



## Bill of Materials for the NCP5183SYNCKBUCKGEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
BOARD STANDOFF	6	Locking PCB supports	-	-	hole 3.2 mm	Duratool	D01455	Yes	Yes
C1	1	Capacitor	220 nF	-	1206	Multicomp	MC1206B224K500CT	Yes	Yes
C2	1	Capacitor	470 nF	-	1206	Multicomp	MC1206B474K500CT	Yes	Yes
C3	1	Capacitor	470 nF	-	C150-084X183	Panasonic	ECQE4474KF	Yes	Yes
C4, C5, C6	3	Polarized capacitor	10 µF	-	E5-10,5	Panasonic	ECA2GHG100	Yes	Yes
C7, C9	2	Capacitor	220 nF	-	0805	Multicomp	MC0805B224K500CT	Yes	Yes
C8	1	Capacitor	100 nF	-	0805	Multicomp	MC0805B104K500CT	Yes	Yes
CON	1	Conector	M20-9990246	-	2.54 mm	Harwin	M20-9990246	Yes	Yes
D1	1	Diode	MURA160	-	SMA	ON Semiconductor	MURA160T3G	No	Yes
D2	1	Diode	1N4148	-	SOD-123	ON Semiconductor	MMSD4148T1G	Yes	Yes
IC1	1	Half Bridge Driver	NCP5183	-	SOIC-8	ON Semiconductor	NCP5183DR2G	No	Yes
IC2	1	HB driver with oscillator	NCP1392D	-	SOIC-8	ON Semiconductor	NCP1392DDR2G	No	Yes
JP	5	Shunt bar	969102-0000-DA	-	2.54 mm	3M	969102-0000-DA	Yes	Yes
JP5	1	Pin header	M20-9990246	-	2.54 mm	Harwin	M20-9990246	Yes	Yes
L1	1	Inductor	NU	NU	TJ3-U2_DR16	NU	NU	Yes	Yes
L2	1	Inductor	330 µH	-	TJ4-U2_DR2	Abrakon	AIRD-06-331K	Yes	Yes
L3	1	Inductor	NU	NU	RFS1412	NU	NU	Yes	Yes
LED1	1	LED	red	-	0805	Bivar	SM0805HCL	Yes	Yes
LSP1, LSP2, LSP3, LSP4, LSP5, LSP6	6	Turret Solder Terminal	13.14.239	-	1.3 mm	Ettinger	13.14.239	Yes	Yes
Q1, Q2	2	N-channel MOSFET	NDF10N60ZG	-	TO220BV	ON Semiconductor	NDF10N60ZG	No	Yes
Q3, Q4	2	N-channel MOSFET	NU	NU	TO220BV	NU	NU	No	Yes
Q5, Q6	2	N-channel MOSFET	NU	NU	TO252AA	NU	NU	No	Yes
R1	1	Resistor	10 Ω	-	1206	Multicomp	MC0125W1206110R	Yes	Yes
R10, R11, R12	3	Resistor	100 Ω	-	0805	Multicomp	MCWR08X1000FTL	Yes	Yes
R13	1	Resistor	11 kΩ	-	0805	Multicomp	MCWR08X1102FTL	Yes	Yes
R14	1	Trimmer	20 kΩ	-	B64Y	Vishay	M64Y203KB40	Yes	Yes
R15	1	Resistor	110 kΩ	-	0805	Multicomp	MCWR08X1103FTL	Yes	Yes
R17	1	Resistor	8.2 kΩ	-	0805	Multicomp	MCWR08X8501FTL	Yes	Yes
R18	1	Resistor	NU	NU	0805	NU	NU	Yes	Yes
R2, R3, R4, R5	4	Resistor	0 Ω	-	0805	Multicomp	MC0805S8F0000T5E	Yes	Yes
R20	1	Resistor	10 kΩ	-	0805	Multicomp	MCWR08X1002FTL	Yes	Yes
R6, R7, R8, R9	4	Resistor	47 kΩ	-	0805	Multicomp	MCWR08X4702FTL	Yes	Yes
SV1	1	2x single line pin header	M20-9990446	-	MA04-2	Harwin	M20-9990446	Yes	Yes
TP1, TP2, TP3, TP4, TP5, TP6, TP7, TP8, TP9	9	Turret Solder Terminal	13.14.239	-	1.3 mm	Ettinger	13.14.239	Yes	Yes