



## Bill of Materials for the NCL30002LED1GEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C2	1	Capacitor	470p NPO	2%	0402	TDK	C1005C0G1H471G	Yes	Yes
C3,C4	2	Capacitor	220nF 250V	10%	Box Cap LS=5mm	Epcos	B32529D3224+***	Yes	Yes
C5	1	Capacitor	680uF	20%	Radial Al El 16x15 LS=7.5mm	Nichicon	UHE1V681MHD3	Yes	Yes
C6	DNP	Capacitor	-	-	-	-	-	Yes	Yes
C7	1	Capacitor	22uF 25V Tant	20%	7342	Vishay	595D226X0025D2T	Yes	Yes
C8	1	Capacitor	22uF X5R 25V	10%	1210	Taiyo Yuden	TMK325B7226MM-TR	Yes	Yes
C10	1	Capacitor	1nF	10%	0402	Kemet	C0402C102K3GACTU	Yes	Yes
C11	1	Capacitor	10uF	10%	0603	Taiyo Yuden	LMK107BJ106MALTD	Yes	Yes
C12	DNP	Capacitor	-	-	-	-	-	Yes	Yes
C13	DNP	Capacitor	-	-	-	-	-	Yes	Yes
C14	DNP	Capacitor	-	-	-	-	-	Yes	Yes
D1	1	Diode	MURS360T3G	-	SMA	On Semiconductor	MURS360T3G	No	Yes
D4	1	Diode	MB6S	-	MB6S	MCC	MB6S	Yes	Yes
D7, D10	2	Diode	BAS21M3T5G	-	SOT-353	On Semiconductor	BAS21DW5T1G	No	Yes
D9	DNP	Diode	-	-	-	-	-	No	Yes
D11	1	Diode	NZ9F16VST5G	-	SOD-923	On Semiconductor	NZ9F16VST5G	No	Yes
L1,L2,L3	3	Inductor	470uH	-	Radial Drum Core LS=2mm	Würth Electronics	7447462471	No	Yes
L4	1	Inductor	125uH	-	EE16 6-Pin	Würth Electronics	750313017	No	Yes
Q1	1	IC	NDD05N50	-	D-Pak	On Semiconductor	NDD05N50ZT4G	No	Yes
Q3	1	IC	NDD05N50	-	I-Pak	On Semiconductor	NDD05N50Z-1G	No	Yes
Q2	1	IC	MMBT3904	-	SOT-323	On Semiconductor	MMBT3904WT1G	No	Yes
Q4	DNP	IC	-	-	-	-	-	Yes	Yes
Q5, Q6	DNP	IC	-	-	-	-	-	Yes	Yes
RT1	1	Resistor	470 Ohm PTC	20%	0603	Epcos	B59601A0085A062	Yes	Yes
RV1	1	Resistor	MOV 130V	-	7mm Radial	Littelfuse	V130LA2P	Yes	Yes
R1	1	Resistor	10	5%	0603	Stackpole	RMCF0603JT10R0	Yes	Yes
R2	1	Resistor	15	5%	0603	Stackpole	RMCF0603JT15R0	Yes	Yes
R4	1	Resistor	100k	5%	1206	Stackpole	RMCF1206JT100K	Yes	Yes
R6	1	Resistor	931k	1%	0402	Stackpole	RMCF0402FT931K	Yes	Yes
R7	1	Resistor	47k	5%	0805	Stackpole	RMCF0805JT47K0	Yes	Yes
R8,R17	3	Resistor	1.00k	1%	0402	Stackpole	RMCF0402FT1K00	Yes	Yes
R9	1	Resistor	0.24 1/4W	1%	1206	Stackpole	RMCF1206FTR240	Yes	Yes
R12,R32	2	Resistor	1Meg	1%	0805	Stackpole	HVCB0805FDC1M00	Yes	Yes
R13	1	Resistor	931k	1%	0402	Stackpole	RMCF0402FT931K	Yes	Yes
R14	1	Resistor	64.9k	1%	0402	Stackpole	RMCF0402FT64K9	Yes	Yes
R15	DNP	Resistor	-	-	-	-	-	Yes	Yes

R16	1	Resistor	100k	1%	0402	Stackpole	RMCF0402FT100K	Yes	Yes
R18	1	Resistor	10k Pot	5%	-	TTI	22AR10KLF	Yes	Yes
R19,R20	2	Resistor	6.2k	5%	0805	Stackpole	RMCF0805JT6k20	Yes	Yes
R21,R24	DNP	Resistor	-	-	-	-	-	Yes	Yes
R22	1	Resistor	3.3	5%	1206	Stackpole	RPC1206JT3R30	Yes	Yes
R23	DNP	Resistor	-	-	-	-	-	Yes	Yes
R25	DNP	Resistor	-	-	-	-	-	Yes	Yes
R26	DNP	Resistor	-	-	-	-	-	Yes	Yes
R27	DNP	Resistor	-	-	-	-	-	Yes	Yes
R28, R29	DNP	Resistor	-	-	-	-	-	Yes	Yes
R30	DNP	Resistor	-	-	-	-	-	Yes	Yes
R31	DNP	Resistor	-	-	-	-	-	Yes	Yes
R33,R34	DNP	Resistor	-	-	-	-	-	Yes	Yes
R35	DNP	Resistor	-	-	-	-	-	Yes	Yes
U1	1	IC	NCL30002D	-	SOIC-8	On Semiconductor	NCL30002DR2G	No	Yes
W1*	6"	-	Wire, Red, 24AWG	-	UL1569 / Stranded	McMaster Carr	7587K922	Yes	Yes
W2*	6"	-	Wire, Blk, 24AWG	-	UL1569 / Stranded	McMaster Carr	7587K921	Yes	Yes
W3*, W4*	12"	-	Wire,Wht, 24AWG	-	UL1569 / Stranded	McMaster Carr	7587K924	Yes	Yes

**Note:**

- \* Ends of wires must be stripped
- \*\*\* Different ordering option for capacitors