

PMP41037_Power REV E1 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB	1		PMP41037_Power	Any	Printed Circuit Board	
C1, C4, C7, C16, C20, C23, C32, C35, C50	9	1uF	GRM188R71E105KA12D	MuRata	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0603	0603
C2, C45	2	33nF	R76QI23305050J	KEMET	CAP, Film, 33nF, 600 V, +/- 5%, TH	18x6x12mm
C3, C6, C12, C15, C21, C22, C26, C27, C33, C34, C38, C49	12	1000pF	GRM188R71H102JA01D	MuRata	CAP, CERM, 1000 pF, 50 V, +/- 5%, X7R, 0603	0603
C5, C8, C9	3	100pF	885012006057	Wurth Elektronik	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C10, C28, C29	3	0.1uF	GRM188R71H104KA93D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
C11, C25, C37	3	10nF	CGA3E2X7R1H103K080AA	TDK	Cap Ceramic 10nF 50V X7R 10% Pad SMD 0603 +125°C Automotive T/R	0603
C13	1	0.1uF	GRM188R71E104KA01D	MuRata	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, 0603	0603
C14, C47	2	4.7uF	GRM188R61E475KE11D	MuRata	CAP, CERM, 4.7 uF, 25 V, +/- 10%, X5R, 0603	0603
C17, C24, C31, C36	4	0.1uF	C0603C104K5RACTU	Kemet	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
C18, C19	2	22uF	C1608X5R1A226M080AC	TDK	CAP, CERM, 22 uF, 10 V, +/- 20%, X5R, 0603	0603
C30, C40, C41, C42, C43, C44	6	22uF	450BXW22MEFR10X30	Rubycon	CAP, AL, 22 uF, 450 V, +/- 20%, TH	D10xL32mm
C39	1	10pF	GRM1885C2A100JA01D	MuRata	CAP, CERM, 10 pF, 100 V, +/- 5%, C0G/NP0, 0603	0603
C46	1	2200pF	GRM31BR73A222KW01L	MuRata	CAP, CERM, 2200 pF, 1000 V, +/- 10%, X7R, 1206	1206
C48	1	1000pF	GCJ188R71H102KA01D	MuRata	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0603	0603
C51	1	100pF	06033C101KAT2A	AVX	CAP, CERM, 100 pF, 25 V, +/- 10%, X7R, 0603	0603
CS1, CS2, CS3, CS4, CS5, CS6, CS7, CS8, CS9, CS10, CS11	11		CopperStrip 2*8		Copper Strip 8mm*2mm	
CS12, CS13, CS14	3		CopperStrip 2*12		Copper Strip 2mm*12mm	
D1, D2, D3, D4	4	220V	BZG03C220-M	Vishay Semiconductors	Diode, Zener, 220 V, 3 W, SMA	SMA
D5	1	100V	BAS316,115	Nexperia	Diode, Ultrafast, 100 V, 0.25 A, SOD-323	SOD-323
J1	1		282843-2	TE Connectivity	Terminal Block, 10.16mm, 2x1, Tin, TH	Terminal Block, 10.16mm, 2x1, TH
J2	1		850-10-050-10-001101	Preci-dip	Header, 50x1, 1.27mm, TH	Connector, 50x1, TH
J3, J4, J5, J6, J7	5		SSQ-102-03-G-S	Samtec	Receptacle, 2.54mm, 2x1, Gold, TH	Receptacle, 2.54mm, 2x1, TH
J8	1		61300311021	Wurth Elektronik	Header, 2.54 mm, 3x1, Gold, R/A, TH	Header, 2.54 mm, 3x1, R/A, TH
K1	1		TX2-12V	Panasonic	General Purpose Relay DPDT (2 Form C) Through Hole	PTH_RELAY
L1	1		YXS50494T	YAXIN ELECTRONIC TECH	RESONANT CHOKE, PQ2016, 12uH 3A 100kHz	PQ2016
L2	1	10uH	74438357100	Wurth Elektronik	Inductor, Shielded, Metal Composite, 10 uH, 2.7 A, 0.11 ohm, SMD	4.1x4.1mm
LBL1	1		THT-14-423-10	Brady	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	PCB Label 0.650 x 0.200 inch
Q1	1	60V	2N7002E-T1-E3	Vishay-Siliconix	MOSFET, N-CH, 60 V, 0.24 A, SOT-23	SOT-23

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R2, R3, R4, R11, R14, R17, R36, R37, R38	9	1.00Meg	ERJ-8ENF1004V	Panasonic	RES, 1.00 M, 1%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
R5, R15, R18, R19, R20, R22, R25, R26, R27, R28, R30, R31, R41	13	10.0k	RC0603FR-0710KL	Yageo	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R6, R8, R24, R32	4	13.0k	RC0603FR-0713KL	Yageo	RES, 13.0 k, 1%, 0.1 W, 0603	0603
R7, R16, R29	3	51	RC0603FR-0751RL	Yageo	RES, 51.0, 1%, 0.1 W, 0603	0603
R10	1	0	RMCF0603ZT0R00	Stackpole Electronics Inc	RES, 0, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R12, R42	2	9.10k	RC0603FR-079K1L	Yageo	RES, 9.10 k, 1%, 0.1 W, 0603	0603
R13	1	1.02k	RC0603FR-071K02L	Yageo	RES, 1.02 k, 1%, 0.1 W, 0603	0603
R23, R43, R46	3	0	MCR18EZJH000	Rohm	RES, 0, 5%, 0.25 W, 1206	1206
R33	1	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
R35	1	13.7k	CRCW060313K7FKEA	Vishay-Dale	RES, 13.7 k, 1%, 0.1 W, 0603	0603
R39	1	10.0k	ERJ-3EKF1002V	Panasonic	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R40	1	51.1	RC0603FR-0751R1L	Yageo	RES, 51.1, 1%, 0.1 W, 0603	0603
RT1	1	250	PTCEL17R251SBE	Vishay	PTC EL LDD 16D5 250R 860 135 B E	PTCEL17R251SBE
TP1, TP2	2		5010	Keystone	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
TP3, TP5	2		5011	Keystone Electronics	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
TP4, TP14	2		RCU-0C	TE Connectivity	PC Test Point, SMT	1.6x0.8mm
TRAN1	1		YXS61041T	YAXIN ELECTRONIC TECH	1000W MAIN TRANSFORMER	PQ3230
U1	1		ACS733KLATR-20AB-T	Allegro Microsystems	1MHz Hall sensor	SOIC16
U2, U6, U9	3		TLV6001IDCKR	Texas Instruments	1-MHz, Low-Power Operational Amplifier for Cost-Sensitive Systems, DCK0005A (SOT-SC70-5)	DCK0005A
U3	1		LMR51420XDDCR	Texas Instruments	LMR51420XDDCR	SOT23-6
U4	1		TLV7011DCKR	Texas Instruments	Low power, small size comparator with push-pull output, DCK0005A (SOT-SC70-5)	DCK0005A
U5, U8	2		AMC1311BDWVR	Texas Instruments	Precision, 2-V Input, Reinforced Isolated Amplifier, DWV0008A (SOIC-8)	DWV0008A
U7	1		TLV76050DBZR	Texas Instruments	100-mA, 30-V, Fixed-Output, Linear-Voltage Regulator, DBZ0003A (SOT-23-3)	DBZ0003A