

### PMP4618 REV\_A BOM

COUNT	RefDes	Value	Description	Size	Part Number	MFR	AREA
1	C1	0.1 uF	Capacitor, Polypropilene, 400V, 10%	0.728 x 0.248 V	ECWF4104B	Panasonic	254,100
1	C2	10nF	Capacitor, Ceramic, 500V, X7R, 10%	1210	12107C103KAT2A	AVX	83,600
1	C3	0.15 uF	Capacitor, Film, 275VAC, 20%	0.689 x 0.217	ECQU2A154ML	Panasonic	97500
2	C4	470uF	Capacitor, Aluminum Electrolytic, 63V, ±20%, -40 to +105 °C	0.670 X 0.697 inch	EEVFK1J471M	Panasonic	532,000
	C5	470uF	Capacitor, Aluminum Electrolytic, 63V, ±20%, -40 to +105 °C	0.670 X 0.697 inch	EEVFK1J471M	Panasonic	532,000
1	C6	100uF	Capacitor, Aluminum, 25V, ±20%	0.328 x 0.328 inch	EEEFK1E101P	Panasonic	148,320
1	C7	47uF	Capacitor, Aluminum, 63V, ±20%	0.328 x 0.328 inch	EEEFK1J470P	Panasonic	182,450
1	C8	1000pF Y1	Capacitor, Cer. Disc, 250V, Y1	0.394 X 0.315 inch Max.	ECK-ANA102MB	Panasonic	128
1	C9	2.2nF	Capacitor, Ceramic, 50V, X7R, 10%	0603	Std	Std	5650
2	C10	47uF	Capacitor, Aluminum, SM, ±20%, 35V,	D Code	EEEFK1V470P	Panasonic	95700
3	C11	.1u	Capacitor, Ceramic, 16-V, [temp], [tol]	0805	std	muRata	10560
1	C12	10pF	Capacitor, Ceramic, 50V, NP0, 10%	0603	Std	muRata	5650
	C13	.1u	Capacitor, Ceramic, 16-V, [temp], [tol]	0805	std	muRata	10560
1	C14	DNP	Capacitor, Ceramic, 50V, X7R, 10%	0603	Std	Std	5650
	C15	47uF	Capacitor, Aluminum, SM, ±20%, 35V,	D Code	EEEFK1V470P	Panasonic	95700
1	C16	1uF	Capacitor, Ceramic, 25V, X5R, +/-10%	0805	std	std	10560
1	C17	220nF	Capacitor, Ceramic, 25V, X7R, 10%	0603	Std	Std	5650
	C100	.1u	Capacitor, Ceramic, 16-V, [temp], [tol]	0805	std	muRata	10560
1	D1	DF06S	Bridge Rectifier, 600V, 1A, Glass Passivated, SMD	DF-S	DF06S	Diodes	176412
2	D2	BYG10M	Diode, Standard Rectifier, 1.5A, 1000V	SMA	BYG10M	Vishay	29520
	D3	BYG10M	Diode, Standard Rectifier, 1.5A, 1000V	SMA	BYG10M	Vishay	29520
1	D4	S1KB	Diode, 1-A, 800-V	SMB	S1KB	Diodes Inc.	95000
1	D5	PDU540-13	Diode, 5A 400V Ultra-Fast Recovery	PowerDI 5	PDU540-13	Diodes	60800
1	D6	BAS16	Diode, Switching, 150-mA, 75-V, 350mW	SOT23	BAS16	Vishay-Liteon	14105
1	D7	MURA140T3	Diode, Rectifier, 1A, 400-V	SMA	MURA140T3	ON	29520
1	D8	15V	Diode, Zener, 15-V, 8.5-mA, 225-mW, 5%	SOT23	MMBZ5245BLT1	Motorola	13419
1	D9	MURA120T3	Diode, Rectifier, 1A, 200-V	SMA	MURA120T3	ON	29520
1	D10	51V	Diode, Zener, 51-V, 2.5-mA, 225-mW, 5%	SOT23	BZX84C51-7-F	Diodes	14105
1	D11	MBR0520L	Diode, Schottky, 0.5A, 20V	SOD-123	MBR0520L	Fairchild	19380
1	D12	12v	Diode, Zener, 12-V, yy-mA, zz-mW, q%	SOT23	MMBZ5242BLT1	Motorola	13419
1	D13	BAW56	Diode, Dual , 250-mA, 75 V	SOT23	BAW56-TP	Micro Commercial Co	14105
1	F1	1A/250V	Fuse, TR5 Series, 1A, 250V	0.335	3701100041	Wickmann	104,635
1	J1	ED555/2DS	Terminal Block, 2-pin, 6-A, 3.5mm	0.27 x 0.25 inch	ED555/2DS	OST	70125
1	JP100	PTC36SAAN	Header, 2-pin, 100mil spacing, (36-pin strip)	0.100 inch x 2	PTC36SAAN	Sullins	
1	L1	1mH	Inductor, SMT, 0.8A, 2 ohm	0.51x 0.37 inch	DO3340P-105ML	Coilcraft	212800
1	L2	20mH	Inductor, 0.5 A, 540 milliohm	0.512 x 0.728 inch	744822120	WE	410836
1	Q1	PZT2222A	Bipolar, NPN, 40-V, 1000-mA, 1-W	SOT223	PZT2222A	Fairchild	98600
1	Q2	STB7NK80ZT4	MOSFET, N-ch, 800-V, 5.2-A, 1.8 Ohm	SMD-220	STB7NK80ZT4	ST	326600
1	Q3	3904	Bipolar, NPN, xx-V, yy-mA, zz-W	SOT23			14105
2	R1	100K	Resistor, Chip, ¼ W, 5%	1210	STD	STD	30800
2	R2	22K	Resistor, 22KOhm, 1W, 5%	2512	STD	STD	35100
	R3	22K	Resistor, 22KOhm, 1W, 5%	2512	STD	STD	35100

	R4	100K	Resistor, Chip, ¼ W, 5%	1210	STD	STD	30800
2	R5	0.15	Resistor, Chip, 1/2W, 1%	1210	STD	STD	24200
1	R6	100K	Resistor, Chip, 1/16W, 1%	0603	Std	Std	9100
2	R7	10K	Resistor, Chip, 1/10W, yy%	0805	Std	Std	10560
1	R8	2.2	Resistor, Chip, 1/10W, 5%	0805	Std	Std	15300
2	R9	1.5M	Resistor, Chip, ¼ W, 5%	1210	STD	STD	30800
1	R10	6.98K	Resistor, Chip, 1/16W, 1%	0603	Std	Std	9100
2	R11	1K	Resistor, Chip, 1/16W, 1%	0603	Std	Std	5650
2	R12	23.7K	Resistor, Chip, 1/16W, 1%	0603	Std	Std	5650
	R13	1K	Resistor, Chip, 1/16W, 1%	0603	Std	Std	5650
	R14	1.5M	Resistor, Chip, ¼ W, 5%	1210	STD	STD	30800
	R15	23.7K	Resistor, Chip, 1/16W, 1%	0603	Std	Std	5650
1	R16	10	Resistor, Chip, 1/10-W, 1%	0805	Std	Std	10560
1	R17	2.49K	Resistor, Chip, 1/16W, 1%	0603	Std	Std	5650
	R18	10K	Resistor, Chip, 1/10W, yy%	0805	Std	Std	10560
1	R19	11K	Resistor, Chip, 1/16W, 1%	0603	Std	Std	9100
2	R20	47.5K	Resistor, Chip, 1/10W, 1%	0805	Std	Std	15,300
	R21	47.5K	Resistor, Chip, 1/10W, 1%	0805	Std	Std	15,300
1	R22	330	Resistor, Chip, 1/16W, 1%	0603	Std	Std	9100
1	R23	0.82	Resistor, Chip, 0.82-Ohms, 1-W, 1%	2512	Std	Std	35100
1	R24	2.21k	Resistor, Chip, 1/16W, 1%	0603	Std	Std	5650
3	R25	10k	Resistor, Chip, 1/16W, 1%	0603	Std	Std	5650
	R26	10k	Resistor, Chip, 1/16W, 1%	0603	Std	Std	5650
	R27	10k	Resistor, Chip, 1/16W, 1%	0603	Std	Std	5650
1	R28	3.32k	Resistor, Chip, 1/16W, 1%	0603	Std	Std	5650
	R100	0.15	Resistor, Chip, 1/2W, 1%	1210	STD	STD	24200
1	T1	G094010LF	Transformer, Continuous Mode Flyback	1.122 x 1.200 inch	G094010LF	GCI	1462500
5	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
1	U1	TL103WID	IC, Dual Op Amp With Internal Reference	SO8	TL103WID	TI	75900
1	U2	UCC28810D	IC, LED LIGHTING POWER CONTROLLER	SO8	UCC28810D	TI	75900
1	U3	TCMT1107	IC, Photocoupler	MF4	TCMT1107	Vishay	47740

- 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