



## NCP1083QBCGEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
U1	1	Power over Ethernet controller	NCP1083		TSSOPEP20	ON Semi	NCP1083DEG	No	Yes
Cf1	1	Capacitor SMD	100n/50V	10%	0805-C-S	TDK	C2012X7R1H104K	Yes	Yes
Cline, Cpd1	2	Capacitor SMD	100n/100V	10%	1206-C	TDK	C3216X7R2A104K	Yes	Yes
Csn1	1	Capacitor SMD	100p/200V	10%	0805-C-S	TDK	C2012C0G2E101J	Yes	Yes
Cfb2	1	Capacitor SMD	12n/50V	10%	0805-C-S	AVX	08055C123KAT2A	Yes	Yes
Cvddh	1	Capacitor SMD	2.2u/16V	+80% to -20%	0805-C-S	TDK	C2012Y5V1C225Z	Yes	Yes
Cgnd	1	Capacitor SMD	2200p/2kV	10%	1812	TDK	C4532X7R3D222K	Yes	Yes
Cfb1	1	Capacitor SMD	39n/50V	10%	0805-C-S	AVX	08055C393KAT2A	Yes	Yes
Cvddl	1	Capacitor SMD	470n/50V	10%	0805-C-S	TDK	C2012X7R1H474M	Yes	Yes
Csn2	1	Capacitor SMD	470p/200V	10%	0805-C-S	AVX	08052C47KJAT2A	Yes	Yes
Css	1	Capacitor SMD	47n/50V	10%	0805-C-S	TDK	C2012X7R1H473K	Yes	Yes
Cpd	1	Electrolytic Capacitor	100u/63V	20%	CRD10.0L17	Panasonic	EEUF1J101	No	Yes
Cf	1	Capacitor Polar	10u/20V	10%	C-TANT-B	AVX	TAJB106K020R	Yes	Yes
Cout	1	Capacitor Polar	68u/25V/55mR	10%	C-TANT-E	AVX	TPME686K025R0055	No	Yes
T3	1	PoE Plus Transformer			EFD20	NUFLUX	SM-00112	No	Yes
Daux1	1	SMD Schottky Rectifier			403A-03	ON Semi	MBRS2H100T3G	No	Yes
Dsn, Dsn1	2	SMD Ultrafast Rectifiers			403A-03	ON Semi	MURS120T3G	No	Yes
Dbr1, Dbr2, Dbr3, Dbr4, Dbr5, Dbr6	6	SMD Schottky Rectifier			403A-03	ON Semi	MBRS1100T3G	No	Yes
Dbw, Dgate	2	SMD Switching Diode			SOD323	ON Semi	BAS16HT1G	No	Yes
Dsec	1	SMD Schottky Rectifier			DPAK	Vishay	12CWQ06FNPBF	No	Yes
Ztvs	1	SMD TVS Zener			403A-03	ON Semi	15MB100AT3G	No	Yes
Zaux1	1	SMD Zener			SOD323	ON Semi	MM3Z3V35T1G	No	Yes
Zbr3, Zbr4	2	SMD Zener			SOD123	ON Semi	MMS216T1G	No	Yes
Zline	1	SMD TVS Zener			SMA	ON Semi	15MA58AT3G	No	Yes
JOUT	1	Header, 6-Pin			HDR1X6	Würth Elektronik	613 006 111 21	Yes	Yes
P1	1	Header, 8-Pin			HDR1X8	Würth Elektronik	613 008 111 21	Yes	Yes
L1	1	Drum Core Choke	10uH/3A		10X12	Murata	18R103C	No	Yes
Q1	1	MOSFET N-CHANNEL	Si7462DP		SOPP8	Vishay Siliconix	Si7462DP	No	Yes
Q4	1	MOSFET N-CHANNEL			SO-8	Fairchild	FDS3992	No	Yes
Qgate	1	Transistor PNP			SOT23	NXP	BFT92	No	Yes
U2	1	High Isolation Voltage Optocoupler			SSOP4	CEL	PS2801-1-F3-A	No	Yes
U3	1	Programmable Shunt Voltage Reference			SOT23	ON Semi	NCP431AV5NT1G	No	Yes
Rcs	1	Resistor SMD	1 0.1/3W	1%	2512-S	Bourns	CRA2512-FZR100ELF	Yes	Yes
Rgate	1	Resistor SMD	10	1%	0805-R-S	Walsin	WR08X10R0FTL	Yes	Yes
Rinrush	1	Resistor SMD	121k	1%	0805-R-S	Walsin	WR08X1213FTL	Yes	Yes
Rbr3, Rbr4, Rosc	3	Resistor SMD	150k	1%	0805-R-S	Walsin	WR08X1503FTL	Yes	Yes
Rfb1	1	Resistor SMD	15k	1%	0805-R-S	Walsin	WR08X1502FTL	Yes	Yes
Rbias2	1	Resistor SMD	20k	1%	0805-R-S	Walsin	WR08X2002FTL	Yes	Yes
Rclass	1	Resistor SMD	30.1	1%	0805-R-S	Yageo	RC0805FR-0730R1L	Yes	Yes
Rdet1	1	Resistor SMD	24.9k	1%	0805-R-S	Walsin	WR08X2492FTL	Yes	Yes
Rfb2	1	Resistor SMD	3.92k	1%	0805-R-S	Walsin	WR08X3921FTL	Yes	Yes
Rsn1	1	Resistor SMD	330 /1W	5%	2512-S	Walsin	WR25X331JTL	Yes	Yes
Raux1	1	Resistor SMD	39.2k	1%	0805-R-S	Walsin	WR08X3922FTL	Yes	Yes
Rilim1	1	Resistor SMD	44.2K	1%	0805-R-S	Walsin	WR08X4422FTL	Yes	Yes
Rbias1, Rsl	2	Resistor SMD	5.1k	5%	0805-R-S	Walsin	WR08X512JTL	Yes	Yes
Rbw, Rsn2	2	Resistor SMD	75	1%	0805-R-S	Walsin	WR08X750JTL	Yes	Yes
Rfb3	1	Resistor SMD	820	1%	0805-R-S	Yageo	RC0805FR-07820RL	Yes	Yes
Rdet2	1	Resistor SMD	845	1%	0805-R-S	Yageo	RC0805FR-07845RL	Yes	Yes
Rdet1	1	Resistor SMD	NC	1%	0805-R-S				
Rbr1, Rbr2	2	Resistor SMD	NC	1%	0805-R-S				
Q2, Q3	2	P-Channel 100V MOSFET, dual	NC		POWERPACK	Vishay	Si7113	Yes	Yes
Csi	1	Capacitor SMD	NC		0805-C-S				
Zbr1, Zbr2	1	SMD Zener	NC		SOD123	ON Semi	MMS216T1G	No	Yes