



Bill of Materials for the NCP1342PD65WGEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
T1	1	Flyback Transformer	300uH	10%	RM-8	Würth	750343808	No	Yes
L2	1	Common Mode Choke	10mH	30%	23x13mm	Würth	744823210	No	Yes
L3	1	Axial-Leaded Inductor	10uH	20%	7.8mm	Würth	744732100	No	Yes
CX1	1	Film Capacitor, X2, Radial	330n/305Vac	10%	18x8.5mm	Epcos	B32922D3334K000	No	Yes
C1-2	2	Aluminum Electrolytic Capacitor	68u/400V	20%	12.5mm	Nichicon	UCY2G680MHD	No	Yes
C10-12	3	Aluminum Organic Polymer Capacitor	470u/25V	20%	8mm	Illinois Capacitor	477AVG025MFBJ	No	Yes
C15, C29	2	Ceramic Capacitor, X7R, SMD	100n/50V	10%	0603	AVX	06035C104K4Z2A	Yes	Yes
C9	1	Ceramic Capacitor, X7R, SMD	100p/50V	10%	0603	AVX	06035C101KAT2A	Yes	Yes
C8	1	Ceramic Capacitor, X7R, SMD	82p/50V	10%	0603	AVX	06035C820KAT2A	Yes	Yes
C5-6, C17	3	Ceramic Capacitor, X7R, SMD	1n/50V	10%	0603	AVX	06035C102K4Z2A	Yes	Yes
C16, C20	2	Ceramic Capacitor, X7R, SMD	1u/35V	10%	0603	Murata	GRM188R7YA105KA12	Yes	Yes
C7	1	Ceramic Capacitor, X7R, SMD	4.7u/35V	10%	0805	TDK	C2012X7R1V475K125A	Yes	Yes
C3	1	Ceramic Capacitor, X7R, SMD	470p/630V	10%	1206	Yageo	CC1206KKX7RZBB471	Yes	Yes
C4	1	Ceramic Capacitor, X7T, SMD	100n/450V	20%	1206	TDK	C3216X7T2W104M160A	Yes	Yes
C18-19	2	Ceramic Capacitor, X7S, SMD	4.7u/100V	10%	1206	AVX	12061Z475KAT2A	Yes	Yes
C36	1	Ceramic Capacitor, X7R, SMD	220p/50V	10%	1206	AVX	12065C221KAT2A	Yes	Yes
CY1-3	3	Ceramic Capacitor, X1/Y2, SMD	1n/250Vac	10%	2220	Knowles Syfer	2220AJ250102KXTB16	No	Yes
R8	1	Resistor, SMD	1.8k	1%	0603	Vishay/Dale	CRCW06031K80FKEA	Yes	Yes
R25	1	Resistor, SMD	100R	1%	0603	Vishay/Dale	CRCW0603100RFKEA	Yes	Yes
R31	1	Resistor, SMD	100k	1%	0603	Vishay/Dale	CRCW0603100KFKEB	Yes	Yes
R13, R20, R28, R30, R49	5	Resistor, SMD	10.0k	1%	0603	Vishay/Dale	CRCW060310K0FKEA	Yes	Yes
R11, R17	2	Resistor, SMD	1.00k	1%	0603	Vishay/Dale	CRCW06031K00FKEA	Yes	Yes
R10, R27	2	Resistor, SMD	20.0k	1%	0603	Vishay/Dale	CRCW060320K0FKEA	Yes	Yes
R48	1	Resistor, SMD	33k	1%	0603	Vishay/Dale	CRCW060333K0FKEA	Yes	Yes
R23	1	Resistor, SMD	4.7k	1%	0603	Vishay/Dale	CRCW06034K70FKTA	Yes	Yes
R46-47	2	Resistor, SMD	470k	1%	0603	Vishay/Dale	CRCW0603470KFKEA	Yes	Yes
R5, R18, R43-45, R50	6	Resistor, SMD	49.9k	1%	0603	Vishay/Dale	CRCW060349K9FKEA	Yes	Yes
R40	1	Resistor, SMD	499k	1%	0603	Vishay/Dale	CRCW0603499KFKTA	Yes	Yes
R21	1	Resistor, SMD	7.5k	1%	0603	Vishay/Dale	CRCW06037K50FKEA	Yes	Yes
R9	1	Resistor, SMD	820k	1%	0603	Vishay/Dale	CRCW0603820KFKEA	Yes	Yes
R15	1	Resistor, SMD	91k	1%	0603	Vishay/Dale	CRCW060391K0FKEA	Yes	Yes
R4, R12, R29	3	Resistor, SMD	10.0R	1%	0805	Vishay/Dale	CRCW080510R0FKEA	Yes	Yes
R6, R26, R39	3	Resistor, SMD	1.00R	1%	0805	Vishay/Dale	CRCW08051R00FKEA	Yes	Yes
R2, R2A	2	Resistor, 1/2W, SMD	0.5R	1%	1206	Stackpole	CSR1206FTR500	Yes	Yes
R1	1	Resistor, SMD	1.00k	1%	1206	Vishay/Dale	CRCW12061K00FKEA	Yes	Yes
R19	1	Resistor, SMD	22R	1%	1206	Vishay/Dale	CRCW120622R0FKEA	Yes	Yes
R3	1	Resistor, SMD	300k	1%	1206	Vishay/Dale	CRCW1206300KFKEA	Yes	Yes
R7	1	Not Installed	-	-	0603	-	-	-	-
RT1	1	NTC Thermistor	220k	1%	0603	Panasonic	ERT-J1VT224FM	Yes	Yes
VAR1	1	Metal Oxide Varistor	470V/1200A	-	7mm	Würth	820573011	Yes	Yes
FB1	1	Ferrite Bead	1k@100MHz	-	0805	Würth	742792096	Yes	Yes
FB2	1	Ferrite Bead	600R@100MHz	-	0805	Würth	742792040	Yes	Yes
F1	1	Fuse	1.6A/250VAC	-	Axial Lead	Hollyfuse	20T-016H	Yes	Yes
ZD1	1	Zener Diode	24V	5%	SOD-323	ON semiconductor	MM3Z24VT1G	No	Yes
ZD2, ZD8	2	Zener Diode	10V	5%	SOD-323	ON semiconductor	MM3Z10VT1G	No	Yes
ZD3	1	Zener Diode	7.5V	5%	SOD-323	ON semiconductor	MM3Z7V5T1G	No	Yes
BD1-2	2	Bridge Rectifier Diode	600V	-	SMT	Comchip	Z4GP206L-HF	No	Yes
D1-2	2	Fast-Recovery Diode	600V	-	SOD-123	ON semiconductor	RS1JFA	No	Yes
D3, D5, D7, D9, D11	5	General Purpose Switching Diode	250V	-	SOD-323	ON semiconductor	BAS21HT1G	No	Yes
D4	1	Super-Fast Rectifier Diode	600V	-	SOD-123	ON semiconductor	US1JFA	No	Yes
D6	1	General Purpose Switching Diode	300V	-	SOD-323	Vishay	GSD2004WS-E3-08	No	Yes
D10, D12-13	3	Schottky Diode	30V	-	SOD-323	ON semiconductor	BAT54HT1G	No	Yes
Q1	1	High-Voltage N-Channel Power MOSFET	650V/385mOhm	-	Power88	Infineon	IPL60R385CPAUMA1	No	Yes
Q2	1	N-Channel Power MOSFET	100V/4.8mOhm	-	SO-8FL	ON semiconductor	NTMFSB03NT1G	No	Yes
Q3	1	General Purpose Transistor, PNP	40V	-	SOT-23	ON semiconductor	MMBT3906LT1	No	Yes
Q4, Q7-9, Q12	5	General Purpose Transistor, NPN	40V	-	SOT-23	ON semiconductor	MMBT3904LT1	No	Yes
Q6	1	N-Channel Small-Signal MOSFET	60V	-	SOT-23	ON semiconductor	NTR5105PT1G	No	Yes
Q10	1	General Purpose Transistor, PNP	80V	-	SOT-23	ON semiconductor	MMBT456LT1G	No	Yes
Q11	1	General Purpose Transistor, NPN	80V	-	SOT-23	ON semiconductor	MMBT406LT1G	No	Yes
U1	1	QR Flyback Controller	NCP1342AMDCC	-	SOIC-8	ON semiconductor	NCP1342AMDCCDR2G	No	Yes
U2	1	Optoisolator	5kV	-	SMD-4	CEL	PS2513L-1-F3-A	No	Yes
U3	1	SR Controller	NCP43080D	-	DFN-8	ON semiconductor	NCP43080DMNTWG	No	Yes