

### Mark Johnson Pearl 3 Op-Amp Rolling Challenge - Lvandoorn Rankings

Rank	Score	Op-Amp	Input C (DM/CM)	IPS	Compensation	OPS Config	OL Zout @ Frequency
1	8.2	MC1458	1.4pF/No CM given	BJT Bastode LTP	1-Pole Miller	N/P CC	75 @ 1k, 75 @ 10k [10]
2	8	MUSES02 [1]	Not listed	BJT Unknown	Multi-pole [3]	N/P CC [8]	Not listed
3	7.8	LF353	Not listed	JFET LTP	1-Pole Miller	N/P CC	200 [11]
4	7.8	ADA4001 [1]	3.1pF/4.8pF	JFET Unknown	Multi-pole [4]	N/P CE [9]	930 @ 100, 450 @ 1k, 280 @ 10k [12]
5	7.7	NE5532	Not listed	BJT LTP	Multi-pole [5]	N/P CC	9.5 @ 10k [12]
6	7.5	OPA1656	9.1pF/1.9pF	CMOS unknown [2]	Multi-pole [6]	N/P CE [9]	72 @ 10, 0.9 @ 1k, 0.6 @ 10k
7	7.4	LM833	12pF/No CM given	BJT LTP	Multi-pole [5]	N CC/N CE	90 @ 1k, 20 @ 10k
8	7.2	OPA1642	8pF/6pF	JFET LTP	Multi-pole [7]	N/P CE	690 @ 10, 6.9 @ 1k, 1.9 @ 10k
9	7	JRC2068	Not listed	BJT LTP	Multi-pole [5]	N/P CC	Not listed

Note 1	No schematic in datasheet
Note 2	Parallel feed-forward amplifier at input
Note 3	40dB CLG plot indicates additional pole & ULGF≠GBW. No OLG plot or schematic to confirm.
Note 4	Indicated by OLG plot
Note 5	IPS Current Mirror Compensation in addition to multi-pole VAS Compensation
Note 6	Output-Inclusive Compensation, Nested Loop, Feed Forward Path
Note 7	Output-Inclusive Compensation, Nested Loop
Note 8	Assumed from non-rail-to-rail output
Note 9	Indicated by rail-to-rail output & output impedance
Note 10	Datasheet: "applies only at frequencies above a few hundred hertz because of the effect of drift and thermal feedback"
Note 11	Resistors at output set Zout. No frequency-specific data provided.
Note 12	Extrapolated from CL Zout & OLG