



Bill of Materials for the NCP1581SBCKRGEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
R1	1	Resistor SMD	10k	1%	1206	Vishay	CRCW120610K0FKEA	Yes	Yes
R2	1	Resistor SMD	22k	1%	1206	Vishay	CRCW120622K0FKEA	Yes	Yes
R3	1	Resistor SMD	470	1%	1206	Vishay	CRCW1206470RFKEA	Yes	Yes
R4	1	Resistor SMD	5k6	1%	1206	Vishay	CRCW12065K60FKEA	Yes	Yes
R6	1	Resistor SMD	0R	1%	1206	Vishay	CRCW120600R0FKEA	Yes	Yes
R9	1	Resistor SMD	4k7	1%	1206	Vishay	CRCW12064K70FKEA	Yes	Yes
R10	1	Resistor SMD	2k7	1%	1206	Vishay	CRCW12062K70FKEA	Yes	Yes
R5, R7	2	Resistor SMD	NU	-	1206	-	-	-	-
R8	1	Resistor Trimmer	10k	10%	64Y	Vishay	064Y103	Yes	Yes
C1, C2, C6	3	Ceramic Capacitor SMD	100n	10%	1206	Kemet	C1206F104K1RACTU	Yes	Yes
C3	1	Ceramic Capacitor SMD	1n	10%	1206	Kemet	C1206C102K5RAC-TU	Yes	Yes
C4	1	Ceramic Capacitor SMD	3n3	10%	1206	Kemet	C1206C332K5RAC-TU	Yes	Yes
C5	1	Ceramic Capacitor SMD	22p	10%	1206	Kemet	C1206C220J5GACTU	Yes	Yes
C7	1	Ceramic Capacitor SMD	NU	-	1206	-	-	Yes	Yes
C8	1	Ceramic Capacitor SMD	10u/16V	20%	1210	Murata	GRM32DR71C106MA01L	Yes	Yes
C10, C11	2	Ceramic Capacitor SMD	47u/6.3V	10%	1210	Murata	GCM32ER70J476KE19L		
C12	1	Ceramic Capacitor SMD	NU	-	1210	-	-	Yes	Yes
C15, C16	2	Tantalum Capacitor SMD	4.7u/16V	10%	A	Kemet	T491A475K016AT	Yes	Yes
C17	1	Tantalum Capacitor SMD	10u/25V	10%	C	Kemet	T491C106K025AT	Yes	Yes
C9	1	Electrolytic Capacitor	470u/16V	20%	10x12.5	Koshin	KZH-16V470U	Yes	Yes
C13, C14	2	Electrolytic Capacitor	NU	-	10xX	-	-	Yes	Yes
L1	1	Inductor SMD	1.2u	20%	13.2x12.8	Würth	744313120	Yes	Yes
Q1, Q2	2	Power N-MOSFET	NTD4860N	-	DPAK	ON Semiconductor	NTD4860N-1G	No	Yes
IC1	1	Synchronous PWM buck controler	NCP1581	-	SOIC14	ON Semiconductor	NCP1581DR2G	No	Yes
IC2	1	Adj. Shunt Regulator	NCP100	-	TSOP5	ON Semiconductor	NCP100SNT1G	No	Yes
X1, X2, X3	3	Terminal Block	-	-	Pitch: 5mm	Lumberg	KRM 02	Yes	Yes
X4	1	Terminal Block	-	-	Pitch: 3.5mm	Degson	DG350-3.50-02	Yes	Yes
JP1	1	Header pins	-	-	Pitch: 2.5mm	Tyco Electronics	87224-3	Yes	Yes