



## Bill of Materials for the NCP1077STGEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C1, 2	2	"X" cap, box type	100nF	20%	LS=15 mm	Rifa, Wima	PHE840MB6100MB05R17	No	Yes
C3	1	Electrolytic cap	22uF	20%	LS=7.5mm, D=16mm	UCC, Panasonic	ECA-2WHG220	No	Yes
C4	1	Ceramic cap, disc	1nF	10%	LS=7.5mm	Rifa, Wima	5NR102KNECA	No	Yes
C5	1	Electrolytic cap	22uF	20%	LS=2.5mm, D=6.3mm	UCC, Panasonic	ESMG250ELL220ME11D	No	Yes
C6	1	Electrolytic cap	4.7uF	20%	LS=2.5mm, D=6.3mm	UCC, Panasonic	ESMG500ELL4R7ME11D	Yes	Yes
C7, 13	2	Ceramic cap, monolythic	1 nF, 100V	1%	1206	AVX, Murata	TBD	No	Yes
C8	1	"Y1" cap, disc type	1nF	20%	LS=7.5mm	Rifa, Wima	VY1102M35Y5UQ63V0	No	Yes
C9A, B	2	Electrolytic cap	1000uF	20%	LS=5mm, D=12.5mm	UCC, Panasonic	EKZE160ELL102MJ20S	Yes	Yes
C10, 11, 12	3	Ceramic cap, monolythic	100nF	10%	1206	AVX, Murata	CC1206KRX7R9BB104	Yes	Yes
D1, 2, 3, 4	4	Diode - 60 Hz,	1A 800V	--	SMA	ON Semiconductor	MRA4007	No	Yes
D5	1	Diode - fast recov	1A 600V Fast recov	--	Axial	ON Semiconductor	1N4937	No	Yes
D6	1	Signal diode	100mA 250V	--	SOD-123	ON Semiconductor	MMSD103	No	Yes
D7	1	Schottky diode	3A 100V Schottky	--	SMC	ON Semiconductor	MBRS3100	No	Yes
F1	1	FUSE BOARD MOUNT 1.6A 250VAC RAD	1.6A, 250V	--	TR-5, LS=5mm	Littelfuse	37211600411	Yes	Yes
J1, 2	2	CONN TERM BLOCK PCB 5.08MM 2POS	--	--	LS=0.2"	Weiduller	1716020000	Yes	Yes
L1A, B	2	Inductor (EMI choke)	1 mH, 500 mA	--	LS=5mm D=8mm	Würth	7447728102	Yes	Yes
R1	1	Resistor, 3W, Wire wound	Use jumper wire	5%	LS=7.5mm, D=7mm	--	--	Yes	Yes
R2	1	Resistor, 1/4W SMD	47 ohms	1%	1206	Various	--	Yes	Yes
R2A, B	2	Resistor, 1/4W SMD	3.3 Meg	1%	1206	Various	--	Yes	Yes
R3	1	Resistor, 0.5W, metal film	68k 0.5W Metal Film	2%	Axial, LS=12.5mm	Vishay	FP01\268K0G5605EK	Yes	Yes
R4	1	Resistor, 1/4W SMD	2.7k	1%	SMD 1206	Various	--	Yes	Yes
R5	1	Resistor, 1/4W SMD	10 ohms	1%	SMD 1207	Various	--	Yes	Yes
R6	1	Resistor, 1/4W SMD	1k	1%	SMD 1208	Various	--	Yes	Yes
R7, 9	2	Resistor, 1/4W SMD	10k	1%	SMD 1209	Various	--	Yes	Yes
R8	1	Resistor, 1/4W SMD	38.3k	1%	SMD 1210	Various	--	Yes	Yes
R10	1	Resistor, 1/4W SMD	21.5k	1%	SMD 1211	Various	--	Yes	Yes
R12, 13	2	Resistor, 1/4W SMD	5.62k	1%	SMD 1212	Various	--	Yes	Yes
T1	1	Transformer	E25/10/6 core	--	See Mag Drawing	Würth	750313861 Rev 1	Yes	Yes
U1	1	Switcher IC, 65kHz, NCP1077	Switcher IC, 65kHz	--	SOT223	ON Semiconductor	NCP1077STAT3G	No	Yes
U2	1	Optocoupler	CTR >= 0.5	--	4 pin SMT	Vishay	PS2561BL-1	Yes	Yes
U3	1	Programmable zener	2.5V	--	SOT-23/SOIC-8	ON Semiconductor	NCP431Axxx	No	Yes