



Bill of Materials for the NCP4371QC30GEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
B1	1	Surface Mount Glass Passivated Bridge Rectifiers	MB6S	-	SOIC-4	Vishay	MB2S-E3/45	Yes	Yes
C1, C2	2	Polarized Capacitor, High Voltage	15uF/400V	20%	E5-10-AX	Nichicon	UVC2G150MPD	Yes	Yes
C10	1	Ceramic Capacitor	120p	10%	C0603	Kemet	C0603C120K5RACTU	Yes	Yes
C11	1	Ceramic Capacitor	DNP	DNP	DNP	DNP	DNP	Yes	Yes
C12, C17, C20	3	Ceramic Capacitor	10n	10%	C0603	Kemet	C0603C103K5RACTU	Yes	Yes
C13, C21	2	Ceramic Capacitor	DNP	DNP	DNP	DNP	DNP	Yes	Yes
C8, C14	2	Ceramic Capacitor	1uF/25V	10%	C0805	Kemet	C0805C105K5RACTU	Yes	Yes
C16	1	Ceramic Capacitor, 100V	1.2nF/100V	10%	C0805	Kemet	C0805C122K2RACTU	Yes	Yes
C18	1	Ceramic Capacitor	33n	10%	C0603	Kemet	C0603C330K5RACTU	Yes	Yes
C19	1	Ceramic Capacitor, 200V	3.9n/200V	10%	C0805	Kemet	C0805C392K2RACTU	Yes	Yes
C22	1	Ceramic Capacitor	1uF/50V	10%	C0805	Murata Electronics	GRM21BR71H105KA12L	Yes	Yes
C3, C4, C5	3	Aluminum Polymer Capacitor	330uF/16V	20%	E3,5-8	Würth Elektronik	870025374005	Yes	Yes
C6	1	Ceramic Capacitor	100n	10%	C0805	Kemet	C0805C104K5RACTU	Yes	Yes
C7, C15	2	Ceramic Capacitor	100n	10%	C0603	Kemet	C0603C104K5RACTU	Yes	Yes
C9	1	Ceramic Capacitor	15p	10%	C0603	Kemet	C0603C150K5RACTU	Yes	Yes
CX1	1	100 nF, 310 VAC, Polyester Film, X2	100n	20%	XC10B6	Vishay	F339MX241031KDA2B0	Yes	Yes
CY1	1	1 nF, 500VAC, Ceramic, Y1	1n	20%	YC10B5	TDK Corporation	CD70ZU2GA102MYNKA	Yes	Yes
D11	1	Diode, Zener 20V	MM3Z20V1T1G	-	SOD323-R	ON Semiconductor	MM3Z20V1T1G	Yes	Yes
D2	1	Standard Recovery Rectifier 1.0A, 600 V	DFLR1600	-	SOD-123_MINI-SMA	Diodes	DFLR1600-7	Yes	Yes
D3	1	High Voltage Switching Diode, 250 V	BAS21	-	SOD323-R	ON Semiconductor	BAS21HT1G	Yes	Yes
D4, D5, D6, D7, D8	5	High Voltage Switching Diode, 200 V	BAS20	-	SOD323-R	ON Semiconductor	BAS20HT1G	Yes	Yes
D9	1	Diode, Zener 5.6V	MM3Z5V6ST1G	-	SOD323-R	ON Semiconductor	MM3Z5V6ST1G	Yes	Yes
F1	1	Fuse, 1.5A, Axial	1.5A	-	PICOFUSE_VERTICAL	Littelfuse Inc.	0263 01.5	Yes	Yes
K1	1	HORIZONTAL USB2.0 A TYPE THT SLIM TYPE	USB 2.0, Type A	-	614104150121	Würth Elektronik	614104150121	Yes	Yes
L1	1	Common Mode Power Line Choke	2.2mH/0.5A	20%	MURATA5000	Murata Electronics	50225C	Yes	Yes
L2	1	Radial Leaded Wire Wound Inductor WE-TI	1uH/8.5A	20%	WE-TI_5075	Würth Elektronik	7447462010	Yes	Yes
L4	1	Radial Leaded Wire Wound Inductor WE-TI	220uH/0.5A	10%	WE-TI_5075	Würth Elektronik	7447462221	Yes	Yes
Q1	1	600V CoolMOS Power Transistor	SPU07N60C3	-	INF-PG-TO-251-3-21_A_1PRIMARY	Infineon	SPU07N60C3	Yes	Yes
Q2	1	Power MOSFET 100V 132A 4.8mOhm Single N-Channel SO-8FL	NTMFS6B03N	-	SO-8FL	ON Semiconductor	NTMFS6B03NT1G	No	Yes
Q3, Q4	2	NPN Bipolar Small Signal Transistor	BSS64L	-	SOT23	ON Semiconductor	BSS64LT1G	Yes	Yes
R1, R2	2	Resistor SMD	4.7M	1%	R1206	Rohm	MCR18ERTF4704	Yes	Yes
R11, R17	2	Resistor SMD	10k	1%	R0603	Rohm	MCR03ERTF1002	Yes	Yes
R12	1	Resistor SMD	820R	1%	R0603	Rohm	MCR03ERTF8200	Yes	Yes
R13	1	Resistor SMD	DNP	DNP	R0805	DNP	DNP	Yes	Yes
R14, R15	2	Current Sense Resistor SMD	0.62R	1%	R0805	Panasonic	ERJ-6RQFR62V	Yes	Yes
R16	1	Resistor SMD	9.1k	1%	R0603	Rohm	MCR03ERTF9102	Yes	Yes
R18, R28	2	Resistor SMD	100k	1%	R0603	Rohm	MCR03ERTF1003	Yes	Yes
R19	1	Resistor SMD	22R	1%	R1206	Rohm	MCR25ERTF22R	Yes	Yes
R20	1	Resistor SMD	24k	1%	R0603	Rohm	MCR03ERTF2402	Yes	Yes
R21	1	Resistor SMD	15k	1%	R0603	Rohm	MCR03ERTF1502	Yes	Yes
R22	1	Resistor SMD	18k	1%	R0603	Rohm	MCR03ERTF1802	Yes	Yes
R23	1	Resistor SMD	1k8	1%	R0603	Rohm	MCR03ERTF1801	Yes	Yes
R24	1	Resistor SMD	39k	1%	R0603	Rohm	MCR03ERTF3902	Yes	Yes
R25, R26	2	Resistor SMD	47k	1%	R0603	Rohm	MCR03ERTF4702	Yes	Yes
R27	1	Current Sense Resistor SMD	0.01	1%	R1206	Rohm	ERJ-8CWFR010V	Yes	Yes
R3, R4	2	Resistor SMD	47k	1%	R0805	Rohm	MCR10ERTF4702	Yes	Yes
R5	1	Resistor SMD	10R	1%	R0805	Rohm	MCR10ERTF10R0	Yes	Yes
R6	1	Resistor SMD	47R	1%	R0603	Rohm	MCR03ERTF47R0	Yes	Yes
R7, R10	2	Resistor SMD	1k	1%	R0603	Rohm	MCR03ERTF1001	Yes	Yes
R8	1	Resistor SMD	10R	1%	R0603	Rohm	MCR03ERTF10R0	Yes	Yes
R9	1	Resistor SMD	22R	1%	R0603	Rohm	MCR03ERTF22R0	Yes	Yes
U1	1	QR Flyback Controller	NCP1361EABAY	-	TSOP6	ON Semiconductor	NCP1361EABAYSNT1G	No	Yes
U2	1	Secondary-Side Synchronous Rectification Driver	NCP4305D	-	WDFN8_2X2	ON Semiconductor	NCP4305DMTTWG	No	Yes
U3	1	Optocoupler	SFH615A-4	-	DIP4	Vishay	SFH615A-4	Yes	Yes
U4	1	Qualcomm Quick Charge™ 3.0 HVDCP Controller	NCP4371AAC	-	SO08	ON Semiconductor	NCP4371AACDR2G	No	Yes
XFRM1	1	Flyback Transformer, RM8, 12-pin	CUST_TRF_RM8FL_NCP4371_PART1VER2	-	RM8-12	Würth Elektronik	750315544	No	Yes