



Bill of Materials for the NCP1076DIPGEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
D7	1	Schottky diode	8A, 60V	-	DPak	ON Semiconductor	SB80W06T or MBRD660CT	No	Yes
D1, 2, 3, 4	4	Diode - 60 Hz,	1A, 800V	-	SMA	ON Semiconductor	MRA4007	No	Yes
D5	1	Diode - fast recov	1A, 600V	-	axial lead	ON Semiconductor	1N4937	No	Yes
D6	1	Signal diode	100mA, 250V	-	SOD-123	ON Semiconductor	MMSD103	No	Yes
U3	1	Programmable zener	2.5V	-	SOIC8 / SOT23	ON Semiconductor	NCP431A	No	Yes
U2	1	Optocoupler	CTR >= 0.5	-	4-pin	Vishay or NEC	Digikey P/N = PS2561BL-1	Yes	Yes
U1	1	Switcher IC - NCP1076	65 kHz	-	PDIP-7	ON Semiconductor	NCP1076	No	Yes
C1, C2	2	"X" cap, box type	100nF, X2	-	LS = 15 mm	Rifa, Wima	Digi-Key P/N = 399-5426-ND	Yes	Yes
C8	1	"Y1" cap, disc type	1nF, Y1	20%	LS = 7.5 mm	Rifa, Wima	Digikey P/N = BC2374-ND, Mouser P/N = 75-WKP102MCPEJ0KR	Yes	Yes
C4	1	Ceramic cap, disc	1 nF, 1kV	5%	LS = 7.5 mm	Rifa, Wima	Digi-Key P/N = 478-4227-ND	Yes	Yes
C7, C13	2	Ceramic cap, monolythic	1 nF, 100V	10%	1206	AVX, Murata	TBD	Yes	Yes
C10, 11, 12	3	Ceramic cap, monolythic	100nF, 50V	10%	1206	AVX, Murata	Digi-Key P/N = 311-1179-1-ND	Yes	Yes
C3	1	Electrolytic cap	22uF, 400/450V	10%	LS=7.5mm, D=16mm	UCC, Panasonic	Digikey P/N = P5877-ND	Yes	Yes
C6	1	Electrolytic cap	4.7uF, 50Vdc	10%	LS=2.5 mm, D=6.3mm	UCC, Panasonic	Digi-Key P/N = 565-1105-ND	Yes	Yes
C5	1	Electrolytic cap	22uF, 25V	10%	LS=2.5mm, D=6.3mm	UCC, Panasonic	Digi-Key P/N = 565-1056-ND		Yes
C9A,B	2	Electrolytic cap	2200 or 3300uF, 6.3V	10%	LS=5mm, D=12.5mm	UCC, Panasonic	TBD		Yes
R1	1	Resistor, 3W, Wire wound	Use jumper wire	10%	LS=7.5mm, D=7mm	Ohmite, Dale	Digi-Key P/N = 4.7AECT-ND	Yes	Yes
R3	1	Resistor, 0.5W, metal film	68K, 0.5W	10%	Axial lead; LS=12.5mm	Ohmite, Dale	Mouser = 71-FP01/268K0G5605EK	Yes	Yes
R2A,R2B	2	Resistor, 1/4W SMD	3.3 Meg	1%	SMD 1206	AVX, Vishay, Dale	Digi-Key P/N = 541-3.30MFCT-ND	Yes	Yes
R10	1	Resistor, 1/4W SMD	21.5K	1%	SMD 1206	AVX, Vishay, Dale	Digi-Key P/N = 541-21.5KFCT-ND	Yes	Yes
R11	1	Resistor, 1/4W SMD	47 ohms	1%	SMD 1206	AVX, Vishay, Dale	Digi-Key P/N = 541-47.0FCT-ND	Yes	Yes
R5	1	Resistor, 1/4W SMD	10 ohms	1%	SMD 1206	AVX, Vishay, Dale	Digi-Key P/N = 541-10.0FCT-ND	Yes	Yes
R4	1	Resistor, 1/4W SMD	2.7K	1%	SMD 1206	AVX, Vishay, Dale	Digi-Key P/N = 541-2.70KFCT-ND		Yes
R7, R9	2	Resistor, 1/4W SMD	10K	1%	SMD 1206	AVX, Vishay, Dale	Digi-Key P/N = 541-10.0KFCT-ND	Yes	Yes
R12, R13	2	Resistor, 1/4W SMD	5.62K	1%	SMD 1206	AVX, Vishay, Dale	Digi-Key P/N = 541-5.62KFCT-ND	Yes	Yes
R6	1	Resistor, 1/4W SMD	240 ohms	1%	SMD 1206	AVX, Vishay, Dale	Digi-Key P/N = 541-240FCT-ND	Yes	Yes
R8	1	Resistor, 1/4W SMD	10K	1%	SMD 1206	AVX, Vishay, Dale	Digi-Key P/N = 541-10.0KFCT-ND	Yes	Yes
F1	1	Fuse, TR-5 style	1.5A	-	TR-5, LS=5mm	Minifuse	Digi-Key P/N = WK4253BK-ND	Yes	Yes
L1A/B	1	Inductor (EMI choke)	1 mH, 500 mA	-	See Wurth Drawing	LS=5mm, D=8mm	7447728102	Yes	Yes
T1	1	Transformer	E25/10/6 core	-	See Mag Drawing	Wurth Magnetics	750313860 Rev 1	No	Yes
J1, J2	2	Screw Terminal	-	-	LS = 0.2"	DigiKey	# 281-1435-ND	Yes	Yes