



Bill of Materials for the NCP731ADNADJR2GEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
IC1	1	LDO regulator	N/A	N/A	MSOP-8	onsemi	NCP731ADNADJR2G	No	Yes
C2	1	Ceramic capacitor, X5R/X7R/etc	10uF/50V	±10%	1210	Samsung	CL32A106KBJNNNE	Yes (same or better DC bias char) *1	Yes
C5	1	Ceramic capacitor, X5R/X7R/etc	10uF/25V	±10%	1206	TDK	C3216X5R1V106M160AB	Yes (same or better DC bias char) *2	Yes
C7, C10	2	Ceramic capacitor, X7R	10nF	±10%	0805	Various	Various	Yes	Yes
C8	1	Ceramic capacitor, NPO	100pF	±10%	0805	Various	Various	Yes	Yes
R1	1	Resistor	33kOhm	±1%	0805	Various	Various	Yes	Yes
R3	1	Resistor	27kOhm	±1%	0805	Various	Various	Yes	Yes
R4	1	Resistor	18kOhm	±1%	0805	Various	Various	Yes	Yes
R5	1	Resistor	10kOhm	±1%	0805	Various	Various	Yes	Yes
RT1	1	Variable resistor (trimmer) 20-turn	100kOhm	±10%	T93YB	Vishay	T93YB104KT20	Yes (any cermet, >=20 turn)	Yes
JP1	1	Pin header	3 pin	N/A	2.54 mm	Various	Various	Yes	Yes
JP2...JP3	2	Pin header	2 pin	N/A	2.54 mm	Various	Various	Yes	Yes

Non-listed components not assembled (optional)

*1 .. C2 possible substitutions:

Taiyo Yuden: UMR325AC7106KM-P, UMR325AC7106MM-P 50V <- 3.8uF@40V

Samsung: CL32B106KBVZ4N 4.1uF@40V, CL32B106KBJZW6 3.5uF@40V, CL32B106KBJN3N 3.0uF@40V, CL32A106KBJN3N 50V 2.7uF@40V

Murrata: GCJ32EC71H106KA01L 50V 3.5uF@40V

*2 .. C5 possible substitutions:

TDK: C3216X7R1H106K160AC, C3216X7R1H106K160AE, CGA5L1X7R1H106K160AC, CGA5L1X7R1H106K160AE <- all 6uF at 15V DC bias

Taiyo Yuden: TMK316BLD106KL-T, TMK316BLD106ML-T, TMK316BLD106KL-T, TMK316BLD106ML-T <- all 6.8uF at 15V DC bias, others 1206 just ~3uF

Murrata: GCM31CC71E106KA03, GCM31CD7YA106KE36, GCJ31CC71E106KA15, GCJ31CC71E106MA15, GRM31CD7YA106KE11, GRM31CD71H106KE11 <- all 6-7uF at 15V DC bias