

Variant: 001
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PMP41140 REV E1 Bill of Materials



Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	C1, C2, C10, C13, C14, C17, C18, C21, C49	9	0.1uF	06035C104KA22A	AVX	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
2	C3, C6, C19, C22, C23	5	2.2uF	EMK107BB7225MA-T	Taiyo Yuden	CAP, CERM, 2.2 uF, 16 V, +/- 10%, X7R, 0603	0603
3	C4	1	0.47uF	450MPK474J	Rubycon	CAP, Film, 0.47 uF, 450 V, +/- 5%, TH	18x6.5mm
4	C5	1	0.33uF	B3522N6334J000	TDK	CAP, Film, 0.33 uF, 450 V, +/- 5%, AEC-Q200 Grade 1, TH	18x7mm
5	C8	1	33pF	C0603C330J5GACTU	Kemet	CAP, CERM, 33 pF, 50 V, +/- 5%, COG/NP0, 0603	0603
6	C9	1	0.1uF	GCM1188R71G104KA37J	MuRata	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
7	C11	1	75pF	GRM1885C1H750JA01D	MuRata	CAP, CERM, 75 pF, 50 V, +/- 5%, COG/NP0, 0603	0603
8	C12	1	10uF	GRM188R61E106KA73D	MuRata	CAP, CERM, 10 uF, 25 V, +/- 10%, X5R, 0603	0603
9	C15, C16	2	22uF	GRM21BR61E226ME44L	MuRata	CAP, CERM, 22 uF, 25 V, +/- 20%, X5R, 0805	0805
10	C20	1	0.01uF	CL10B103K88NCNC	Samsung Electro-Mechanics	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, 0603	0603
11	C24	1	0.022uF	GRM1158R71H223KA12D	MuRata	CAP, CERM, 0.022 uF, 50 V, +/- 10%, X7R, 0402	0402
12	C26, C27, C28, C30, C41, C42, C43, C44	8	4.7uF	GRM31CC72A475KE11L	Murata	4.7uF ±10% 100V Ceramic Capacitor X7S 1206 (3216 Metric)	1206
13	C36, C37, C38	3	0.022uF	VJ1206Y223KXGAT5Z	Vishay-Vitramon	CAP, CERM, 0.022 uF, 1000 V, +/- 10%, X7R, 1206	1206
14	C39	1	1uF	C1608X7R1E105K080AB	TDK	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0803	0803
15	C46, C47	2	68pF	C1005C0G1H680J050BA	Yageo	CAP, CERM, 68 pF, 50 V, +/- 5%, COG/NP0, 0402	0402
16	C52, C53	2	680uF	A750MW687M1VAAE018	KEMET	CAP, 680 uF, 35 V, +/- 20%, TH	D10xL25mm
17	C58	1	1uF	CGA3E1X7R1V105K080AE	TDK	CAP, CERM, 1 uF, 35 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
18	C59, C60	2	0.1uF	C1210V104KRACTU	Kemet	CAP, CERM, 0.1 uF, 500 V, +/- 10%, X7R	0603
19	C61	1	1000pF	CC0805KRX7R9BB102	Yageo America	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0805	0805
20	C62	1	82uF	450KXW82MEFC16X40	Rubycon	82 uF 450 V Aluminum Electrolytic Capacitors Radial, Can 2000 Hrs @ 105°C	RADIAL
21	C66	1	470pF	CGA2B2X7R1H471K050BA	TDK	CAP, CERM, 470 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
22	C68	1	0.1uF	0603YC104JA72A	AVX	CAP, CERM, 0.1 uF, 16 V, +/- 5%, X7R, 0603	0603
23	C75, C81	2	2200pF	C0603X222KSRACTU	Kemet	CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, 0603	0603
24	C78	1	4700pF	GRM188R71H472KA01D	MuRata	CAP, CERM, 4700 pF, 50 V, +/- 10%, X7R, 0603	0603
25	C79	1	1000pF	C0603C102F3GACTU	Kemet	CAP, CERM, 1000 pF, 25 V, +/- 1%, COG/NP0, 0603	0603
26	C82, C83	2	10uF	EMK107BBJ106MA-T	Taiyo Yuden	CAP, CERM, 10 uF, 16 V, +/- 20%, X5R, 0603	0603
27	C86	1	1uF	CC0603MRX5R7BB105	Yageo America	CAP, CERM, 1 uF, 16 V, +/- 20%, X5R, 0603	0603
28	C88	1	470pF	GCM1885C1H471JA16D	MuRata	CAP, CERM, 470 pF, 50 V, +/- 5%, COG/NP0, AEC-Q200 Grade 1, 0603	0603
29	C90	1	1uF	C1608X7R1E105K080AB	TDK	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0803	0803
30	D2	1	200V	RF071M2S	Rohm	Diode, Ultrafast, 200 V, 1 A, SOD-123	SOD-123
31	D3	1	100V	BAV99.215	Neperia	Diode, Switching, 100 V, 0.215 A, SOT-23	SOT-23
32	D4	1	200V	BAS20HT1G	ON Semiconductor	Diode, Switching, 200 V, 0.2 A, AEC-Q101, SOD-323	SOD-323
33	J1	1		HSEC8-160-01-L-DV-A-BL	Samtec	C2000 controlCARD-120HSEC connector, SMT	C2000 pin numbering
34	J2, J3	2		TSW-102-07-G-S	Samtec	Header, 100mil, 2x1, Gold, TH	2x1 Header
35	J4	1		PBC030AAN	Sullins Connector Solutions	Header, 100mil, 3x2, Gold, TH	Sullins 100mil, 2x3, 230 mil above insulator
36	J5	1		PBC02DAAN	Sullins Connector Solutions	Header, 2.54mm, 2x2, Gold, TH	Header, 2.54mm, 2x2, TH
37	L2	1	15uH	7447714150	Würth Elektronik	Inductor, Shielded Drum Core, Ferrite, 15 uH, 3.5 A, 0.036 ohm, SMD	SMD
38	OUT, VIN	2		282843-2	TE Connectivity	Terminal Block, 10.16mm, 2x1, Tin, TH	Terminal Block, 10.16mm, 2x1, TH
39	Q1, Q2	2			Infineon Technologies	Insulated-Gate Field-Effect Transistor (IGFET), N-Channel, Enhancement, Body Diode, Pin 1 Source, 2 Source, 3 Source, 4 Gate, 5 Drain, 6 Drain, 7 Drain, 8 Drain, 9 Pins	PG-TDSON-8-59
40	Q3	1	60V	2N7002KW	Fairchild Semiconductor	MOSFET, N-CH, 60 V, 0.31 A, SOT-23	SOT-23
41	Q4	1	30V	CSD87312Q3E	Texas Instruments	MOSFET, 2-CH, N-CH, 30 V, 27 A, DPB00008A (VSON-8)	DPB00008A
42	R1	1	100	CRCW0603100RJNEA	Vishay-Dale	RES, 100, 5%, 0.1 W, 0603	0603
43	R2, R11	2	100k	CRCW0603100KJNEAC	Vishay-Dale	RES, 100 k, 5%, 0.1 W, 0603	0603
44	R3, R4	2	1.0Meg	CRCW06031M0JNEA	Vishay-Dale	RES, 1.0 M, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
45	R5	1	510k	RC0603FR-07510KL	Yageo	RES, 510 k, 1%, 0.1 W, 0603	0603
46	R6	1	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
47	R7	1	105k	CRCW0603105KFKEA	Vishay-Dale	RES, 105 k, 1%, 0.1 W, 0603	0603
48	R8	1	13.3k	CRCW060313K3FKEA	Vishay-Dale	RES, 13.3 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
49	R12, R19	2	0	ERJ-2GE0R00X	Panasonic	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0402	0402
50	R13	1	10.0k	CRCW060310KJFKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
51	R15, R16	2	49.9	CRCW040249R9FKED	Vishay-Dale	RES, 49.9, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
52	R17, R56, R65	3	0	RMCF06032TOR00	Stackpole Electronics Inc.	RES, 0, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
53	R18	1	10.0Meg	CRCW120610M0FKEA	Vishay-Dale	RES, 10.0 M, 1%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
54	R20	1	402k	ERJ-3EKF4023V	Panasonic	RES, 402 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
55	R23	1	300	RC0603FR-07300RL	Yageo	RES, 300, 1%, 0.1 W, 0603	0603
56	R25, R26, R29, R31, R41, R44, R63, R67	8	0	ERJ-3GEY0R00V	Panasonic	RES, 0, 5%, 0.1 W, 0603	0603
57	R27	1	47.0k	RT0603DRE0747KL	Yageo America	RES, 47.0 k, 0.5%, 0.1 W, 0603	0603
58	R28	1	20.0k	ERJ-3EKF2002V	Panasonic	RES, 20.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
59	R30	1	1	RC0603FR-071RL	Yageo	RES, 1, 0%, 0.1 W, 0603	0603
60	R35	1	10	CRCW120610RJNEA	Vishay-Dale	RES, 10, 5%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
61	R36, R37, R40	3	3.32Meg	CRCW12063M32FKEA	Vishay-Dale	RES, 3.32 M, 1%, 0.25 W, 1206	1206
62	R38, R62, R66, R69	4	10.0k	M55342K12B10E0T	TT Electronics/IRC	RES, 10.0 k, 1%, 0.1 W, 0603	0603
63	R42, R49, R73, R77	4	10k	CRCW060310K0JNEA	Vishay-Dale	RES, 10 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
64	R43	1	66.5k	RC0603FR-0766KSL	Yageo	RES, 66.5 k, 1%, 0.1 W, 0603	0603
65	R58	1	1.65k	RC0603FR-071K6SL	Yageo	RES, 1.65 k, 1%, 0.1 W, 0603	0603
66	R61, R70	2	20.0k	CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, 0603	0603
67	R71, R79	2	58k	CRCW060358KJNEA	Vishay-Dale	RES, 58 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
68	R81	1	47k	CRCW040247KJNEA	Vishay-Dale	RES, 47 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
69	RB2, RB3	2	0.2	CSR1206FRK200	Stackpole Electronics Inc.	RES, 0.2, 1%, 0.5 W, 1206	1206
70	RT1	1		TMPB131DECR	Texas Instruments	Thermistor, DECO002A (X1SON-2)	DECO002A
71	T2	1		PMP41140XFMRE1	Texas Instruments	PMP41140XFMRE1	PTH10
72	TP1, TP2, TP3, TP4, TP5, TP6, TP7, TP8, TP11	9		5003	Keystone	Test Point, Miniature, Orange, TH	Orange Miniature Testpoint
73	TP9, TP10, TP11, TP12, TP13, TP14, TP15, TP16, TP17	9		5006	Keystone Electronics	Test Point, Compact, Black, TH	Black Compact Testpoint
74	U1, U4, U5	3		TLV74333PDBVR	Texas Instruments	Low-Dropout Regulator, DBV0005A (SOT-23-5)	DBV0005A
75	U2	1		TLVH431BCDBZT	Texas Instruments	Low-Voltage Adjustable Precision Shunt Regulator, 80 mA, 0 to 70 degC, 3-pin SOT-23 (DB2), Green (RoHS & no Sb/Bi)	DB20003A
76	U3	1		TPS54202DDCR	Texas Instruments	4.5V to 28V Input, 2A Output, EMI Friendly Synchronous Step-Down Converter, DDC0006A (SOT-23-THIN-6)	DDC0006A
77	U6	1		LMG2650	Texas Instruments	650-V 100-mA GaN Half Bridge with Integrated Driver and Current Sense Emulation	VQFN19
78	U7	1		MP6908AGJ-Z	Monolithic Power Systems	FAST TURN-OFF INTELLIGENT RECTIF	TSOT23-6
79	U10	1		TLV9061IDBVR	Texas Instruments	10-MHz, RRIO, CMOS Operational Amplifier for Cost-Sensitive Systems, DBV0005A (SOT-23-5)	DBV0005A
80	U11	1		AMC1311BDWVR	Texas Instruments	Precision, 2-V Input, Reinforced Isolated Amplifier, DWW0008A (SOIC-8)	DWW0008A
81	U14	1		OPA2365AID	Texas Instruments	50 MHz, Low-Noise Single-Supply Rail-to-Rail Operational Amplifier, 2.2 to 5.5 V, -40 to 125 degC, 8-pin SOIC (DB), Green (RoHS & no Sb/Bi)	DO0008A