Filename: Generated: BOM-PMP7413(001).xlsx 3/28/2014 9:50:37 AM PMP7413 Rev C Bill Of Materials

| | | 13 KeV C Bill Of I | | | | |
|-----------------------------------|----------|--------------------|---|------------------------------|--|------------------------|
| Designator | Quantity | Value | Description | PackageReference | PartNumber | Manufacturer |
| !PCB1 | 1 | 00.5 | Printed Circuit Board | 4000 | PMP7413 GRM31CR61C226KE15L | Any |
| C1, C8, C9, C10 | 4 | 22uF | CAP, CERM, 22uF, 16V, +/-10%, X5R, 1206 | 1206 | | MuRata |
| C2 | 1 | 0.22uF | CAP, Film, 0.22uF, 630V, +/-10%, TH | B32922_12.5mm | B32922C3224K | EPCOS Inc |
| C3 | 1 | 0.047uF | CAP, CERM, 0.047uF, 630V, +/-10%, X7R, 1210 | 1210 | GRM32DR72J473KW01L ESMQ451VSN101MP25S | MuRata |
| C4 | 1 | 100uF | CAP, AL, 100uF, 450V, +/-20%, TH | Cap 22x25mm 0603 | | Nippon Chemi-Con |
| C6, C26, C31, C100 | 4 | 0.1uF 4700uF | CAP, CERM, 50V, +/-10%, X7R, 0603 CAP, AL, 4700uF, 10V, +/-20%, 0.035 ohm, SMD | SMT Radial J16 | STD EEV-FK1A472M | STD |
| C7 C11, C21, C23, C25, C27 | 1 5 | 1uF | - / / / - / / - / - | 0603 | STD | Panasonic STD |
| | | | CAP, CERM, 25V, +/-10%, X7R, 0603 | | | |
| C13, C16, C28 | 3 | 1000pF | CAP, CERM, 50V, +/-10%, X7R, 0603 | 0603 | STD DE1E3KX222MA4BL01 | STD |
| C14 C15 | 1 | 2200pF 0.47uF | CAP, CERM, 2200pF, 250V, +/-20%, E, Cap, 7x12x9 mm CAP, CERM, 25V, +/-10%, X7R, 0603 | Cap, 7x12x9 mm 0603 | STD | MuRata STD |
| C17 | 1 | 4.7uF | CAP, CERM, 25V, +/-10%, X7R, 0803 CAP, CERM, 4.7uF, 50V, +/-10%, X5R, 0805 | 0805 | C2012X5R1H475K125AB | TDK |
| C18 | 1 | 150uF | CAP, AL, 150uF, 35V, +/-20%, 0.16 ohm, SMD | SMT Radial F | EEE-FK1V151P | Panasonic |
| C19 | 1 | 220pF | CAP, CERM, 50V, +/-10%, X7R, 0603 | 0603 | STD | STD |
| C20, C29, C30 | 3 | 0.01uF | CAP, CERM, 50V, +/-10%, X7R, 0003 | 0603 | STD | STD |
| C20, C29, C30 | 1 | 330pF | CAP, CERM, 50V, +/-10%, X7R, 0003 | 0603 | STD | STD |
| C24 | 1 | 0.047uF | CAP, CERM, 50V, +/-10%, X7K, 0603 CAP, CERM, 50V, +/-10%, X7R, 0603 | 0603 | STD | STD |
| D1, D5, D8, D9, D11, D12, | 9 | 100V | Diode, Switching, 100V, 0.2A, SOD-123 | SOD-123 | MMSD4148T1G | ON Semiconductor |
| D13, D14, D16 | | | | | | |
| D4 | 1 | 75V | Diode, Switching, 75V, 0.3A, SOT-23 | SOT-23 | BAV99-7-F | Diodes Inc. |
| D6 | 1 | 91V | Diode, Zener, 91V, 500mW, SOD-123 | SOD-123 | MMSZ5270BT1G | ON Semiconductor |
| D7 | 1 | 30V | Diode, Schottky, 30V, 0.2A, SOT-23 | SOT-23 | BAT54S-7-F | Diodes Inc. |
| D15 | 1 | 3.6V | Diode, Zener, 3.6V, 500mW, SOD-123 | SOD-123 | MMSZ4685-V | Vishay-Semiconductor |
| F1 | 1 | | Fuse, 2A, 250V, TH | TR5 fuse 8.5mm DIA | 37212000001 | Littelfuse |
| J1 | 1 | | Terminal Block, 6A, 3.5mm Pitch, 2-Pos, TH | 7.0x8.2x6.5mm | ED555/2DS | On-Shore Technology |
| L1 | 1 | 4uH | Inductor, Shielded E Core, Ferrite, 4uH, 25A, 0.00194 ohm, SMD | SER2014 | SER2014-402MLB | Coilcraft |
| L2 | 1 | 1mH | Inductor, Shielded Drum Core, Ferrite, 1mH, 0.11A, 16.3 ohm, SMD | LPS4414 | LPS4414-105MLB | Coilcraft |
| Q3, Q10 | 2 | 30V | MOSFET, N-CH, 30V, 100A, SON 5x6mm | SON 5x6mm | CSD17501Q5A | Texas Instruments |
| Q4 | 1 | 800V | MOSFET N-CH 800V 3A DPAK | DPAK | STD4NK80ZT4 | STMicroelectronics |
| Q5 | 1 | 1.6V | Transistor, PNP, 60V, 0.8A, SOT-23 | SOT-23 | MMBT2907A | Fairchild Semiconducto |
| Q6 | 1 | 0.4V | Transistor, NPN, 400V, 1A, TO-92 | TO-92 | PHE13003A,126 | NXP Semiconductor |
| Q9 | 1 | 800V | MOSFET N-CH 800V 5.2A D2PAK | DDPAK | STB7NK80ZT4 | STMicroelectronics |
| Q12 | 1 | 60V | MOSFET, N-CH, 60V, 0.17A, SOT-23 | SOT-23 | 2N7002-7-F | Diodes Inc. |
| R1, R13, R23 | 3 | 10 | RES, 1%, 0.1W, 0603 | 0603 | STD | STD |
| R2, R3, R4, R19, R28, R34, R37 | 7 | 10k | RES, 1%, 0.1W, 0603 | 0603 | STD | STD |
| R5, R6, R9, R10 | 4 | 499k | RES, 1%, 0.25W, 1206 | 1206 | STD | STD |
| R7 | 1 | 200k | RES, 1%, 1W, 2512 | 2512 | STD | STD |
| R8 | 1 | 3.3 | RES, 1%, 0.1W, 0603 | 0603 | STD | STD |
| R11 | 1 | 51.1 | RES, 1%, 0.1W, 0603 | 0603 | STD | STD |
| R12, R18 | 2 | 1MEG | RES, 1%, 0.25W, 1206 | 1206 | STD | STD |
| R14, R15 | 2 | 0.005 | RES, 1%, 1W, 2512 | 2512 | STD | STD |
| R17 | 1 | 3.01k | RES, 1%, 0.1W, 0603 | 0603 | STD | STD |
| R20, R40 | 2 | 0 | RES, 1%, 0.1W, 0603 | 0603 | STD | STD |
| R21 | 1 | 0.22 | RES, 1%, 1W, 2010 | 2010 | STD | STD |
| R22 | 1 | 12.4k | RES, 1%, 0.1W, 0603 | 0603 | STD | STD |
| R24 | 1 | 20.0k | RES, 20.0k ohm, 1%, 0.1W, 0603 | 0603 | CRCW060320K0FKEA | Vishay-Dale |
| R25, R36 | 2 | 499 | RES, 1%, 0.1W, 0603 | 0603 | STD | STD |
| R26 | 1 | 84.5k | RES, 1%, 0.1W, 0603 | 0603 | STD | STD |
| R27, R30, R32, R41, R43 | 5 | 1k | RES, 1%, 0.1W, 0603 | 0603 | STD | STD |
| R29 | 1 | 110k | RES, 110k ohm, 1%, 0.1W, 0603 | 0603 | CRCW0603110KFKEA | Vishay-Dale |
| R31, R38 | 2 | 100k | RES, 1%, 0.1W, 0603 | 0603 | STD | STD |
| R33 | 1 | 7.5k | RES, 1%, 0.1W, 0603 | 0603 | STD | STD |
| R35 | 1 | 4.99k | RES, 4.99k ohm, 1%, 0.1W, 0603 | 0603 | CRCW06034K99FKEA | Vishay-Dale |
| R39 | 1 | 2.49k | RES, 1%, 0.1W, 0603 | 0603 | STD | STD |
| R42 | 1 | 40.2k | RES, 1%, 0.1W, 0603 | 0603 | STD | STD |
| T1 | 1 | 700uH | Power Transformer, TH | 30.48x25.4x40.64mm | RLTI-1107 | Renco Electronics |
| T2 | | 300uH | Gate Drive Transformer, 300uH, TH | 13.97x13.3x13.97mm | G044052LF | GCI Technologies |
| TP1 | 1 | Red | Test Point, Multipurpose, Red, TH | Red Multipurpose Testpoint | 5010 | Keystone |
| TP2 | 1 | Black | Test Point, Multipurpose, Black, TH | Black Multipurpose Testpoint | 5011 | Keystone |
| TP3, TP5 | 2 | Red | Test Point, Miniature, Red, TH | Red Miniature Testpoint | 5000 | Keystone |
| TP4, TP6 | 2 | Black | Test Point, Miniature, Black, TH | Black Miniature Testpoint | 5001 | Keystone |
| U1 | 1 | | Advanced Active Clamp PWM Controller with Current-Mode Control, -40 to | PW0020A | UCC2897APWR | Texas Instruments |
| • 1 | <u>'</u> | | +125 degC, 20-pin TSSOP (PW), Green (RoHS & no Sb/Br) | | | |
| U2, U4 | 2 | | OptoCoupler, Phototransitor, 80-160%, SSOP-4 | 7x2.12x2.6mm | VOS617A-7X001T | Vishay-Semiconductor |
| U3 | 1 | | PRECISION PROGRAMMABLE REFERENCE, DBZ0003A | DBZ0003A | TL431AIDBZ | Texas Instruments |
| U5 | 1 | | DUAL D-TYPE POSITIVE-EDGE-TRIGGERED FLIP-FLOPS WITH CLEAR AND PRESET, PW0014A | | SN74AHCT74PW | Texas Instruments |
| U6 | 1 | | DUAL OPERATIONAL AMPLIFIERS WITH INTERNAL REFERENCE, | D0008A | TL103WAID | Texas Instruments |
| | | | IDUAL OF LIVATIONAL AWITH HING WITH INTERNAL REFERENCE. | DUUUUA | II LIUSWAID | LI DAGO IIIOU UIIIUU |

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