



Bill of Materials for the NCP1081SPCGEV B Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C1, C2, C3, C4, Cf1	5	Capacitor	100n	10%	0805-C-S	Samsung	-	Yes	Yes
Cf	1	Capacitor Polar Tant	10u/20V/2.1R/T	10%	C-TANT-B	AVX	TAJB106K020R	No	Yes
Cfb1	1	Capacitor	39n	10%	0805-C-S	Samsung	-	Yes	Yes
Cfb2	1	Capacitor	12n	10%	0805-C-S	Samsung	-	Yes	Yes
Cgnd	1	Capacitor	2200p/2KV	10%	1812	AVX	1812GC222KAT1A	Yes	Yes
Cline, Cpd1, Cpd2	3	Capacitor	100n/100V	10%	1206-C	Samsung	-	Yes	Yes
Cout	1	Capacitor Polar Tant	68u/25V/55mR/T	10%	C-TANT-E	AVX	TPME686K025R0055	No	Yes
Cpd	1	Capacitor Polar Elec	100u/63V	20%	CRD10.0L17.0RM5.0	Hitano	-	Yes	Yes
Csi	1	Capacitor	NC	10%	0805-C-S	Samsung	-	Yes	Yes
Csn	1	Capacitor	NC	10%	1206-C	Samsung	-	Yes	Yes
Csn1	1	Capacitor	100p/200V	10%	0805-C-S	AVX	08052A471JAT2A	Yes	Yes
Csn2	1	Capacitor	470p/200V	10%	0805-C-S	Samsung	-	Yes	Yes
Css	1	Capacitor	47n	10%	0805-C-S	Samsung	-	Yes	Yes
Cvddh	1	Capacitor	2.2u/16V	10%	0805-C-S	Samsung	-	Yes	Yes
Cvddl	1	Capacitor	470n	10%	0805-C-S	Samsung	-	Yes	Yes
Dbr1, Dbr2, Dbr3, Dbr4, Dbr5, Dbr6	6	Diode Schottky	MBRS1100T3G	-	403A-03	ON Semiconductor	MBRS1100T3G	No	Yes
Dbw, DGate	2	Diode	BAS16HT1G	-	SOD323	ON Semiconductor	BAS16HT1G	No	Yes
Dsec	1	Diode Schottky	12CWQ06FNPBF	-	DPAK	VISHAY FORMERLY IRF	12CWQ06FNPBF	No	Yes
Dsn, Dsn1	2	Diode	MURS120T3G	-	403A-03	ON Semiconductor	MURS120T3G	No	Yes
J1, J4	2	8 Position 8 Contact (8P8C) modular jack communications connector	RJ45	-	RJ45-MX-85505	Molex	85505-5113	Yes	Yes
L1	1	Secondary Filter	10uH/3A	-	10x12	-	-	No	Yes
Led	1	LED	KP-2012SGC	-	0805-D-S	Kingbright	KP-2012SGC	Yes	Yes
Q1	1	MOSFET N-CHANNEL	Si7462DP	-	SOP8	VISHAY SILICONIX	Si7462DP	No	Yes
Q2, Q3	2	MOSFET P-Channel	Si7113DN	-	POWERPACK 1212-8	-	Si7113DN	No	Yes
Q4	1	MOSFET N-CHANNEL	FDS3992	-	SO-8	Fairchild	FDS3992	No	Yes
Qgate	1	Transistor PNP	BFT92	-	SOT23	NXP	BFT92	Yes	Yes
Rbias1, Rsl	2	Resistor	5.1K	5%	0805-R-S	Uni ohm	-	Yes	Yes
Rbias2	1	Resistor	20K	5%	0805-R-S	Uni ohm	-	Yes	Yes
Rbr1, Rbr2, Rbr3, Rbr4, Rosc	5	Resistor	150K	5%	0805-R-S	Uni ohm	-	Yes	Yes
Rbw, Rsn2	2	Resistor	75	5%	0805-R-S	Uni ohm	-	Yes	Yes
Rclass	1	Resistor	22	5%	0805-R-S	Uni ohm	-	Yes	Yes
Rcs	1	Resistor	0R1/2W	1%	2512-S	PHYCOMP	232276430107	Yes	Yes
Rdet1	1	Resistor	24.9K/0.1%	0.1%	0805-R-S	Uni ohm	-	Yes	Yes
Rdet1'	1	Resistor	470K	5%	0805-R-S	Uni ohm	-	Yes	Yes
Rdet2	1	Resistor	845/0.1%	0.1%	0805-R-S	Uni ohm	-	Yes	Yes
Rfb1	1	Resistor	15K	5%	0805-R-S	Uni ohm	-	Yes	Yes
Rfb2	1	Resistor	3.9K	5%	0805-R-S	Uni ohm	-	Yes	Yes
Rfb3	1	Resistor	820	5%	0805-R-S	Uni ohm	-	Yes	Yes
Rgate	1	Resistor	10	5%	0805-R-S	Uni ohm	-	Yes	Yes
Rilim1	1	Resistor	44.2K	5%	0805-R-S	Uni ohm	-	Yes	Yes
Rinrush	1	Resistor	120K	5%	0805-R-S	Uni ohm	-	Yes	Yes
Rled	1	Resistor	1K	5%	0805-R-S	Uni ohm	-	Yes	Yes
Rsn	1	Resistor	NC	-	2512-S	-	-	Yes	Yes
Rsn1	1	Resistor	330/2W	5%	2512-S	VISHAY DALE	PWC2512-330RJI	Yes	Yes
T1, T2	2	Transformer POE+, Midcom Inc.	WE-749012011	-	749012011	Würth Elektronik	749012011	No	Yes
T3	1	PoE Plus Transformer	SM-00112	-	NUFLUX	NuFlux	SM-00112	No	Yes
U1	1	Power over Ethernet controller	NCP1081	-	TSSOPEP20	ON Semiconductor	NCP1081	No	Yes
U2	1	HIGH ISOLATION VOLTAGE SSOP PHOTOCOUPLER	PS2801-1-F3-A	-	SSOP4	CEL - NEC	PS2801-1-F3-A	No	Yes
U3	1	Programmable Shunt Voltage Reference	TL432BIDBZTG4	-	SOT23	TI	TL432BIDBZTG4	No	Yes
Zbr1, Zbr2, Zbr3, Zbr4	4	Diode Zener 16V	MMSZ16T1G	-	SOD123	ON Semiconductor	MMSZ16T1G	No	Yes
Zline	1	Diode TVS 58V	1SMA58AT3G	-	SMA	ON Semiconductor	1SMA58AT3G	No	Yes
Ztvs	1	Diode TVS 100V	1SMB100AT3G	-	403A-03	ON Semiconductor	1SMB100AT3G	No	Yes