



Bill of Materials for the NCP10970AGEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
B1	1	Bridge Rectifier 1A, 1kV	MDB10S	-	TSSOP-4	ON Semiconductor	MDB10S	No	Yes
C1	1	Capacitor MLCC, SMD	220nF	20%	805	Various	Various	Yes	Yes
C2	1	Capacitor MLCC, SMD	1uF/25V	20%	805	Various	Various	Yes	Yes
C3	1	Capacitor MLCC, SMD	2.2nF	20%	805	Various	Various	Yes	Yes
C4	1	Capacitor MLCC, SMD	33nF	20%	805	Various	Various	Yes	Yes
C5	1	Electrolytic Capacitor	100uF/25V	20%	TH	Würth Elektronik	8.6008E+11	Yes	Yes
C6, C7	2	Capacitor MLCC, SMD	10uF/25V, X7R	20%	1206	Various	Various	Yes	Yes
C8	1	Capacitor MLCC, SMD	22uF/16V, X7R	20%	1206	Murata	GRM31CZ71C226ME15L	Yes	Yes
C9	0	Capacitor MLCC, SMD	NU	20%	805	Various	Various	Yes	Yes
CB1, CB2	2	Electrolytic Capacitor	10uF/400V	20%	TH	Würth Elektronik	8.60021E+11	Yes	Yes
CX1, CX2	2	X Capacitor	220nF/275Vac	-	TH	Würth Elektronik	8.90324E+11	Yes	Yes
D1	1	Switching Diode	BAV70L	-	SOT-23-3	ON Semiconductor	BAV70LT1G	No	Yes
D2, D3	2	Superfast Rectifier	US1MFA	-	SOD-123 FL	ON Semiconductor	US1MFA	No	Yes
D4	0	Zener Diode	NU	-	SOD-123	ON Semiconductor	-	No	Yes
F1	1	Fuse	T1A	-	TH	Bel Fuse	RST1	Yes	Yes
IC1	1	Dual Output Controller	NCP10970A1 NCP10970B1	-	SOIC-16	ON Semiconductor	NCP10970A1DR2G	No	Yes
L1	1	Inductor 1 mH, 0.5A	1mH	-	TH	Würth Elektronik	768772102	Yes	Yes
L2	1	Common Mode Choke	2x10mH	-	TH	Würth Elektronik	744821110	Yes	Yes
LED_SW, LED_LDO	2	Red LED 3mm	Red 3mm	-	TH	Various	Various	Yes	Yes
R1, R2, R8	3	Resistor, SMD	150kΩ	1%	1206	Various	Various	Yes	Yes
R3	1	Resistor, SMD	200kΩ	1%	805	Various	Various	Yes	Yes
R4	1	Resistor, SMD	56kΩ	1%	805	Various	Various	Yes	Yes
R5	1	Resistor, SMD	3.3kΩ	1%	603	Various	Various	Yes	Yes
R6	1	Resistor, SMD	6.8kΩ	1%	603	Various	Various	Yes	Yes
R7	1	Resistor, SMD	820Ω	1%	603	Various	Various	Yes	Yes
R9	0	Resistor, SMD	NU	1%	805	Various	Various	Yes	Yes
RB1, RB2, RB3, RB4	4	Resistor, SMD	3MΩ	1%	1206	Various	Various	Yes	Yes
RV1	0	Varistor	NU	-	TH	Würth Elektronik	820474611	Yes	Yes