



Bill of Materials for the NCL30288LED1GEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C1	1	Film Capacitor	68nF 310V	-	12M5X5_LS10	Vishay	BFC233820683	Yes	Yes
C2	1	Film Capacitor	120nF 450V	-	12.6MX4.6M_LS10	Panasonic	ECW-FD2W124KQ	Yes	Yes
C3	1	Not Fitted	-	-	0603	-	-	Yes	Yes
C4	1	Ceramic Capacitor	1uF 50V	-	0603	TDK	C1608X6S1H105K080AC	Yes	Yes
C5	1	Ceramic Capacitor	470pF 50V	-	0603	TDK	C1608C0G1H471K080AA	Yes	Yes
C6	1	Ceramic Capacitor	6.8uF 35V	-	1206	TDK	C3216X7R1V685K160AC	Yes	Yes
C7, C8	2	Electrolytic Capacitor	18uF 200V	-	10MX12M5_LS5	Rubycon	200LLE18MEFC10X12.5	Yes	Yes
D1	1	Diode Bridge	0.5A 600V	-	MBS-1	Micro Commercial	MB6S-TP	Yes	Yes
D2, D3	2	Diode	200mA 250V	-	SOD-123	ON Semiconductor	MMSD103T1G	Yes	Yes
D4	1	Diode	1A 800V	-	SMA	Micro Commercial	US1K-TP	Yes	Yes
D5	1	Zener Diode	22V	-	SOD-123	ON Semiconductor	MMSZ4708T1G	No	Yes
F1	1	Fuse	500mA 250V	-	Hairpin_LS250	Littelfuse	0263.500WRT1L	Yes	Yes
L1, L2	2	Inductor	3.3mH	-	Radial_LS5	Würth	744772332	Yes	Yes
L3	1	Inductor	1.5mH	-	Radial_LS5	Würth	744772152	Yes	Yes
L4	1	Inductor	1.25mH 8:1	-	RM6_4P	Würth	750314731	Yes	Yes
Q1	1	MOSFET	6A 800V	-	IPAK	STMicro	STU8N80K5	Yes	Yes
R1, R2	2	Resistor	5.1k	-	1206	ANY	-	Yes	Yes
R3, R4	2	Resistor	499k	-	1206	ANY	-	Yes	Yes
R5	1	Resistor	9.1k	-	0603	ANY	-	Yes	Yes
R6	1	Resistor	5.9k	-	1206	ANY	-	Yes	Yes
R7	1	Resistor	1.6k	-	0603	ANY	-	Yes	Yes
R8, R9, R10, R11	4	Resistor	56k	-	1206	ANY	-	Yes	Yes
R12	1	Resistor	2k	-	0603	ANY	-	Yes	Yes
R13	1	Resistor	5.62	-	1206	ANY	-	Yes	Yes
R14	1	Resistor	1	-	1206	ANY	-	Yes	Yes
R15	1	Resistor	1 meg	-	1206	ANY	-	Yes	Yes
U1	1	Controller		-	TSOP-6	ON Semiconductor	NCL30288BSNT1G	No	Yes
W1	6"	Wire	Wire, Red	-	24 AWG	ANY	-	Yes	Yes
W2	6"	Wire	Wire, Black	-	24 AWG	ANY	-	Yes	Yes
W3,4	12"	Wire	Wire, White	-	24 AWG	ANY	-	Yes	Yes