



Bill of Materials for the NCP1075PSRGEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
D7 (12Vout)	1	Schottky diode	2A, 60V	-	SMB	ON Semiconductor	MBRS260T3	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, 100V	-	SOD-123	ON Semiconductor	MMSD4148A	No	Yes
Z1	1	Zener diode	11 volt	-	SOD-123	ON Semiconductor	MMSZ5241B	No	Yes
Z2	1	Zener diode	15 volt	-	SOD-123	ON Semiconductor	MMSZ5245B	No	Yes
Q1	1	NPN transistor	60V, 500mA	-	SOT23	ON Semiconductor	MMBTA06T1G	No	Yes
U1	1	Switcher IC - NCP1075	100 kHz	-	SOT223	ON Semiconductor	NCP1075ST100	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	-	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	1	Ceramic cap, monolythic	1 nF, 50V	10%	1206	AVX, Murata	Digi-Key P/N = 311-1170-1-ND	Yes	Yes
C10, C11	2	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
C5, C6	2	Electrolytic cap	22uF, 25V	10%	LS=2.5mm, D=6.3mm	UCC, Panasonic	Digi-Key P/N = 565-1056-ND	Yes	Yes
C9A, C9B	2	Electrolytic cap	1000uF, 16V	10%	LS=5mm, D=12.5mm	UCC, Panasonic	Digi-Key P/N = 565-1664-ND	Yes	Yes
R1 (option)	1	Resistor, 3W, Wire wound	4.7 ohm, 3W	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
R5	1	Resistor, 1/4W SMD	22 ohms	1%	SMD 1206	AVX, Vishay, Dale	Digi-Key P/N = 541-22.0FCT-ND	Yes	Yes
R4	1	Resistor, 1/4W SMD	1K	1%	SMD 1206	AVX, Vishay, Dale	Digi-Key P/N = 541-1.00KFCT-ND	Yes	Yes
R6	1	Resistor, 1/4W SMD	120 ohms	1%	SMD 1206	AVX, Vishay, Dale	Digi-Key P/N = 541-120FCT-ND	Yes	Yes
R7	1	Resistor, 1/4W SMD	680	1%	SMD 1206	AVX, Vishay, Dale	Digi-Key P/N = 541-680FCT-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 Würth Drawing	LS=5mm, D=8mm	7447728102	Yes	Yes
T1 (12Vout)	1	Transformer	E20/10/6 core	-	See Mag Drawing	Würth Magnetics	750313390 Rev 00	Yes	Yes
J1, J2	2	Screw Terminal	-	-	LS = 0.2"	DigiKey	# 281-1435-ND	Yes	Yes