

Variant: 001
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PMP41166_GaN REV C Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPCB	1		PMP41166_GaN	Any	Printed Circuit Board	
2	BULK, PGND, SW, TP1, TP2, TP3	6		3621-0-32-15-00-00-08-0	Mill-Max		
3	C1, C4, C24	3	4.7uF	GRT188C81E475KE13D	MuRata	CAP, CERM, 4.7 uF, 25 V, +/- 10%, X6S, AEC-Q200 Grade 2, 0603	0603
4	C2, C22, C25	3	10uF	CGA4J1X7S1E106K125AC	TDK Corporation	Cap Ceramic 10uF 25V X7S 10% Pad SMD 0805 +125°C Automotive T/R	0805
5	C3, C23, C28	3	4.7uF	GCM21BR71C475KA73L	MuRata	CAP, CERM, 4.7 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
6	C5, C6, C7, C8, C9, C10	6	0.1uF	C3225X7T2J104K160AC	TDK	CAP, CERM, 0.1 uF, 630 V, +/- 10%, X7T, 1210	1210
7	C11, C30, C44, C58	4	10uF	GRM188R61E106MA73D	MuRata	CAP, CERM, 10 uF, 25 V, +/- 20%, X5R, 0603	0603
8	C12, C13, C14, C15, C16, C17, C18, C19, C32, C33, C34, C35, C36, C37, C38, C39	16				Multilayer Ceramic Capacitors 2.2uF ±10% 450V X6S SMD 2220	
9	C20, C57, C80, C96	4	0.1uF	GRM188R70J104KA01D	MuRata	CAP, CERM, 0.1 uF, 6.3 V, +/- 10%, X7R, 0603	0603
10	C21, C40, C45, C59	4	0.22uF	GCM155R71C224KE02D	MuRata	CAP, CERM, 0.22 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
11	C26, C63, C86, C98	4	68pF	C1005C0G1H680J050BA	TDK	CAP, CERM, 68 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
12	C27, C42, C47, C61	4	100pF	CGA2B2C0G1H101J050BA	TDK	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0402	0402
13	C29, C43, C48, C62	4	2.2uF	GRM155R61E225KE11D	Murata	2.2uF ±10% 25V Ceramic Capacitor X5R 0402 (1005 Metric)	0402 (1005 metric)
14	C31, C41, C46, C60	4	22pF	GRM1555C1H220JA01D	MuRata	CAP, CERM, 22 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
15	C49	1	0.1uF	C1005X7R1H104K050BB	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0402	0402
16	C50, C100	2	330pF	GRM1555C1H331FA01J	MuRata	CAP, CERM, 330 pF, 50 V, +/- 1%, C0G/NP0, 0402	0402
17	C51, C52	2	0.1uF	CGA2B3X7R1E104K050BB	TDK	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
18	C53, C54, C55	3	1uF	GRM155R61E105MA12D	MuRata	CAP, CERM, 1 uF, 25 V, +/- 20%, X5R, 0402	0402
19	C56	1	100pF	0402YC101KAT2A	AVX	CAP, CERM, 100 pF, 16 V, +/- 10%, X7R, 0402	0402
20	D1, D4, D7	3		KMB24STR	SMC Diode Solutions	Bridge Rectifier Single Phase Schottky 40V Surface Mount MBS	SMD4
21	D2, D3, D5, D6	4	150V	ZGL41-150A-E3/96	Vishay-Semiconductor	Diode, Zener, 150V	DO-213AB
22	D8, D9, D10, D11	4	16V	BZT52C16-7-F	Diodes Inc.	Diode, Zener, 16 V, 500 mW, AEC-Q101, SOD-123	SOD-123
23	J2	1		TSW-106-08-G-D-RA	Samtec	Header, 100mil, 6x2, Gold, R/A, TH	6x2 R/A Header
24	L1, L2, L3	3		ACM2012-900-2P-T001	TDK	2 Line Common Mode Choke Surface Mount 90 Ohms @ 100MHz 400mA DCR 190mOhm	SMD4
25	L4, L5, L6, L7	4	4.7uH	MPIA2510V2-4R7-R	Eaton	4.7uH Shielded Molded Inductor 1.22A 262mOhm Max 1008 (2520 Metric)	1008
26	R1, R2, R3, R4	4	3.3k	CRCW04023K30JNED	Vishay-Dale	RES, 3.3 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
27	R5, R8, R11, R25	4	0	MCR03E2PJ000	Rohm	RES, 0, 5%, 0.1 W, 0603	0603
28	R6, R9, R12, R27	4	300	CRCW0402300RJNED	Vishay-Dale	RES, 300, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
29	R7, R10, R13, R14	4	69.8k	MCR01MZPF6982	Rohm	RES, 69.8 k, 1%, 0.063 W, 0402	0402
30	R28, R40, R60, R74	4	49.9	CRCW040249R9FKED	Vishay-Dale	RES, 49.9, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
31	R30, R63	2	10	PHP01206E10R0BST5	Vishay-Dale	RES, 10.0, 0.1%, 1 W, 1206	1206
32	R42, R46, R48	3	348k	RC1206FR-07348KL	Yageo America	RES, 348 k, 1%, 0.25 W, 1206	1206
33	R53	1	7.50k	CRCW04027K50FKED	Vishay-Dale	RES, 7.50 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
34	T1, T2, T3	3	475uH	760390014	Würth Elektronik	Transformer, 475uH, SMT	10.05x4.19x6.73 mm
35	Thermal Transfer Printable Labels	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
36	U1	1		TLV70450DBVR	Texas Instruments	Single Output LDO, 150 mA, Fixed 5 V Output, 2.5 to 24 V Input, with Ultra-Low IQ, 5-pin SOT-23 (DBV), -40 to 125 degC, Green (RoHS & no Sb/Br)	DBV0005A
37	U2	1		AMC0311DDWVR	Texas Instruments	Precision, 2V Input, Basic and Reinforced Isolated Amplifiers With Fixed Gain Differential Output	SOIC-WB8
38	U3	1		TLV9061IDBVR	Texas Instruments	10-MHz, RRIO, CMOS Operational Amplifier for Cost-Sensitive Systems, DBV0005A (SOT-23-5)	DBV0005A
39	U4, U7, U10, U11	4		LMG3522R030-Q1	Texas Instruments	650-V 30-mΩ GaN FET with Integrated Driver, Protection, and Temperature Reporting	VQFN52
40	U5, U8, U12	3		SN6505BQDBVTQ1	Texas Instruments	Transformer Driver PMIC SOT-23-6	SOT-23-6
41	U6, U9, U13, U16	4		ISO7710FDR	Texas Instruments	General Purpose Digital Isolator 3000Vrms 1 Channel 100Mbps 85kV/μs CMTI 8-SOIC (0.154", 3.90mm Width)	SOIC8