



Bill of Materials for the NCP737ADNADJR2GEVB Evaluation Board (PCB: RA0902DB-0)

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
IC1	1	LDO regulator	N/A	N/A	MSOP-8	ON Semiconductor	NCP737ADNADJR2G	No	Yes
C2	1	Ceramic capacitor	4.7uF/100V	±20%	1210	Taiyo Yuden	MSASH32MSB5475MPCA01	Yes (same or better DC bias char)	Yes
C5	1	Ceramic capacitor	2.2uF/35V	±10%	1206	Samsung	CL31B225KBHVPNE	Yes (same or better DC bias char) *1	Yes
C8	1	Ceramic capacitor	1nF	±10%	0805	Various	Various	Yes	Yes
C10	1	Ceramic capacitor	10nF	±20%	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
R6	1	Resistor	100kOhm	±1%	0805	Various	Various	Yes	Yes
RT1	1	Variable resistor (trimmer) 20-turn	100kOhm	±10%	T93YB	Vishay	T93YB104KT20	Yes (cermet 100k, ~20 turn, same footprint)	Yes
JP1	1	Pin header	3 pin	N/A	2.54 mm	Various	Various	Yes	Yes
JP2..JP4	3	Pin header	2 pin	N/A	2.54 mm	Various	Various	Yes	Yes
JP1, JP2, JP4	3	Jumper	2 pin	N/A	2.54 mm	Various	Various	Yes	Yes

Non-listed components not assembled (optional)

*1 .. C5 possible substitutions:

Samsung: CL31B225KBH4PNE, CL31B225KBHNNNE, CL31B225KBHNNNF, CL31B225KBHNFNE,
Taiyo Yuden: UMR316BC7225KL-T
Kemet: C1206X225K5RAC3316

Capacitor web part selectors - to find C = f(DC-bias) chart:

<https://weblib.samsungsem.com/mlcc/mlcc-ec.do?partNumber=CL31B225KBHNNNE>

<https://ds.murata.co.jp/simsurfing/mlcc.html?lcid=en-us>

<https://ksim3.kemet.com/capacitor-simulation?pn=C1206X225K5RAC3316>

<https://ds.yuden.co.jp/TYCOMPAS/or/specificationSearcher?pn=GMJ316AB7225KLHT&cid=C&u=M&pg=1>