



Bill of Materials for the NCP3065 3A Buck Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
U1	1	DC-DC controller	NCP3065	-	SOIC8	ON Semiconductor	NCP3065DR2G	No	Yes
C1, C4	2	Ceramic Capacitor	100 nF	10%	1206	Kemet	C1206F104K1RAC	Yes	Yes
C2, C6	2	Electrolytic Capacitor	220uF / 50V	10%	G, 10x10.2	Panasonic	EEEVFK1H221P	Yes	Yes
C3	1	Ceramic Capacitor	1.8nF	10%	0805	AVX	08055F182K4Z2A	Yes	Yes
C5	1	Ceramic Capacitor	100pF	5%	0805	AVX	08051A101JAT2A	Yes	Yes
D1	1	Schottky Rectifier	5A, 40V	-	SMC	ON Semiconductor	MBRS540LT3G	No	Yes
D2	1	Switching Diode	MMSD4148	-	SOD123	ON Semiconductor	MMSD4148T1G	No	Yes
L1	1	Surface mount power inductor	22uH	20%	-	Coilcraft	DO5040H-223MLB	Yes	Yes
Q4	1	Power MOSFET, P Channel	MTB30P06V	-	D ² PAK	ON Semiconductor	MTB30P06VT4G	No	Yes
Q5	1	General purpose transistor	MMBT3904	-	SOT23	ON Semiconductor	MMBT3904LT1G	No	Yes
R1	1	Resistor	40 mΩ, 0.5 W	1%	2010	Vishay/Dale	WSL-2010 .04 1% EB E3	Yes	Yes
R8	1	Resistor	12kΩ	1%	0805	Phycomp	232273461202	Yes	Yes
R9	1	Resistor	10 kΩ	1%	0805	Phycomp	232273461003	Yes	Yes
R10, R15	2	Resistor	1 kΩ	1%	0805	Phycomp	232273461002	Yes	Yes
R11	1	Resistor	1.2 kΩ	1%	0805	Phycomp	232273461202	Yes	Yes
R12, R16	2	Resistor	150 mΩ	1%	2010	Vishay/Dale	WSL-2010 .15 1% EB E3	Yes	Yes
VIN, GND, ON/OFF,	4	Test Post				Vector Electronics		Yes	Yes
VAUX, LED+/-	3	Test Post				Vector Electronics	K24C/M	Yes	Yes
Q1	1	Transistor PNP	BC807		SOT-23	On Semiconductor	BC807-40LT1G	Yes	Yes
Q2	1	Transistor NPN	BC817		SOT-23	On Semiconductor	BC817-40LT1G	Yes	Yes
R13	1	Not assembled							Yes
R14	1	Not assembled							Yes
R2, R3, R4	3	Not assembled							Yes
R5, R6, R7	3	Not assembled							Yes