.ti.com/computers">www.ti.com/computers</a>
Consumer Electronics	<a href="http://www.ti.com/consumer-apps">www.ti.com/consumer-apps</a>
Energy and Lighting	<a href="http://www.ti.com/energy">www.ti.com/energy</a>
Industrial	<a href="http://www.ti.com/industrial">www.ti.com/industrial</a>
Medical	<a href="http://www.ti.com/medical">www.ti.com/medical</a>
Security	<a href="http://www.ti.com/security">www.ti.com/security</a>
Space, Avionics and Defense	<a href="http://www.ti.com/space-avionics-defense">www.ti.com/space-avionics-defense</a>
Transportation and Automotive	<a href="http://www.ti.com/automotive">www.ti.com/automotive</a>
Video and Imaging	<a href="http://www.ti.com/video">www.ti.com/video</a>

TI E2E Community Home Page

[e2e.ti.com](http://e2e.ti.com)

Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265  
Copyright © 2011, Texas Instruments Incorporated