

Variant: 001
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PMP41166_GaN REV D Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	PCB	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, C25, C69	3	1uF	CC0402MRX5R6BB105	Yageo America	CAP, CERM, 1 µF, 10 V, +/- 20%, X5R, 0402	0402
4	C2, C4, C23, C28, C51, C52, C65, C67, C70, C72, C74	11	0.1uF	CGA2B3X7R1E104K050BB	TDK	CAP, CERM, 0.1 µF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
5	C3, C22, C64, C66, C71, C73	6	10uF	C1608X5R1E106M080AC	TDK	CAP, CERM, 10 uF, 25 V, +/- 20%, X5R, 0603	0603
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	8	2.2uF	CKG57NX7T2W225M500JH	TDK	CAP, CERM, 2.2 uF, 450 V, +/- 20%, X7T, AEC-Q200 Grade 1, 6x5x5mm	6x5x5mm
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 µF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
11	C24, C68, C75	3	470pF	GRM155R71H471KA01D	MuRata	CAP, CERM, 470 pF, 50 V, +/- 10%, X7R, 0402	0402
12	C26, C63, C86, C98	4	68pF	C1005C0G1H680J050BA	TDK	CAP, CERM, 68 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
13	C27, C42, C47, C61	4	100pF	CGA2B2C0G1H101J050BA	TDK	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0402	0402
14	C29, C43, C48, C62	4	2.2µF	GRM155R61E225KE11D	Murata	2.2µF ±10% 25V Ceramic Capacitor X5R 0402 (1005 Metric)	0402 (1005 metric)
15	C31, C41, C46, C60	4	22pF	GRM1555C1H220JA01D	MuRata	CAP, CERM, 22 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
16	C49	1	0.1uF	C1005X7R1H104K050BB	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0402	0402
17	C50, C100	2	330pF	GRM1555C1H331FA01J	MuRata	CAP, CERM, 330 pF, 50 V, +/- 1%, C0G/NP0, 0402	0402
18	C53, C54, C55	3	1uF	GRM155R61E105MA12D	MuRata	CAP, CERM, 1 µF, 25 V, +/- 20%, X5R, 0402	0402
19	C56	1	2200pF	GRM155R71E222KA01D	MuRata	CAP, CERM, 2200 pF, 25 V, +/- 10%, X7R, 0402	0402
20	D2, D3, D5, D6	4	150V	ZGL41-150A-E3/96	Vishay-Semiconductor	Diode, Zener, 150V	DO-213AB
21	D8, D9, D10, D11	4	16V	BZT52C16-7-F	Diodes Inc.	Diode, Zener, 16 V, 500 mW, AEC-Q101, SOD-123	SOD-123
22	J2	1		TSW-106-08-G-D-RA	Samtec	Header, 100mil, 6x2, Gold, R/A, TH	6x2 R/A Header
23	L4, L5, L6, L7	4	4.7uH	MPIA2510V2-4R7-R	Eaton	4.7µH Shielded Molded Inductor 1.22A 262mOhm Max 1008 (2520 Metric)	1008
24	R1, R2, R3, R4	4	3.3k	CRCW04023K30JNED	Vishay-Dale	RES, 3.3 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
25	R5, R8, R11, R25	4	0	MCR03EZPJ000	Rohm	RES, 0, 5%, 0.1 W, 0603	0603
26	R6, R9, R12, R27	4	300	CRCW0402300RJNED	Vishay-Dale	RES, 300, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
27	R7, R10, R13, R14	4	69.8k	MCR01MZPF6982	Rohm	RES, 69.8 k, 1%, 0.063 W, 0402	0402
28	R15, R19, R20, R24, R26, R33	6	10.0k	RT0402BRD0710KL	Yageo America	RES, 10.0 k, .1%, .0625 W, 0402	0402
29	R16, R21, R29	3	5.11k	CRCW04025K11FKED	Vishay-Dale	RES, 5.11 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
30	R17, R22, R31	3	180k	RC0402FR-07180KL	Yageo America	RES, 180 k, 1%, 0.063 W, 0402	0402
31	R18, R23, R32	3	38.3k	CRCW040238K3FKED	Vishay-Dale	RES, 38.3 k, 1%, 0.063 W, 0402	0402
32	R28, R40, R60, R74	4	49.9	CRCW040249R9FKED	Vishay-Dale	RES, 49.9, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
33	R30, R63	2	10	PHP01206E10R0BST5	Vishay-Dale	RES, 10.0, 0.1%, 1 W, 1206	1206
34	R42, R46, R48	3	348k	RC1206FR-07348KL	Yageo America	RES, 348 k, 1%, 0.25 W, 1206	1206
35	R53	1	7.50k	CRCW04027K50FKED	Vishay-Dale	RES, 7.50 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
36	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
37	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
38	U2	1		AMC0211DDWV	Texas Instruments	Precision, 2V Input, Basic and Reinforced Isolated Amplifiers With Fixed-Gain Differential Output	SOIC-WB8
39	U3	1		TLV9061IDBVR	Texas Instruments	10-MHz, RRIO, CMOS Operational Amplifier for Cost-Sensitive Systems, DBV0005A (SOT-23-5)	DBV0005A
40	U4, U7, U10, U11	4		LMG3522R030-Q1	Texas Instruments	650-V 30-mΩ GaN FET with Integrated Driver, Protection, and Temperature Reporting	VQFN52
41	U5, U8, U12	3		UCC35131QDCHARQ1	Texas Instruments	Automotive 2.0W, 12V VIN, High-Density, > 5kVRMS, Isolated DC/DC Module	SSOP16
42	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