



Bill of Materials for the NCL30488LED2GEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C1	1	Capacitor	100nF		18Lx11Wx15LS	Kemet	R474I310050A1K	Yes	Yes
C2	1	Capacitor	220nF		26.5Lx11Wx22.5LS	Kemet	R474N322050A1K	Yes	Yes
C3,C11	2	Capacitor	2.2nF		9Dx5.5Tx10LS	Kemet	C921U222MVVDBA7317	Yes	Yes
C4	1	Capacitor	470nF		32Lx13Wx27.5LS	Kemet	R474R347050A1K	Yes	Yes
C5	1	Capacitor	47nF 50V		0603	Würth	885012206093	Yes	Yes
C6	1	Capacitor	680nF 50V		1206	Würth	885012208092	Yes	Yes
C7	1	Capacitor	10uF35V		6.3Dx2.5LS	Würth	8.60131E+11	Yes	Yes
C8	1	Capacitor	10nF 1kV		1206	Würth	8.85342E+11	Yes	Yes
C9	1	Capacitor	220uF 200V		18Dx27Hx7.5LS	Nichicon	UCS2D221MHD1TN	Yes	Yes
C10	1	Capacitor	4.7nF 1kV		13Lx4Wx10LS	Kemet	R474F147050A1K	Yes	Yes
C12,C13	2	Capacitor	1000uF 63V		18Dx33Hx7.5LS	Würth	860080781029	Yes	Yes
D1	1	Diode	1000V 4A		SIP	ON Semiconductor	GBU4M	No	Yes
D2	1	Diode	250V 0.2A		SOD-123	ON Semiconductor	MMSD103T1G	No	Yes
D4	1	Diode	800V 1.5A		SMA	ON Semiconductor	US2KA	No	Yes
D5,D6	2	Diode	400V 4A		CASE 267	ON Semiconductor	MUR440RLG	No	Yes
F1	1		500V 5A		5mmx20mm Pigtail	Littelfuse	0477005.MXEP	Yes	Yes
J1	1		3 Pin Conn		Block	Würth	691131710003	Yes	Yes
J2	1		2 Pin Conn		Block	Würth	691131710002	Yes	Yes
L1	1	Inductor	20mH 1A		27.4Lx28.3W	Schurter	DFKF-28-0002	Yes	Yes
L2	1	Inductor	1mH 1A		18Dx20Hx10LS	Abracon	AIUR-15-102K	Yes	Yes
L3	1	Inductor	330uH 0.6A		9.5Dx5LS	Würth	744732331	Yes	Yes
L4	1	Inductor	10uH 1.85A		6Dx4LS	Würth	744779100	Yes	Yes
Q2	1		800V 11A 400m		TO-220F	ON Semiconductor	F0PF400N80ZL1	No	Yes
HS1	1	Heatsink				Aavid Thermalloy	507302B00000G	Yes	Yes
R1	1	Resistor	100 0.25W comp		1/4W Axial	Stackpole	RC14JB100R	Yes	Yes
R2	1	Resistor	22 0.25W Comp		1/4W Axial	Stackpole	RC14JB22R0	Yes	Yes
R5	1	Resistor	82.5k 0.1W		0603	Panasonic	ERJ-3EKF8252V	Yes	Yes
R6	1	Resistor	56k 0.1W		0603	Panasonic	ERJ-3EKF56302V	Yes	Yes
R7	1	Resistor	11k 0.1W		0603	Panasonic	ERJ-3EKF1102V	Yes	Yes
R8	1	Resistor	2k 0.1W		0603	Panasonic	ERJ-3EKF2001V	Yes	Yes
R9	1	Resistor	10 0.1W		0603	Panasonic	ERJ-3EKF10R0V	Yes	Yes
R10, R11	2	Resistor	499 0.25W		1206	Panasonic	ERJ-8ENF4990V	Yes	Yes

R14	1	Resistor	0.39 1W		2512	TE Connectivity	RL73H3AR39FTE	Yes	Yes
R15	1	Resistor	0.39 1W		2512	TE Connectivity	RL73H3AR39FTE	Yes	Yes
R16, R17	2	Resistor	22k 0.25W		1206	Panasonic	ERJ-8ENF2202V	Yes	Yes
R18	1	Resistor	100k 0.1W		0603	Parasonic	ERJ-3EKF1003V	Yes	Yes
R19	1	Resistor	56k 2W		axial	TE Connectivity	ROX2SJ56K	Yes	Yes
MOV1	1		440V MOV		23mm OD	Littelfuse	V20E440P	Yes	Yes
MOV2	1		240V MOV		12.5mm OD	Littelfuse	V150LA5P	Yes	Yes
MOV3	1		390V MOV		23mm OD	Littelfuse	V20E250P	Yes	Yes
T1	1		50V 1.5A Xfmr		PQ2620 Extended Rail	Würth	750318308REV02	Yes	Yes
U1	1		LED Controller		SOIC7	On Semiconductor	NCL30488A2	No	Yes
P1,2,3,4	4		Hex Standoff		#4-40 Nylon, 1/2"	Keystone Electronics	1902C	Yes	Yes
S1,2,3,4	4		Screw		#4-40 steel, 3/8"	Various Manufacturers	Pan Philips	Yes	Yes
P5	1		Nylon support		Snap in	Richco	TCBS-801	Yes	Yes