

# HIGH SPEED AMPLIFIER SELECTION GUIDE



	PART NUMBER					SUPPLY VOLTAGE					RAIL-TO-RAIL		MICRO PKG	A <sub>CL</sub>	BW @ A <sub>CL</sub>	SLEW RATE	DISTORTION SFDR <sup>1</sup> @ BW FOR R <sub>L</sub>			NOISE	V <sub>OS</sub>	I <sub>B</sub>	I <sub>S/AMP</sub>	PRICE @ 1000
	SINGLES	DUALS	TRIPLES	QUADS		DISABLE	3 V	5 V	±5 V	±12 V	±15 V	IN					OUT	[dBc]	[MHz]	[Ω]	[nV/√Hz]	[mV MAX]	[μA MAX]	[mA TYP]
DIFFERENTIAL	Drivers																							
	AD8131					●	●	●					●	2	400	2000	−77	20	800	13	5	6	8	1.80
	AD8132					●	●	●					●	1	350	1200	−99	5	800	8	4	7	10.7	1.65
	AD8138					●	●	●					●	1	310	1150	−94	5	800	5	3	5	20	3.75
	Receivers																							
	AD8129				●		●	●	●				●	10	200	1100	−68	5	1k	4.5	1	3	11	1.55
VOLTAGE FEEDBACK	AD8130				●		●	●	●				●	1	270	1100	−74	5	1k	12.5	2	3	11	1.55
	Fast FET™																							
	AD8033 <sup>3</sup>	AD8034			●		●	●	●			●	●	1	80	80	−81	1	1k	11	2	10 pA	3.3	1.19/1.59
	AD8065	AD8066 <sup>3</sup>					●	●	●			●	●	1	145	180	−88	1	1k	7	1.5	10 pA	6.4	1.59/2.19
	AD8610	AD8620					●	●	●				●	1	25	50	−106 <sup>2</sup>	0.02	600	6	0.25	10 pA	3	3.37/6.74
	Low Cost, High Performance																							
	AD8038 <sup>3</sup>	AD8039			●		●	●					●	1	350	425	−90	1	2k	8	3	0.75	1	0.85/1.20
	AD8055	AD8056						●					●	1	300	1400	−85	5	1k	6	5	1	5	0.85/1.60
	AD8057	AD8058				●	●	●					●	1	325	1150	−85 <sup>2</sup>	5	1k	7	5	2	6	0.85/1.60
	Rail-to-Rail																							
	AD8031	AD8032				2.7 V	●	●			●	●	●	1	80	32	−62 <sup>2</sup>	1	1k	15	2	1.2	0.8	1.30/1.95
	AD8061/AD8063	AD8062				2.7 V	8 V					●	●	1	300	800	−77	5	1k	8.5	6	10	6.8	0.85/1.60
	AD8091	AD8092				●	●	●				●	●	1	110	140	−75	5	2k	16	10	2.5	4.8	0.69/0.89
	Low Noise, Low Distortion																							
	AD8021				●		●	●	●				●	1	200	100	−92	1	1k	2.1	1	10	7	1.29
	AD8022					●	●		●			●	1	75	100	−94	1	1k	2.5	5	2.5	3.5	2.35	
AD9631						●	●						1	320	1300	−64	20	100	7	10	7	17	4.28	
High Supply Voltage																								
AD817	AD826					●	●		●				1	50	350	−78	1	2k	15	2	6.6	7	1.58/2.18	
AD818	AD828					●	●		●				2	130	450	−78	1	2k	10	2	6.6	7	1.76/2.18	
CURRENT FEEDBACK	Low Cost																							
	AD8014						●	●					●	1	400	4000	−70	5	1k	3.5	5	15	1.1	1.19
		AD8072	AD8073				●	●					●	1	200	500	−64	5	150	3	6	12	3.5	1.50/1.95
	High Performance																							
	AD8001	AD8002						●					●	1	600	1200	−66	5	100	2	6	25	5	1.35/2.57
				AD8004			●	●						1	250	3000	−78	5	1k	1.5	4	90	3.5	3.95
	AD8005					●	●					●		1	270	1500	−53	5	1k	4	30	10	0.4	1.47
	AD8007	AD8008 <sup>3</sup>				●	●					●		1	650	1000	−83	20	150	2.7	4	8	9	1.19/1.99
	AD8009					●	●					●		1	1000	5500	−54	100	100	1.9	7	150	14	1.59
			AD8013		●		●	●						1	140	1000	−80	5	1k	3.5	5	15	4	4.38
		AD8023		●		●	●						1	400	1200	−78	5	150	2	5	45	6.2	4.67	
FIXED GAIN	Buffers																							
			AD8074		●			●						1	500	1400	−80	5	150	25	27	9	7.3	2.65
			AD8075		●			●						2	450	1800	−74	5	150	25	40	10	8.3	2.65
			AD8079					●						2	260	800	−78	5	1k	2	15	6	5	4.10

<sup>1</sup>Spurious Free Dynamic Range – Distortion @ Worst Harmonic <sup>2</sup>THD – Total Harmonic Distortion <sup>3</sup>Product Under Development

– June 2002

For more information on ADI High-Speed Amps visit our website at [www.analog.com/highspeedamps](http://www.analog.com/highspeedamps)