

Variant: PMP41146 GaN Card
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GaN Card REV A Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	C1, C26, C27, C28, C30, C36, C37	7	0.1uF	GCM155R71H104KE02D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
2	C2, C9, C10, C21	4	4.7uF	CGA4J1X7R1E475K125AC	TDK	CAP, CERM, 4.7 uF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
3	C3, C4, C13, C14, C16, C17	6	100pF	CGA2B2C0G1H101J050BA	TDK	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0402	0402
4	C5, C6, C7, C8, C39	5	1uF	GRT155C71A105KE13D	MuRata	CAP, CERM, 1 uF, 10 V, +/- 10%, X7S, AEC-Q200 Grade 1, 0402	0402
5	C11, C12	2	10uF	GCM31CC71E106KA03L	MuRata	CAP, CERM, 10 uF, 25 V, +/- 10%, X7S, AEC-Q200 Grade 1, 1206_190	1206_190
6	C15, C19	2	0.22uF	GCM155R71C224KE02D	MuRata	CAP, CERM, 0.22 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
7	C18, C20	2	2.2uF	GCM21BR71E225KA73L	MuRata	CAP, CERM, 2.2 uF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
8	C22, C23	2	0.022uF	C1206C223KDRACU	Kemet	CAP, CERM, 0.022 uF, 1000 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1206	1206
9	C24, C25	2	0.1uF	C1812W104KDRACU	Kemet	CAP, CERM, 0.1 uF, 1000 V, +/- 10%, X7R, 1812	1812
10	C32, C33, C34, C35	4	43pF	GCQ1555C1H430JB01D	MuRata	CAP, CERM, 43 pF, 50 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0402	0402
11	C38	1	0.01uF	CGA2B3X7R1H103K050BB	TDK	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
12	D2, D3	2	20V	MBR0520LT1G	ON Semiconductor	Diode, Schottky, 20 V, 0.5 A, SOD-123	SOD-123
13	J1	1		FTSH-106-01-L-D-RA	Samtec		HDR12
14	J2	1		FTSH-102-01-L-D-RA	Samtec	Connector Unshrouded Header HDR 4 POS 1.27mm Solder RA Thru-Hole	HDR4
15	L1, L2	2		SDEM20161T-4R7MS	Cyntec	4.7uH Unshielded Inductor 1.1A 426mOhm Max 0806 (2016 Metric)	SMD2
16	L3	1		ACT32P-102-2P-TL01	TDK	2 Line Common Mode Choke Surface Mount 1 kOhms @ 100 MHz 800mA DCR 150mOhm	SMT4_3MM9_2MM5
17	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
18	R1, R2, R5, R6	4	49.9	CRCW040249R9FKED	Vishay-Dale	RES, 49.9, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
19	R3, R4	2	100	CRCW0402100RKFED	Vishay-Dale	RES, 100, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
20	R7, R9	2	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
21	R8, R14	2	10.0k	MCS0402MD1002BE100	Vishay/Beyschlag	RES, 10.0 k, 0.1%, 0.1 W, AEC-Q200 Grade 0, 0402	0402
22	R11, R12, R21, R22	4	300	CRCW0402300RJNED	Vishay-Dale	RES, 300, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
23	R13, R23	2	20	CRCW040220R0FKED	Vishay-Dale	RES, 20.0, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
24	R16	1	0	CRCW04020000Z0EDHP	Vishay-Dale	RES, 0, 0%, 0.2 W, AEC-Q200 Grade 0, 0402	0402
25	R25	1	0	CRCW12060000Z0EA	Vishay-Dale	RES, 0, 5%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
26	T1	1	475uH	760390014	Würth Elektronik	Transformer, 475uH, SMT	10.05x4.19x6.73 mm
27	TP1, TP2, TP3, TP4, TP5, TP6	6		3621-0-32-15-00-00-08-0	Mill-Max	PCB Pin, 0.04" DIA, Edge-Mount	PCB Pin, 0.04" DIA, R/A, Edge-Mount
28	U1	1		SN6505DQDBVRQ1	Texas Instruments	SN6505DQDBVRQ1, DBV0006A (SOT-23-6)	DBV0006A
29	U2, U3	2		ISO7741FQDBQRQ1	Texas Instruments	General Purpose Digital Isolator 2500Vrms 4 Channel 100Mbps 85kV/us CMTI 16-SSOP (0.154", 3.90mm Width)	SSOP16
30	U4, U5	2		LMG3522R030-Q1	Texas Instruments	650-V 30-mA GaN FET with Integrated Driver, Protection, and Temperature Reporting	VQFN52
31	U6	1		SN74AHC1G08QDBVRQ1	Texas Instruments	Automotive Catalog Single 2-Input Positive-AND Gate, DBV0005A (SOT-23-5)	DBV0005A
32	U7	1		TPS71733QDRVRQ1	Texas Instruments	Low Noise, High-Bandwidth PSRR Low-Dropout 150mA Linear Regulator for Automotive Applications, DRV0006A (WSON-6)	DRV0006A
33	U8	1		SN74LVC2G66QDCURQ1	Texas Instruments	Automotive Dual Bilateral Analog Switch	VSSOP8
34	R10, R15	0	0	ERJ-2GE0R00X	Panasonic	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0402	0402