



Bill of Materials for the NCP3170BGEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C3	1	SMT Ceramic Capacitor	1uF	±10%	0603	TDK	C1608X5R1E105K	Yes	Yes
CC	1	SMT Ceramic Capacitor COG	1.5nF	±5%	0603	TDK	C1608C0G1H152J	Yes	Yes
CF	1	SMT Ceramic Capacitor	82pF	±5%	0603	AVX	06035A820JAT2A	Yes	Yes
CHF	1	SMT Ceramic Capacitor	820pF	±5%	0603	AVX	06035A821JAT2A	Yes	Yes
CP	0	SMT Ceramic Capacitor	Do Not Populate	±5%	0603	-	-	Yes	Yes
C2, C4, C5	3	SMT Ceramic Capacitor	22uF	±20%	1210	Taiyo Yuden	TMK325B7226MM-TR	Yes	Yes
C6, C8	0	SMT Ceramic Capacitor	Do Not Populate	±10%	1210	-	-	Yes	Yes
C1	0	Surface Mount E-Cap	Do Not Populate	±20%	(8mm x 6.2)mm	-	-	Yes	Yes
C7	0	Surface Mount E-Cap	Do Not Populate	±20%	(8.3 x 8.3)mm	-	-	Yes	Yes
BODE COMP FB GND_GND_I GND_IN PG VIN VOUT VSW	10	PRINTED CIRCUIT PIN	NA	NA	52 Mill	MIL MAX	2110-2-00-80-00-00-07-0	Yes	Yes
LOUT	1	SMT Inductor	3.3uH	±20%	(7.0 x 6.9 x 3.8)mm	Würth	744311330	Yes	Yes
U1	1	500 kHz Synchronous Switching Regulator	500 kHz	NA	SOIC8	ON Semiconductor	NCP3170BDR2G	No	Yes
R1	1	SMT Resistor	24.9k	±1%	0603	Vishay / Dale	CRCW060324K9FKEA	Yes	Yes
R2	1	SMT Resistor	7.87k	±1%	0603	Vishay / Dale	CRCW06037K87FKEA	Yes	Yes
R3	1	SMT Resistor	100k	±1%	0603	Vishay / Dale	CRCW0603100KFKEA	Yes	Yes
R4	1	SMT Resistor	20R	±1%	0603	Vishay / Dale	CRCW060320R0FKEA	Yes	Yes
RC	1	SMT Resistor	12.1k	±1%	0603	Vishay / Dale	CRCW060312K1FKEA	Yes	Yes
RF	1	SMT Resistor	1k	±1%	0603	Vishay / Dale	CRCW06031K00FKEA	Yes	Yes
RT1	0	SMT Resistor	Do Not Populate	±1%	0603	-	-	Yes	Yes
RT2	1	SMT Resistor	0R0	±1%	0603	Vishay / Dale	CRCW0603000Z0EA	Yes	Yes
EN	1	GENERIC 2 PIN SIP HEADER .100 CENTERS	100mill	NA	Through Hole	FCI	68001-102	Yes	Yes
SH	1	Jumper	100mill	NA	Through Hole	TE Connectivity	382811-8	Yes	Yes