



Bill of Materials for the NCV12711FLOATGEVB Evaluation Board

Designator (Main Board)	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C1	1	Ceramic capacitor	10 nF / 100 V	20%	0805	Generic		Yes	Yes
C2	1	Ceramic capacitor	3.3 nF / 630 V	20%	1206	Kemet	C1206C332KBRACU	Yes	Yes
C3, C4	2	Ceramic capacitor	2.2 μ F / 100 V	20%	1210	Kemet	C1210C225M1RACTU	Yes	Yes
C5	1	Electrolytic Capacitor	100 μ F / 50 V	20%	TH	Rubycon	50ZL100MEFC8X11.5	Yes	Yes
C6	0	Ceramic capacitor	NU		0805	Generic		Yes	Yes
C7	1	Ceramic capacitor	10 nF / 50 V	20%	0805	Generic		Yes	Yes
C8	1	Ceramic capacitor	22 nF / 50 V	20%	0805	Generic		Yes	Yes
C9	1	Ceramic capacitor	3.3 nF / 50 V	20%	0805	Generic		Yes	Yes
C10	1	Ceramic capacitor	2.2 nF / 50 V	20%	0805	Generic		Yes	Yes
C11	1	Ceramic capacitor	4.7 μ F / 50 V	20%	0805	Generic		Yes	Yes
C12	1	Ceramic capacitor	100 nF / 50 V	20%	0805	Generic		Yes	Yes
C13	1	Ceramic capacitor	22 pF / 50 V	20%	0805	Generic		Yes	Yes
C14	1	Ceramic capacitor	470 nF / 50 V	20%	0805	Generic		Yes	Yes
C15	1	Ceramic capacitor, COG	470 pF / 200 V	20%	0805	Yageo	CC0805JRNPOABN471	Yes	Yes
C16, C17, C18	3	Electrolytic Capacitor	330 μ F / 16 V	20%	TH	Rubycon	16ZLG330MEFC8X11.5	Yes	Yes
C20	1	Ceramic capacitor	1 μ F / 50 V	20%	0805	Generic		Yes	Yes
C21	1	Ceramic capacitor	2.2 nF / 50 V	20%	0805	Generic		Yes	Yes
D1	1	HV diode	1N4937	-	DO-41	onsemi	1N4937G	Yes	Yes
D2, D3, D6	3	switching diode	MMSD4148	-	SOD-123	onsemi	MMSD4148	Yes	Yes
D4	1	power diode	FSV10100V	-	TO-277	onsemi	FSV10100V	Yes	Yes
D5	1	Zener diode 15V/3W	1SMB5929BT3G	5%	SMB-2	onsemi	1SMB5929BT3G	Yes	Yes
IC1	1	PWM Controller	NCV12711	-	MSOP-10	onsemi	NCV12711ADNR2G	No	Yes
J1a, J2a	2	Banana plug	-	-		multicomp	24.243.1	Yes	Yes
J1b, J2b	2	Banana plug	-	-		multicomp	24.243.2	Yes	Yes
L1	1	Inductor	1.5 μ H	30%		Coilcraft	MSS1038-152NL	Yes	Yes
M1	1	N-channel MOSFET	FDMS86103L	-	POFN-8	onsemi	FDMS86103L	Yes	Yes
R1, R2	2	Resistor	40 m Ω	1%	2512	Vishay	WSL2512R0400FEA	Yes	Yes
R3	1	Resistor	18 k Ω / 1 W	1%	2512	Generic		Yes	Yes
R4	1	Resistor	2.2 Ω / 0.5 W	1%	0805	Generic		Yes	Yes
R5, R14	2	Resistor	56 Ω	1%	0805	Generic		Yes	Yes
R6	1	Resistor	4.7 k Ω	1%	0805	Generic		Yes	Yes
R7, R13	2	Resistor	10 Ω	1%	0805	Generic		Yes	Yes
R8	1	Resistor	10 k Ω	1%	0805	Generic		Yes	Yes
R9	1	Resistor	15 k Ω	1%	0805	Generic		Yes	Yes
R10, R12	0	Resistor	NU	1%	0805	Generic		Yes	Yes
R11	1	Resistor	22 k Ω	1%	0805	Generic		Yes	Yes
R15	1	Resistor	133 k Ω	1%	0805	Generic		Yes	Yes
R16	1	Resistor	82 k Ω	1%	0805	Generic		Yes	Yes
R17	1	Resistor	820 Ω	1%	0805	Generic		Yes	Yes
R18	1	Resistor	10 k Ω	1%	0805	Generic		Yes	Yes
R19, R20	2	Resistor	100 Ω / 0.25 W	1%	0805	Generic		Yes	Yes
R21	1	Resistor	1 k Ω / 0.25 W	1%	0805	Generic		Yes	Yes
R22	1	Resistor	0 Ω	1%	0805	Generic		Yes	Yes
T1	1	Transformer	ZA9845-BL	-		Coilcraft	ZA9845-BL	No	Yes

Notes: Ceramic capacitor are X7R type unless stated otherwise
TH = through hole part