

PMP40690_GaN REV E1 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C1	1	1uF	EMK105BJ105KVHF	Taiyo Yuden	CAP, CERM, 1 μ F, 16 V, +/- 10%, X5R, 0402	0402
C2, C6, C17, C22	4	68pF	GRM1555C1H680JA01D	MuRata	CAP, CERM, 68 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C3, C25	2	0.1uF	C1005X7R1H104K050BB	TDK	CAP, CERM, 0.1 μ F, 50 V, +/- 10%, X7R, 0402	0402
C4	1	22pF	C1005C0G1H220J050BA	TDK	CAP, CERM, 22 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C5, C7	2	0.22uF	C1608X7R1H224K080AB	TDK	CAP, CERM, 0.22 μ F, 50 V, +/- 10%, X7R, 0603	0603
C8	1	47uF	C3216X5R1E476M160AC	TDK	CAP, CERM, 47 μ F, 25 V, +/- 20%, X5R, 1206_190	1206_190
C9, C26	2	2.2uF	08053C225KAT2A	AVX	CAP, CERM, 2.2 μ F, 25 V, +/- 10%, X7R, 0805	0805
C10, C12, C13, C29	4	0.01uF	GRM31BR72J103KW01L	MuRata	CAP, CERM, 0.01 μ F, 630V, +/-10%, X7R, 1206	1206
C14, C15	2	0.1uF	C1812W104KDRACU	Kemet	CAP, CERM, 0.1 μ F, 1000 V, +/- 10%, X7R, 1812	1812
C21, C30, C31	3	4.7uF	GRM188R6YA475KE15D	MuRata	CAP, CERM, 4.7 μ F, 35 V, +/- 10%, X5R, 0603	0603
C23	1	10uF	C1206C106K3RACTU	Kemet	CAP, CERM, 10 μ F, 25 V, +/- 10%, X7R, 1206_190	1206_190
C27	1	4.7uF	GCM21BR71C475KA73K	MuRata	CAP, CERM, 4.7 μ F, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
D4, D8	2	20V	MBR0520LT1G	ON Semiconductor	Diode, Schottky, 20 V, 0.5 A, SOD-123	SOD-123
D6	1	16V	MMSZ4703T1G	ON Semiconductor	Diode, Zener, 16 V, 500 mW, SOD-123	SOD-123
J1	1		90121-0766	Molex	Header, 2.54mm, 6x1, Gold, R/A, TH	Header, 2.54mm, 6x1, R/A, TH
L1, L2	2	10uH	VLS252012CX-100M-1	TDK	Inductor, Shielded, Ferrite, 10 uH, 0.79 A, 0.482ohm, SMD	Inductor, 2.5x1.2x2mm
L3	1		ACM2520-601-2P-T002	TDK	Coupled inductor, 0.2 A, 0.45 ohm, SMD	2.5x2mm
Q1, Q2	2		LMG3410R050RWHR	Texas Instruments	600-V 12-A Single Channel GaN Power Stage, RWH0032A (VQFN-32)	RWH0032A
R2	1	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R3, R4, R11	3	49.9	RC0402FR-0749R9L	Yageo America	RES, 49.9, 1%, 0.063 W, 0402	0402
R5, R9	2	15k	CRCW040215K0JNED	Vishay-Dale	RES, 15 k, 5%, 0.063 W, 0402	0402
R7, R8	2	10.0k	ERJ-2RK1002X	Panasonic	RES, 10.0 k, 1%, 0.1 W, 0402	0402
R18	1	0	RC0603JR-070RL	Yageo	RES, 0, 5%, 0.1 W, 0603	0603
T1	1	475uH	760390014	Würth Elektronik	Transformer, 475uH, SMT	10.05x4.19x6.73 mm
U1	1		ISO7721FDR	Texas Instruments	High Speed, Robust EMC Reinforced Dual-Channel Digital Isolator, D0008B (SOIC-8)	D0008B
U4	1		SN6505BDBVR	Texas Instruments	Low-Noise 1 A, 420 kHz Transformer Driver, DBV0006A (SOT-6)	DBV0006A
U5	1		SN74AHC1G08DBVR	Texas Instruments	Single 2-Input Positive-AND Gate, DBV0005A (SOT-23-5)	DBV0005A