



## Bill of Materials for the NCP51820GAN1GEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C1	1	CAP, SMD, CERAMIC, 50V, NPO	10pF		402	Yageo	CC0402JRNPO9BN100	Yes	Yes
C2	1	CAP, SMD, CERAMIC, 25V, X7R	1uF		603	Samsung	CL10B105KA8NNNC	Yes	Yes
C4	1	CAP, SMD, CERAMIC, 25V, X7R	100nF		603	TDK	CGA3E2X7R1E104K080AA	Yes	Yes
C5	1	CAP, SMD, CERAMIC, 25V, X5R	470nF		402	Samsung	CL05A474KA5NNNC	Yes	Yes
C8	1	CAP, SMD, CERAMIC, 25V, X7R	0.1uF		402	Yageo	CC0402KRX7R8BB104	Yes	Yes
C3,C7	2	CAP, SMD, CERAMIC, 630V, X7R	0.1uF		1812	TDK	C4532X7R2J104K230KA	Yes	Yes
C6,C9	2	CAP, SMD, CERAMIC, 25V, X5R	1uF		402	TDK	CGB2A1X5R1E105K033BC	Yes	Yes
D1	1	DIODE FAST REC 1A 600V			SMA	ON Semiconductor	ES1J	No	Yes
J1	1	Connector, Header, 100Mil spacing			Thru-Hole	Würth	61300611121	Yes	Yes
J2-4	3		DNI					Yes	Yes
J5,J6	2	Testpin, Gold, 40mil,			Thru-Hole	Keystone	1352-1	Yes	Yes
Q1-2	2	GaN FET, 650V, E-mode, 30A, 50mOhm			7.1x8.5mm	GaN Systems	GS66508B	Yes	Yes
R3	1	RES, SMD, 1/16W	2		402	Samsung	RC1005F2R0CS	Yes	Yes
R4	1	RES, SMD, 1/10W	60.4k		603	Yageo	RC0603FR-0760K4L	Yes	Yes
R10	1	RES, SMD, 1/10W	0		603	Yageo	RC0603JR-070RL	Yes	Yes
R1-2,R5	3	RES, SMD, 1/16W	10k		402	Yageo	RC0402FR-0710KL	Yes	Yes
R6,R8	2	RES, SMD, 1/10W	10		603	Yageo	RC0603FR-0710RL	Yes	Yes
R7,R9	2	RES, SMD, 1/10W	2		603	Yageo	RC0603FR-072RL	Yes	Yes
U1	1	High Speed Half Bridge GaN Driver			MLP 4 x4-15	ON Semiconductor	NCP51820AMNTWG	No	Yes