



Bill of Materials for the NCP1207AADAPGEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C1	1	Suppression Capacitor	100 nF, 275 Vac	20%	pitch :15 mm	Vishay	F1772-410-22	Yes	Yes
C2	1	Electrolytic Capacitor	47 uF, 400 V	20%	Radial	Panasonic - ECG	ECA2GM470	Yes	Yes
C3	1	Electrolytic Capacitor	10 uF, 25 V	20%	Radial	Panasonic - ECG	ECEA1CN100U	Yes	Yes
C4	1	Ceramic Capacitor	47 pF, 50 V	5%	Radial	Vishay	BC1038CT-ND (Digi-Key)	Yes	Yes
C5, C6, C12	3	Ceramic Capacitor	1 nF, 50 V	5%	Radial	Vishay	BC1048CT-ND (Digi-Key)	Yes	Yes
C7	1	Ceramic Capacitor	4.7nF, 50 V	5%	Radial	Vishay	BC1052CT-ND (Digi-Key)	Yes	Yes
C8, C9	2	Electrolytic Capacitor	470 uF, 25 V	20%	Radial	Panasonic - ECG	ECA1EM471	Yes	Yes
C10	1	Electrolytic Capacitor	100 uF, 35 V	20%	Radial	Panasonic - ECG	ECA1VM101	Yes	Yes
C11	1	Ceramic Capacitor	100 nF, 50 V	10%	Radial	Vishay	BC1101CT-ND (Digi-Key)	Yes	Yes
C13	1	Suppression Capacitor	1 nF, 300 Vac	20%	pitch: 10 mm	Vishay	2222 3386 102	Yes	Yes
DB1	1	Bridge Rectifier	1 A, 600 V	NA	DIP 4	Vishay	DF06ME3	Yes	Yes
D1, D2, D3	3	Switching Rectifier	75 V, 150 mA	NA	DO-35	ON Semiconductor	1N4148	Yes	Yes
F1	1	Fuse	1 A, time-lag	NA	5 x 20 mm	Littelfuse	0219001_XAP	Yes	Yes
	1	Fuse Block	250V, 6.3A, 1.6W	NA	pitch: 22 mm	Cooper Bussmann	HTC-15M	Yes	Yes
	1	Snap-On Cover	NA	NA	NA	Cooper Bussmann	HTC-140M	Yes	Yes
IC1	1	PWM Current-Mode Controller	NA	NA	PDIP 8	ON Semiconductor	NCP1207APG	No	Yes
IC2	1	Adjustable Shunt Regulator	2.5 V - 36 V	NA	TO-92	ON Semiconductor	TL431CLPG	No	Yes
ISO1	1	Photocoupler	NA	NA	DIP 4	Sharp	PC817XJ0000F	Yes	Yes
L1	1	Common Mode Inductor	10 mH, 0.7 A	30%	18 x 13 mm	EPCOS	B82721-K2701-N20	Yes	Yes
L2	1	Power Inductor	10 uH, 4.2 A	10%	pitch: 5 mm	Coilcraft	RFB0810-100L	Yes	Yes
Q1	1	N-Channel MOSFET	800 V, 3.9 A	NA	TO-220	Fairchild Semiconductor	FQP4N80	Yes	Yes
Q2, Q3	2	NPN Transistor	NA	NA	TO-92	ON Semiconductor	BC237BG	No	Yes
Q4	1	Amplifier Transistor	NA	NA	TO-92	ON Semiconductor	BC557CG	No	Yes
Q5	1	HEXFET Power MOSFET	75 V, 82 A	NA	TO-220AB	ON Semiconductor	FDP060AN08A0	Yes	Yes
R1	1	Resistor	39 kΩ	1%	Axial	Vishay	CCF5539K0FKE36	Yes	Yes
R2, R7	2	Resistor	100 Ω	1%	Axial	Vishay	CCF55100R0FKE36	Yes	Yes
R3	1	Resistor	39 Ω	1%	Axial	Vishay	CCF5539R0FKE36	Yes	Yes
R4, R9, R10	3	Resistor	1 kΩ	1%	Axial	Vishay	CCF551K00FKE36	Yes	Yes
R5	1	Resistor	1.5 Ω	1%	Axial	Vishay	5063JD1R500F12AF5	Yes	Yes
R6, R8	2	Resistor	470 Ω	1%	Axial	Vishay	CCF55470R0FKE36	Yes	Yes

R11	1	Resistor	33 kΩ	1%	Axial	Vishay	CCF5533K0FKE36	Yes	Yes
R12	1	Resistor	4.7 kΩ	1%	Axial	Vishay	CCF554K70FKE36	Yes	Yes
R13	1	Resistor	18 kΩ	1%	Axial	Vishay	CCF5518K0FKE36	Yes	Yes
T1	1	Custom Transformer	NA	NA	NA	P&V Elektronik	NCP1207-T1	No	Yes
T2	1	Custom Transformer	NA	NA	NA	P&V Elektronik	NCP1207-T2	No	Yes
J1	1	PCB Terminal	NA	NA	pitch: 7.5 mm	Weidmuller	1594420000	Yes	Yes
J2	1	PCB Terminal	NA	NA	pitch: 5.08 mm	Weidmuller	1592820000	Yes	Yes