



Bill of Materials for the NCP1200ADAPGEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free	
R1	1	Through Hole Resistor	100. 3W	5%	Axial	BC Components	5093NW10R00J08AFX	Yes	Yes	
R2	2	SMD Chip Resistors in Series	560kΩ, 1/8W	5%	0805	Yageo America	9C08052A5603JLHFT	Yes	Yes	
R3	1	SMD Resistor	560Ω, 1/8W	5%	0805	Vishay	CRCW0805560RJKTA	Yes	No	
		SMD Resistor			Axial	Vishay	CRCW251201R8JKTA			
R4	1	Through Hole Resistor, Optional	1.80. 1W	5%	2512	BC Components	5073NW1R800J12AFXBC	Yes	No	
R5	1	SMD Chip Resistor	3.9 kΩ, 1/8W	5%	0805	Panasonic - ECG	ERJ-6GE1J39ZV	Yes	Yes	
R6	1	SMD Chip Resistor	1 kΩ, 1/8W	5%	0805	Yageo America	9C08052A1001JLHFT	Yes	Yes	
R7	1	Through Hole Resistor	22 kΩ, 3W	5%	Axial	BC Components	5093NW22K00J08AFX	Yes	Yes	
L1	1	Current Compensated Choke	27mH, 0.8A	NA	W=22.5mm L=21.5mm	Schaffner	RN114-082	No	Yes	
L2	1	Inductor	22 μH, 1.8 A	10%	pitch 6 mm	Panasonic - ECG	ELC090220 F	Yes	Yes	
M1	1	Power MOSFET	600V	NA	TO-220	ON Semiconductor	F0PF2N60C	No	Yes	
IC1	1	Optocoupler, High Reliability	5300 VRMS	NA	DIP-4	Vishay	SFH615A-2	No	Yes	
IC2	1	PWM Current-Mode Controller	NA	NA	DIP8	ON Semiconductor	NCP1200P60	No	Yes	
IC3	1	Programmable Precision References	NA	NA	TO-92	ON Semiconductor	TL431BC	No	Yes	
C1	1	Film Capacitor, Box	1μF, 250V	20%	W=8.5mm L=18mm	Vishay	MKT 1820-510/255	Yes	Yes	
C2	1	Snap-In Vertical Capacitor	47μF, 400V	20%	D=22mm L=25mm	Vishay		222205756479	Yes	Yes
C3	1	Standard Vertical Capacitor	22μF, 16V	20%	D=5mm L=10mm	Panasonic - ECG	ECE-A1CKS220	Yes	Yes	
C4	1	SMD Standard Capacitor	100nF, 16V	20%	SMD	Nichicon	UWT1C471MNL1GS	Yes	Yes	
C5	1	Y2K1 Ceramic Disc Capacitor	1.5 nF	20%	Radial	Panasonic - ECG	ECKATS152ME	Yes	Yes	
Ca	1	Vertical Capacitor	470μF, 16V	20%	D=10mm L=15mm	Vishay		222202135471	Yes	Yes
Cb	1	Vertical Capacitor	470μF, 16V	20%	D=10mm L=15mm	Vishay		222202135471	Yes	Yes
C7	1	Vertical Capacitor	100μF, 16V	20%	D=6mm L=11mm	Vishay		222213835101	Yes	Yes
C8	1	Capacitor	100nF, 400V	20%	Axial	Nichicon	UVR2G101MRD	Yes	Yes	
C9	1	Ceramic Capacitor	1nF, 16V	10%	0201	Murata	GRM033R71C102KD01D	Yes	Yes	
D1	1	Fast Switching Diode	1A, 600V	NA	Axial	ON Semiconductor	MUR160	No	Yes	
D2	1	Schottky Rectifier	3A, 60V	NA	SMC 3.8mm x 2.8mm	ON Semiconductor	MBRS360	No	Yes	
J2	1	PCB Termination, 2 pole	300V, 10A	NA	Pitch 5.08mm	Weidmuller		1716020000	Yes	Yes
Bridge	1	Rectifier Bridge, Mini DIP	1A, 800V	NA	DB-1	Micro Commercial	DB106-BP	Yes	Yes	
Transformer	1	Transformer	1.8mH, 10 W	NA	W=27.9mm L=27.9mm	Coilcraft	Y8848-A	No	Yes	
Mains connector	1	Power Entry Module With Fuse	NA	NA	W=20mm L=34mm	Schurter	GSF1.1202.31	Yes	Yes	