

HIGH SPEED AMPLIFIER SELECTION GUIDE



Part Number				Architecture				Supply Voltage				Rail-to-Rail		Micro	A _{cl}	BW@A _{cl}	Slew Rate	SFDR** @ BW for R _L			Noise	V _{os}	I _b	I _{s/Amp}	I _{out}	Price @100
Single	Dual	Triple	Quad	VF	CF	Buffer	Disable	3V	5V	± 5V	±15V	In	Out	Pack.	Min	[MHz]	[V/μs]	[dBc]	[MHz]	[Ω]	[nV/√Hz]	[mV max]	[μA max]	[mA typ]	[mA typ]	[OEM \$US]
Low-Cost High-Performance																										
AD8051	AD8052		AD8054	•				•	•	•			•	•	1	110	140	-75	5	2k	16	10	2.5	4.8	45	1.00/1.88/3.35
AD8057	AD8058			•				•	•	•				•	1	325	1150	-85***	5	1k	7	5	2	6	40	1.00/1.88
AD8014					•				•	•				•	1	400	4000	-70	5	1k	3.5	5	15	1.1	50	1.36
	AD8012				•				•	•				•	1	350	2250	-66	5	1k	2.5	5	15	1.7	125	2.46
AD8055	AD8056			•					•	•				•	1	300	1400	-85	5	1k	6	5	1.2	5	60	1.00/1.88
	AD8072	AD8073			•				•	•					1	200	500	-64	5	150	3	6	12	3.5	30	1.76/2.29
Fast Current Feedback																										
AD8001	AD8002				•					•				••	1	600	1200	-66	5	100	2	5.5	25	5	70	3.25/2.94
			AD8004		•				•	•					1	250	3000	-78	5	1k	1.5	3.5	90	3.5	50	4.65
AD8009					•					•					1	1000	5500	-54	100	100	1.9	7	150	14	175	1.87
		AD8013			•		•		•	•					1	140	1000	-80	5	1k	3.5	5	15	4	30	4.41
		AD8023			•		•		•	•					1	400	1200	-78	5	150	2	5	45	6.2	70	4.69
Low-Power High-Speed																										
AD8005					•				•	•				•	1	270	1500	-53	5	1k	4	30	10	0.4	10	1.47
AD8031	AD8032			•				2.7V	•	•		•	•	•	1	80	32	-62***	1	1k	15	1.5	1.2	0.8	28	1.48/2.29
Low-Noise High-Speed																										
AD829				•						•	•				20	120	230	-52	1	250	1.7	1	7	5	32	2.51
	AD8022*			•					•	•	±12V			•	1	75	100	-94	1	1k	2.5	5	2.5	3.5	20	2.25
Low-Distortion																										
AD9631				•					•	•					1	320	1300	-64	20	100	7	10	7	17	70	4.85
High-Output Current Drive																										
AD811					•					•	•				1	140	2500	-60	5	100	1.9	5	30	16.5	100	3.35
	AD815	ADSL			•					•	•				1	120	900	-66***	1	200	1.85	30	150	30	750	5.31
	AD8016*	ADSL			•		•			•	±12V				1	320	1000	-86	1	100	6.5	4	10	12.5	420	4.15
	AD8017	G.LITE			•					•	•				1	160	1500	-76	1	100	1.9	8	10	7	220	2.95
AD8010	Video Distribution Amplifier				•					•	•				1	280	800	-58	5	19	2	12	135	15.5	160	3.24
Differential Amplifiers																										
AD8131*	Driver					•		•	•	•				•	2	500	3000	-80	5	150	13	5	6	8	50	2.88
AD8138				•				•	•	•				•	1	310	1150	-94	5	800	5	2.5	5	20	95	4.25
AD830	Receiver								•	•					1	100	530	-74	4	150	27	3	10	14.5	50	2.85
High-Speed Buffers and Fixed Gain																										
	LCD DRIVER		AD8026		•				•	•					1.67	60	125	-60***	5	1k	67	6	1.6	3.2	50	4.85
	AD8079					•				•					2	260	800	-78	5	1k	2	15	6	5	70	4.12
±1.5V Supply High-Speed																										
AD817	AD826			•					•	•	•				1	50	350	-78	1	2k	15	2	6.6	7	50	1.79/2.47
AD818	AD828			•					•	•	•				2	130	450	-78	1	2k	10	2	6.6	7	50	1.99/2.47
JFET Input High-Speed																										
AD744	AD746			•							•				1	13	75	-82***	0.1	2k	16	0.25	100pA	4	25	2.25/4.25
	AD823			•				3.3V	•	•	•		•		1	16	22	-72	0.1	600	16	0.8	25pA	5.2	40	2.65
AD825				•					•	•	•				1	45	135	-73	2	1k	12	2	20pA	6.6	50	1.94

* Pre-release

**Spurious Free Dynamic Range - Distortion @ Worst harmonic

***THD - Total Harmonic Distortion

July, 1999

For More Information on ADI High Speed Amps Visit Our Website at www.analog.com/highspeedamps

USD 100s, recommended resale, FOB U.S.A.

Please note an HTML version of this Selection Guide is available at http://www.analog.com/support/standard_linear/selection_guides/index.html