



Bill of Materials for the NCP5217AGEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
U1	1	Single Synchronous Step Down Controller	-	-	QFN-14 (Special)	ON Semiconductor	NCP5217AMNTXG	No	Yes
R1	1	Chip Resistor	75K	5%	0603	Panasonic	ERJ3GEYJ753V	Yes	Yes
R2	1	Chip Resistor	10K	5%	0603	Panasonic	ERJ3GEYJ103V	Yes	Yes
R8	1	Chip Resistor	5K	1%	0603	Panasonic	ERJ3EKF5001V	Yes	Yes
R3, R4	2	Chip Resistor	1K	5%	0603	Panasonic	ERJ3GEYJ102V	Yes	Yes
R5	1	Chip Resistor	100K	5%	0603	Panasonic	ERJ3GEYJ104V	Yes	Yes
R6	1	Chip Resistor	120K	1%	0603	Panasonic	ERJ3EKF1203V	Yes	Yes
R7	1	Chip Resistor	1K	1%	0603	Panasonic	ERJ3EKF1001V	Yes	Yes
R9	1	Chip Resistor	5.6K	1%	0603	Panasonic	ERJ3EKF5601V	Yes	Yes
R10	1	Chip Resistor	5.6	5%	0603	Panasonic	ERJ3GEYJ5R6V	Yes	Yes
R11	1	Chip Resistor	20K	5%	0603	Panasonic	ERJ3GEYJ203V	Yes	Yes
R12	1	Chip Resistor	3.3	5%	0603	Panasonic	ERJ3GEYJ3R3V	Yes	Yes
R13, R14, R15, R17	4	Chip Resistor	0	5%	0603	Panasonic	ERJ3GEYJR00V	Yes	Yes
R16, R18, R21, R22, R23	5	-	DNP	-	-	-	-	-	-
R19	1	Chip Resistor	4.3K	1%	0603	Panasonic	ERJ3EKF4301V	Yes	Yes
R20	1	-	DNP	-	-	-	-	-	-
C1	1	MLCC Chip Capacitor Temp Char: X7R, Rate V=50V	100nF	10%	0603	Panasonic	ECJ1VB1E104K	Yes	Yes
C2	1	MLCC Chip Capacitor Temp Char: CH, Rate V=50V	270pF	10%	0603	Panasonic	ECJ1VC1H271K	Yes	Yes
C3	1	MLCC Chip Capacitor Temp Char: CH, Rate V=50V	30pF	10%	0603	Panasonic	ECJ1VC1H300K	Yes	Yes
C4	1	MLCC Chip Capacitor Temp Char: CH, Rate V=50V	330pF	10%	0603	Panasonic	ECJ1VB1H331K	Yes	Yes
C5, C6	2	MLCC Chip Capacitor Temp Char: X5R, Rate V=25V	1uF	20%	0805	Panasonic	ECJ2FB1E105M	Yes	Yes
C7, C8, C9, C11	4	MLCC Chip Capacitor Temp Char: X5R, Rate V=25V	4.7uF	20%	0805	Panasonic	ECJ2FB1E475M	Yes	Yes
C10, C13, C16 C17, C19	5	-	DNP	-	-	-	-	-	-
C14, C15	2	SP-Cap/Polymer Aluminum Capacitor, 2V, ESR=12mΩ Reflow: 240°C, UD series	220uF	20%	7343	Panasonic	EEFUD0D221XR	Yes	Yes
C18	1	MLCC Chip Capacitor Temp Char: X5R, Rate V=6.3V	10uF	20%	0805	Panasonic	ECJ2FB0J106M	Yes	Yes
C20	1	MLCC Chip Capacitor Temp Char: X7R, Rate V=50V	0.1uF	20%	0603	Panasonic	ECJ1VB1E104M	Yes	Yes

D1	1	30V Schottky Diode Vf=0.35V @ 10mA	-	-	SOT-23	ON Semiconductor	BAT54LT1	No	Yes
D2	1	-	DNP	-	-	-	-	-	-
D3	1	-	DNP	-	-	-	-	-	-
M1, M3	2	Power MOSFET 30V, 57A Single N-Ch	-	-	SO-8	ON Semiconductor	NTMFS4841N	No	Yes
M2, M4	2	-	DNP	-	-	-	-	-	-
M5	1	Power MOSFET 50V, 200mA Single N-Ch	-	-	SOT-23	ON Semiconductor	BSS138L	No	Yes
L1	1	Power Choke Coil DCR=3.3mΩmax, ISAT=18A, IDC=26A	1uH	0.2	10x11.5x4mm	Cyntec	PCMC104T-1R0MN	Yes	Yes
LED1	1	Surface Mount LED	Green	-	0805	LUMEX	SML-LX0805GC-TR	Yes	Yes
LED2	1	Surface Mount LED	Red	-	0805	LUMEX	SML-LX0805IC-TR	Yes	Yes
COMP, EN_SKIP, PGOOD, AGND	4	Pin Header Single Row - 1 pin	-	-	Pitch=2.54mm	Betamax	2211S-40G-F1	Yes	Yes
J1	1	Pin Header Single Row - 2 pins	-	-	Pitch=2.54mm	Betamax	2211S-40G-F1	Yes	Yes
J2, SW1	3	Pin Header Single Row - 3 pins	-	-	Pitch=2.54mm	Betamax	2211S-40G-F1	Yes	Yes
J100	1	-	DNP	-	-	-	-	-	-
V5, VIN, VIN_GND, PGND, PGND, VOUT, VOUT_GND	7	Terminal Pin	-	-	f=1.74mm	HARWIN	H2121-01	Yes	Yes
BNC1	1	SMB SMT Straight Socket	-	-	5.1 x 5.1mm	Tyco Electronics	RS Stock# 420-5401	Yes	Yes