



## Bill of Materials for the NCP1340GEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C1	1	Capacitor, Electrolytic	150uF	400V	18mm x 7.5mm(LS)	United Chemi-Con	EKXG401ELL151MM40S	No	Yes
C2, C19	2	Capacitor, Ceramic, SMD, X7R	0.1uF/50V	10%	0603	Yaego	CC0603KRX7R9BB104	Yes	Yes
C3	1	Capacitor, Electrolytic	47uF/35V	20%	6mm x 2.5mm(LS)	Kemet	ESH476M035AE3AA	Yes	Yes
C4, C8, C20	3	Capacitor, Ceramic, SMD, X7R	10nF/50V	10%	0603	Vishay Vitramon	VJ0603Y103KXAAC31	Yes	Yes
C5	1	Capacitor, Electrolytic	100uF/35V	20%	6mm x 2.5mm(LS)	Kemet	ESH107M035AE3AA	Yes	Yes
C6	1	Capacitor, Ceramic, SMD, X7R	6800pF/630V	20%	1206	TDK	C3216X7R2J682M115AA	Yes	Yes
C7, C12	2	Capacitor, Ceramic, SMD, X7R	100pF/1kV	10%	1206	Johanson's Dielectric	102R18W101KV4E	Yes	Yes
C9	1	Capacitor, Ceramic, SMD, X7R	150pF/50V	10%	0603	Yaego	CC0603KRX7R9BB151	Yes	Yes
C10	1	Capacitor, Ceramic, SMD, X7R	100pF/50V	10%	0603	Vishay Vitramon	VJ0603Y101KXACW1BC	Yes	Yes
C11	1	Capacitor, Ceramic, SMD, X7R	270pF/50V	10%	0603	Yaego	CC0603KRX7R9BB271	Yes	Yes
C13, C14	2	Capacitor, Electrolytic	1000uF/35V	20%	12.5mm x 5mm(LS)	Panasonic	EEU-FM1V102	No	Yes
C15	1	Capacitor, Ceramic, SMD, X7R	470nF/50V	10%	1206	Yaego	CC1206KKX7R9BB474	Yes	Yes
C16	1	Capacitor, Ceramic, SMD, X7R	3.3nF/50V	10%	0603	Kemet	C0603C332K5RACTU	Yes	Yes
C21	1	Capacitor, Ceramic, SMD, X7R	33nF/50V	10%	0603	Yaego	CC0603KRX7R9BB333	Yes	Yes
C23	1	Capacitor, Ceramic, SMD, X7R	1uF/50V	10%	0603	Taiyo Yuden	UMK107AB7105KA-T	Yes	Yes
C22	1	Capacitor, Ceramic, SMD, X7R	NI	-	1206	-	-	Yes	Yes
CX1	1	Capacitor, Film, X2	220nF/310Vac	10%	7mm x 15mm (12.5mm LS)	Wurth	890334024002	No	Yes
CY1, CY2	2	Capacitor, Ceramic, Y2	1000pF/250VAC	20%	7mm Disc (5mm LS)	Murata	DE2E3KY102MA2BM01	No	Yes
CY3	1	Capacitor, Ceramic, Y2	2200pF/250VAC	20%	8mm Disc (5mm LS)	Murata	DE2E3KY222MA2BM01	No	Yes
F1	1	Fuse, Fast Acting	6A/250Vac	-	2AG	LITTELFUSE	0224006.HXUP	Yes	Yes
F2	1	Fuse, Fast Acting	3A/250Vac	-	2AG	LITTELFUSE	0224003.HXP	Yes	Yes
MOV1	1	Varistor	423V/2.5kA	-	10mm (7.5mm LS)	Epcos	S10K300	No	Yes
R1, R2	2	Resistor, SMD	1k	1%	1206	Yaego	RC1206FR-071KP	Yes	Yes
R12, R14	2	Resistor, SMD	1k	1%	0603	Vishay Dale	CRCW06031K00FKEA	Yes	Yes
R13	1	Resistor, SMD	174k	1%	0603	Vishay Dale	CRCW0603174KFKEA	Yes	Yes
R16	1	Resistor, SMD	44.2k	1%	0603	Vishay Dale	CRCW0603442KFKEA	Yes	Yes
R17	1	Resistor, SMD	NI	-	0603	-	-	Yes	Yes
R18, R18A	2	Resistor, SMD	200	1%	1206	Vishay Dale	CRCW1206200RFKEA	Yes	Yes

R8, R19	2	Resistor, SMD	10k	1%	0603	Vishay Dale	CRCW060310K0FKEA	Yes	Yes
R20	1	Resistor, SMD	10	1%	0603	Vishay Dale	CRCW060310R0FKEA	Yes	Yes
R21	1	Resistor, SMD	165k	1%	0603	Vishay Dale	CRCW0603165KFKEA	Yes	Yes
R22	1	Resistor, SMD	750	1%	0603	Vishay Dale	CRCW0603750RFKEA	Yes	Yes
R23	1	Resistor, SMD	15k	1%	0603	Vishay Dale	CRCW060315K0FKEA	Yes	Yes
R24, R32	2	Resistor, SMD	24.9k	1%	0603	Vishay Dale	CRCW060324K9FKEA	Yes	Yes
R3	1	Resistor, SMD	0.4	1%	2512	Yaego	PT2512FK-070R4L	Yes	Yes
R30	1	Resistor, SMD	22k	1%	0603	Vishay Dale	CRCW060322K0FKEA	Yes	Yes
R31	1	Resistor, SMD	8.25	1%	1206	Vishay Dale	CRCW12068R25FKEA	Yes	Yes
R34	1	Resistor, SMD	20	1%	1206	Vishay Dale	CRCW120620R0FKEA	Yes	Yes
R35	1	Resistor, SMD	6.8k	1%	0603	Vishay Dale	CRCW06036K80FKEA	Yes	Yes
R36, R37	2	Resistor, SMD	39k	1%	0603	Vishay Dale	CRCW060339K0FKEA	Yes	Yes
R38	1	Resistor, SMD	100	1%	0603	Vishay Dale	CRCW0603100RFKEA	Yes	Yes
R39	1	Resistor, SMD	0	-	1206	Vishay Dale	CRCW12060000Z0EA	Yes	Yes
R41	1	Resistor, SMD	0	-	0603	Vishay Dale	CRCW06030000Z0EA	Yes	Yes
R3A	1	Resistor, SMD	0.806	1%	2512	KOA Speer	SR733ATTER806F	Yes	Yes
R4, R5, R6, R7	4	Resistor, SMD	100k	1%	1206	Vishay Dale	CRCW1206100KFKEA	Yes	Yes
R9	1	Resistor, SMD	1.18	1%	1206	Vishay Dale	CRCW12061R18FKEA	Yes	Yes
RT1	1	Thermistor, NTC	220k	5%	2.5mm	Vishay BC	NTCLE100E3224JB0	Yes	Yes
L1	1	Choke, Common Mode	10mH	2A	-	WURTH	744823210	No	Yes
L3	1	Bead, Ferrite, SMD	48Ohm/100MHz	-	1812	Laird	28F0121-0SR-10	No	Yes
TX1	1	Transformer, Flyback	600uH	10%	ER28	Würth	750315170	No	Yes
D1, D2	2	Diode, Rectifier	MRA4007	1000V/1A	SMA	ON Semiconductor	MRA4007T3G	No	Yes
D3	1	Diode, Bridge	600V/4A	-	18.5mm x 22mm	Diodes Inc	GBU406	Yes	Yes
D4	1	Diode, General Purpose	1kV/1.5A	-	SMB	Vishay	S2M-E3/52T	Yes	Yes
D6, D7, D8	3	Diode, General Purpose	100V/200mA	-	SOD-123	ON Semiconductor	MMSD4148T1G	No	Yes
D9	1	Diode, Zener	27V/500mW	5%	SOD-123	ON Semiconductor	MMSZ27T1G	No	Yes
D12	1	Diode, Schottky	100V/1A	-	SMA	ON Semiconductor	MBRA1H100T3G	No	Yes
D14	1	Diode, General Purpose	200V/200mA	-	SOD-323	ON Semiconductor	BAS20HT1G	No	Yes
M1	1	MOSFET, High Voltage	650V/165mOhm	-	TO-220FP	Infineon	IPA60R165CP	No	Yes
M2	1	MOSFET, SR	100V/132A	-	SO-8FL	ON Semiconductor	NTMFS6B03N	No	Yes
U1	1	Flyback Controller	NCP1340B3	-	SOIC-9	ON Semiconductor	NCP1340B3D1R2G	No	Yes
U2	1	Optocoupler	CTR 50%-200%	-	PDIP4	CEL	PS2513-1-A	No	Yes
U3	1	SR Controller	NCP43080	-	DFN8	ON Semiconductor	NCP43080	No	Yes
U4	1	Shunt Regulator	NCP431A	1%	SOT-23	ON Semiconductor	NCP431ACSNT1G	No	Yes
HS1	1	Heatsink	-	-	-	-	-	Yes	Yes
J1	1	3T Screw Block	-	-	5mm Pitch	On Shore Technology	OSTTA030161	No	Yes
J2	1	2T Screw Block	-	-	10mm Pitch	On Shore Technology	ED200/2DS	No	Yes
J3, J4, J5, J6	4	Standoff, Nylon	-	-	6-32	Keystone Electronics	4820	Yes	Yes
-	4	Nut, Nylon	-	-	6-32	Keystone Electronics	9606	Yes	Yes