16-Bit to 18-Bit, Precision ADCs

Part Number	Resolution (Bits)	Data Bus Interface	Sample Rate (kSPS)	Number of Channels	Supply Range (V)	Power (mW)	No Missing Codes (Bits)	Analog Input Range (V)	Reference (V)	DNL (LSB)	INL (LSB)	SNR (dB)	THD (dB)	Package	Price @ 1k ($U.S.)
AD7641	18	Parallel/serial	2000	1	2.5 (2.5 to 5 logic)	68	18	Differential, ±2.5	2.5	–1/+2	±3	93	–116	48-lead LQFP, 48-lead LFCSP	32.95
AD7984	18	Serial	1333	1	2.5 to 5 (1.8 to 5 logic)	10.5	18	Differential, $\pm V_{REF}$	2.5 to 5 (external)	–1/+1.5	±2.25	98.5	–110.5	10-lead MSOP, 10-lead LFCSP	27.95
AD7643	18	Parallel/serial	1250	1	2.5 (2.5 to 5 logic)	52	18	Differential, ±2.5	2.5	–1/+2	±3	93	–116	48-lead LQFP, 48-lead LFCSP	29.95
AD7982	18	Serial	1000	1	2.5 to 5 (1.8 to 5 logic)	7	18	Differential, $\pm V_{REF}$	2.5 to 5 (external)	–0.85/+1.5	±2	95.5	–120	10-lead MSOP, 10-lead LFCSP	23.00
AD7674	18	Parallel/serial	800	1	5 (3, 5 logic)	114	18	Differential, ±5	5 (external)	–1/+1.75	±2.5	101	–115	48-lead LQFP, 48-lead LFCSP	27.95
AD7634	18	Parallel/serial	670	1	±15, (3, 5 logic)	175	18	Differential, ±5, ±10, ±20	5	–1/+2.5	±2.5	101	–112	48-lead LQFP, 48-lead LFCSP	31.45
AD7679	18	Parallel/serial	570	1	5 (3, 5 logic)	89	18	Differential, ±5	5 (external)	–1/+1.75	±2.5	101	–115	48-lead LQFP, 48-lead LFCSP	25.60
AD7690	18	Serial	400	1	5 (1.8 to 5 logic)	17	18	Differential, $\pm V_{REF}$	0.5 to 5 (external)	–1/+1.25	±1.5	101	–125	10-lead MSOP, 10-lead LFCSP	19.50
AD7631	18	Parallel/serial	250	1	±15, (3, 5 logic)	73	18	Differential, ±5, ±10, ±20	5	–1/+2.5	±2.5	101	–112	48-lead LQFP, 48-lead LFCSP	29.45
AD7691	18	Serial	250	1	2.7 to 5 (1.8 to 5 logic)	5	18	Differential, $\pm V_{REF}$	0.5 to 5 (external)	–1/+1.25	±1.5	101	–118	10-lead MSOP, 10-lead LFCSP	14.50
AD7678	18	Parallel/serial	100	1	5 (3, 5 logic)	18	18	Differential, ±5	5 (external)	–1/+1.75	±2.5	101	–115	48-lead LQFP, 48-lead LFCSP	19.20
AD7621	16	Parallel/serial	3000	1	2.5 (2.5 to 5 logic)	65	16	Differential, ±2.5	2.5	–1/+2	±2	90	–102	48-lead LQFP, 48-lead LFCSP	29.95
AD7622	16	Parallel/serial	2000	1	2.5 (2.5 to 5 logic)	65	16	Differential, ±2.5	2.5	–1/+1.25	±1.5	88	–100	48-lead LQFP, 48-lead LFCSP	26.95
AD7983	16	Serial	1333	1	2.5 to 5 (1.8 to 5 logic)	10.5	16	Differential, $\pm V_{REF}$	2.5 to 5 (external)	±0.9	±1.0	92	–115	10-lead MSOP, 10-lead LFCSP	24.95
AD7623	16	Parallel/serial	1333	1	2.5 (2.5 to 5 logic)	45	16	Differential, ±2.5	2.5	–1/+2	±2	90	–97	48-lead LQFP, 48-lead LFCSP	24.95
AD7980	16	Serial	1000	1	2.5 to 5 (1.8 to 5 logic)	7	16	Differential, $\pm V_{REF}$	2.5 to 5 (external)	–1/+2, ±0.9	±2.5, ±1.25	90	–114	10-lead MSOP, 10-lead LFCSP	11.95/15.95
AD7653	16	Parallel/serial	1000	1	5 (3, 5 logic)	128	15	2.5	2.5		±6	86	–98	48-lead LQFP, 48-lead LFCSP	11.50
AD7667	16	Parallel/serial	1000	1	5 (3, 5 logic)	130	16	2.5	2.5		±2.5	89	–104	48-lead LQFP, 48-lead LFCSP	23.50
AD7671	16	Parallel/serial	1000	1	5 (3, 5 logic)	112	16	2.5, 5, 10, ±2.5, ±5, ±10	2.5 (external)		±2.5	90	–100	48-lead LQFP, 48-lead LFCSP	21.95
AD7677	16	Parallel/serial	1000	1	5 (3, 5 logic)	115	16	Differential, ±2.5	2.5 (external)	±1	±1	94	–110	48-lead LQFP, 48-lead LFCSP	32.95
AD7612	16	Parallel/serial	750	1	±15, (3, 5 logic)	190	16	5, 10, ±5, ±10	5	–1/+1.5	±1.5	94	–107	48-lead LQFP, 48-lead LFCSP	29.45
AD7650	16	Parallel/serial	570	1	5 (3, 5 logic)	115	15	2.5	2.5 (external)		±6	86	–98	48-lead LQFP, 48-lead LFCSP	7.50
AD7664	16	Parallel/serial	570	1	5 (3, 5 logic)	115	16	2.5	2.5 (external)	–1/+1.5	±2.5	90	–100	48-lead LQFP, 48-lead LFCSP	18.65
AD7665	16	Parallel/serial	570	1	5 (3, 5 logic)	107	16	2.5, 5, 10, ±2.5, ±5, ±10	2.5 (external)		±2.5	90	–100	48-lead LQFP, 48-lead LFCSP	19.00
AD7654	16	Parallel/serial	500	4 (2 sim. samp.)	5 (3, 5 logic)	120	16	5	2.5 (external)		±3.5	90	–100	48-lead LQFP, 48-lead LFCSP	15.42
AD7655	16	Parallel/serial	500	4 (2 sim. samp.)	5 (3, 5 logic)	120	15	5	2.5 (external)		±6	86	–96	48-lead LQFP, 48-lead LFCSP	9.45
AD7652	16	Parallel/serial	500	1	5 (3, 5 logic)	65	15	2.5	2.5		±6	86	–98	48-lead LQFP, 48-lead LFCSP	9.45
AD7666	16	Parallel/serial	500	1	5 (3, 5 logic)	66	16	2.5	2.5		±2.5	89	–104	48-lead LQFP, 48-lead LFCSP	18.00
AD7676	16	Parallel/serial	500	1	5 (3, 5 logic)	67	16	Differential, ±2.5	2.5 (external)		±1	94	–110	48-lead LQFP, 48-lead LFCSP	24.95
AD7686	16	Serial	500	1	5 (1.8 to 5 logic)	15	16	V_{REF}	0.5 to 5 (external)	–1/+1.5	±2	92	–110	10-lead MSOP, 10-lead LFCSP	12.00
AD7688	16	Serial	500	1	5 (1.8 to 5 logic)	12.5	16	Differential, $\pm V_{REF}$	0.5 to 5 (external)	±1	±1.5	95	–118	10-lead MSOP, 10-lead LFCSP	14.95
AD7693	16	Serial	500	1	5 (1.8 to 5 logic)	18	16	Differential, $\pm V_{REF}$	0.5 to 5 (external)	±0.5	±0.5	96	–120	10-lead MSOP, 10-lead LFCSP	18.00
AD7699	16	Serial	500	8	5 (1.8 to 5 logic)	30	16	V_{REF}	2.5/4.1	–1, +1.5	±3	93	–105	20-lead LFCSP	7.99
AD7610	16	Parallel/serial	250	1	±15, (3, 5 logic)	70	16	5, 10, ±5, ±10	5	–1/+1.5	±1.5	94	–107	48-lead LQFP, 48-lead LFCSP	12.90
AD7656	16	Parallel/serial	250	6 (6 sim. samp.)	±12 (3, 5 logic)	140 max	15	±5, ±10	2.5		±3	86.5	–100	64-lead LQFP	17.00
AD7682	16	Serial	250	4	2.7 to 5 (1.8 to 5 logic)	15	16	V_{REF}	2.5/4.1	–1, +1.5	±3	93	–105	20-lead LFCSP	4.80
AD7689	16	Serial	250	8	2.7 to 5 (1.8 to 5 logic)	15	16	V_{REF}	2.5/4.1	–1, +1.5	±3	93	–105	20-lead LFCSP	6.99
AD7663	16	Parallel/serial	250	1	5 (3, 5 logic)	35	16	2.5, 5, 10, ±2.5, ±5, ±10	2.5 (external)		±3	90	–100	48-lead LQFP, 48-lead LFCSP	12.00
AD7685	16	Serial	250	1	2.7 to 5 (1.8 to 5 logic)	10	16	V_{REF}	0.5 to 5 (external)	–1/+1.5	±2	93	–110	10-lead MSOP, 10-lead LFCSP	8.00
AD7687	16	Serial	250	1	2.7 to 5 (1.8 to 5 logic)	12.5	16	Differential, $\pm V_{REF}$	0.5 to 5 (external)	±1	±1.5	95	–118	10-lead MSOP, 10-lead LFCSP	8.95
AD7694	16	Serial	250	1	2.7 to 5	1.5	16	V_{REF}	0.5 to 5 (external)		±4	92	–106	8-lead MSOP	6.00
AD974	16	Serial	200	4	5	120	15, 16	4, 5, ±10	2.5	–2/+3, –1/+1.5	±3, ±2	83, 85	–90/–96	28-lead SSOP	30.99
AD976A	16	Parallel	200	1	5	200	15, 16	±10	2.5	–2/+3, –1/+1.5, 2 typ	±3, ±2, 3 typ	83, 85	–90/–96	28-lead SSOP, 28-lead PDIP	30.59
AD977A	16	Serial	200	1	5	200	15, 16	4, 5, 10, ±3.3, ±5, ±10	2.5	–2/+3, –1/+1.5, 2 typ	±3, ±2, 3 typ	83, 85	–90/–96	28-lead SSOP	30.59
AD7651	16	Parallel/serial	100	1	5 (3, 5 logic)	16	15	2.5	2.5		±6	86	–98	48-lead LQFP, 48-lead LFCSP	7.45
AD7660	16	Parallel/serial	100	1	5 (3, 5 logic)	21	16	2.5	2.5 (external)	–1/+1.75	±3	90	–100	48-lead LQFP, 48-lead LFCSP	7.91
AD7661	16	Parallel/serial	100	1	5 (3, 5 logic)	15	16	2.5	2.5		±2.5	89	–104	48-lead LQFP, 48-lead LFCSP	8.95
AD7675	16	Parallel/serial	100	1	5 (3, 5 logic)	15	16	Differential, ±2.5	2.5 (external)		±1.5	94	–110	48-lead LQFP, 48-lead LFCSP	12.00
AD7680	16	Serial	100	1	3 to 5	9	15 @ 5 V, 16 @ 3 V	5	5 (external)	–0.9, +2.5 @ 3 V, ±2.5 @ 5 V	±4	85 @ 3 V, 84 @ 5 V	–95	6-lead SOT-23	6.00
AD7683	16	Serial	100	1	2.7 to 5	1.5	16	V_{REF}	0.5 to 5 (external)		±3	91	–106	8-lead MSOP	6.50
AD7684	16	Serial	100	1	2.7 to 5	1.5	16	Differential, $\pm V_{REF}$	0.5 to 5 (external)		±3	91	–106	8-lead MSOP	6.50

Oversampling, 24-Bit ADCs

Part Number	Resolution (Bits)	Dynamic Range (dB)	Max Data Rate/SNR Typ	Min Data Rate/SNR Typ	Programmable Oversampling Rate	INL Error Typ (ppm)	Interface	Package	Low Power Mode (mW)	Price @ 1k ($U.S.)
AD7760	24	120	2.5 MHz/100 dB	78 kHz/112 dB	8× to 256×	8	Parallel	64-lead TQFP	661	34.95
AD7762	24	120	625 kHz/107 dB	78 kHz/112 dB	32× to 256×	8	Parallel	64-lead TQFP	661	17.95
AD7763	24	120	625 kHz/107 dB	78 kHz/112 dB	32× to 256×	8	Serial	64-lead TQFP	651	17.95
AD7764	24	115	312 kHz/104 dB	78 kHz/109 dB	64×, 128×, 256×	14	Serial	28-lead TSSOP	160	13.95
AD7765	24	115	156 kHz/107 dB	78 kHz/109 dB	128×, 256×	14	Serial	28-lead TSSOP	160	8.95
AD7766	24	109.5	128 kHz/108.5 dB		8×	6	Serial	16-lead TSSOP	15	5.95
AD7766-1	24	112.5	64 kHz/111.5 dB		16×	6	Serial	16-lead TSSOP	10.5	5.95
AD7766-2	24	115.5	32 kHz/113.5 dB		32×	6	Serial	16-lead TSSOP	8.5	5.95
AD7767	24	109.5	128 kHz/108.5 dB		8×	3	Serial	16-lead TSSOP	15	8.50
AD7767-1	24	112.5	64 kHz/111.5 dB		16×	3	Serial	16-lead TSSOP	10.5	8.50
AD7767-2	24	115.5	32 kHz/113.5 dB		32×	3	Serial	16-lead TSSOP	8.5	8.50

Precision Σ-Δ ADCs

Part Number	Resolution (Bits)	AIN Channels	Min Input Range (V)	Max Input Range (V)	Peak-to-Peak (p-p) Resolution @ Max Input Range		Power Supply Current Typ (mA)	On-Chip PGA	On-Chip AIN Buffer	On-Chip Current Source	Features	Price @ 1k ($U.S.)
					Resolution (p-p) (Bits)	@ Data Rate (Hz)						
AD7701	16	1		$\pm V_{REF}$	16	4000	5				Update rate is 4 kHz, bandwidth is 10 Hz	14.59
AD7715	16	1	$\pm V_{REF}/128$	$\pm V_{REF}$	16	60	0.55	•	•			5.65
AD7788	16	1		$\pm V_{REF}$	16	16.6	0.07				Low power	1.99
AD7790	16	1	$\pm V_{REF}/8$	$\pm V_{REF}$	16	16.6	0.13		•		Low power	2.95
AD7796	16	1		$\pm V_{REF}/128$	15.5	16.6	0.25	•	•		Low power and low noise	2.75
AD7705	16	2	$\pm V_{REF}/128$	$\pm V_{REF}$	16	60	0.5	•	•			4.12
AD7706	16	3	$\pm V_{REF}/128$	$\pm V_{REF}$	16	60	0.5	•	•			4.12
AD7707	16	3	$\pm V_{REF}/128$	$\pm 4V_{REF}$	16	60	0.5	•	•			4.46
AD7792	16	3	$\pm V_{REF}/128$	$\pm V_{REF}$	16	16.6	0.4	•	•	•	Low power and low noise	3.99
AD7798	16	3	$\pm V_{REF}/128$	$\pm V_{REF}$	16	16.6	0.3	•	•		Low power and low noise	3.80
AD7709	16	4	$\pm 1.024V_{REF}/128$	$\pm 1.024V_{REF}$	16	20	1.25	•	•	•		3.89
AD7795	16	6	$\pm V_{REF}/128$	$\pm V_{REF}$	16	16.6	0.4	•	•	•	Low power and low noise	4.40
AD7708	16	10	$\pm 1.024V_{REF}/128$	$\pm 1.024V_{REF}$	16	20	1.3	•	•			3.98
AD7703	20	1		$\pm V_{REF}$	17	4000	5				Update rate is 4 kHz, bandwidth is 10 Hz	17.33
AD7785	20	3	$\pm V_{REF}/128$	$\pm V_{REF}$	18.6	16.6	0.4	•	•	•	Low power and low noise	4.20
AD7783	24	1	$\pm 1.024V_{REF}/16$	$\pm 1.024V_{REF}$	18.5	20	1.3	•	•	•	Read only	4.25
AD7789	24	1		$\pm V_{REF}$	19	16.6	0.07				Low power	2.95
AD7791	24	1		$\pm V_{REF}$	19	16.6	0.13		•		Low power	3.83
AD7797	24	1		$\pm V_{REF}/128$	15.5	16.6	0.25	•	•		Low power and low noise	3.35
AD7710	24	2	$\pm V_{REF}/128$	$\pm V_{REF}$	17.5	60	5	•		•		16.69
AD7711	24	2	$\pm V_{REF}/128$	$\pm V_{REF}$	17.5	60	5	•		•	2 current sources	17.68
AD7711A	24	2	$\pm V_{REF}/128$	$\pm V_{REF}$	17.5	60	5	•		•	1 current source	17.68
AD7712	24	2	$\pm V_{REF}/128$	$\pm V_{REF}$	17.5	60	5	•				15.25
AD7730	24	2	$\pm 1.024V_{REF}/256$	$\pm 1.024V_{REF}/32$	17	200	13	•	•		Weigh scale	9.86
AD7730L	24	2	$\pm 1.024V_{REF}/256$	$\pm 1.024V_{REF}/32$	17	200	13	•	•		Weigh scale	8.12
AD7732	24	2	$\pm 2V_{REF}$	$\pm 4V_{REF}$	16	2000	14.5		•		Fast channel switching	8.50
AD7782	24	2	$\pm 1.024V_{REF}/16$	$\pm 1.024V_{REF}$	18.5	20	1.3	•	•		Read only	4.25
AD7787	24	2		$\pm V_{REF}$	19	16.6	0.13		•		Low power	3.95
AD7713	24	3	$\pm V_{REF}/128$	$\pm V_{REF}$	16	20	1.1	•		•		18.66
AD7793	24	3	$\pm V_{REF}/128$	$\pm V_{REF}$	18.6	16.6	0.4	•	•	•	Low power and low noise	5.10
AD7799	24	3	$\pm V_{REF}/128$	$\pm V_{REF}$	18.6	16.6	0.38	•	•		Low power and low noise	4.35
AD7734	24	4	$\pm 2V_{REF}$	$\pm 4V_{REF}$	16	2000	14.5		•		Fast channel switching	8.50
AD7714	24	5	$\pm V_{REF}/128$	$\pm V_{REF}$	17.5	60	0.55	•	•			8.28
AD7719	24	5	$\pm 1.024V_{REF}/128$	$\pm 1.024V_{REF}$	18.5	20	1.5	•	•	•	Dual ADC	8.76
AD7731	24	5	$\pm 1.024V_{REF}/128$	$\pm 1.024V_{REF}/2$	17	800	13.5	•	•			9.86
AD7794	24	6	$\pm V_{REF}/128$	$\pm V_{REF}$	18.6	16.6	0.4	•	•	•	Low power and low noise	5.80
AD7738	24	8	$\pm V_{REF}/4$	$\pm V_{REF}$	16	8500	14.5		•		Fast channel switching	7.77
AD7739	24	8	$\pm V_{REF}/4$	$\pm V_{REF}$	16	4000	14.5		•		Fast channel switching	7.65
AD7718	24	10	$\pm 1.024V_{REF}/128$	$\pm 1.024V_{REF}$	18.5	20	1.3	•	•			5.24
Isolated Σ-Δ ADCs												
AD7400	16	1	±0.2	±0.32	16	10,000	6	•	•	•	Isolated Σ-Δ	4.00
AD7401	16	1	±0.2	±0.32	16	20,000	6	•	•	•	Isolated Σ-Δ, external clock	4.00

8-Bit to 14-Bit, Precision ADCs

Part Number	Resolution (Bits)	Data Bus Interface	Sample Rate (kSPS)	Number of Channels	Supply Range (V)	Power (mW)	Power-Down Mode	Analog Input Range (V)	Reference (V)	Package	Features	Price @ 1k ($U.S.)
Single-Channel, True Differential, and Pseudo Differential ADCs												
AD7946	14	Serial	500	1	5 (1.8 to 5 logic)	3.3	•	0 to V_{REF}	0.5 to 5 (external)	10-lead MSOP, 10-lead LFCSP	14-bit, no missing codes, ±1 LSB INL, 85 dB SNR	7.37
AD7942	14	Serial	250	1	2.7 to 5 (1.8 to 5 logic)	1.5	•	0 to V_{REF}	0.5 to 5 (external)	10-lead MSOP, 10-lead LFCSP	14-bit, no missing codes, ±1 LSB INL, 85 dB SNR	4.75
AD7949	14	Serial	250	8	2.7 to 5 (1.8 to 5 logic)	15	•	0 to V_{REF}	2.5/4.1	20-lead LFCSP	14-bit, no missing codes, ±1 LSB INL, 83 dB SNR	3.99
AD7450A	12	Serial	1000	1	2.7 to 5.25	4 max	•	2 × V_{REF}	2.5 (external)	8-lead SOT-23, 8-lead MSOP	Differential input, 1 MSPS, 12-bit ADC	4.30
AD7451	12	Serial	1000	1	2.7 to 5.25	4 max	•	V_{REF}	2.5 (external)	8-lead SOT-23, 8-lead MSOP	Pseudo differential, 1 MSPS, 12-bit ADC	4.25
AD7452	12	Serial	555	1	2.7 to 5.25	3.3 max	•	2 × V_{REF}	2.5 (external)	8-lead SOT-23	Differential input, 555 kSPS, 12-bit ADC	2.95
AD7453	12	Serial	555	1	2.7 to 5.25	3.3 max	•	V_{REF}	2.5 (external)	8-lead SOT-23	Pseudo differential input, 555 kSPS, 12-bit ADC	2.95
AD7457	12	Serial	100	1	2.7 to 5.25	0.9 max	•	V_{REF}	2.5 (external)	8-lead SOT-23	Pseudo differential, 100 kSPS, 12-bit ADC	2.05
AD7440	10	Serial	1000	1	2.7 to 5.25	4 max	•	2 × V_{REF}	2.5 (external)	8-lead SOT-23, 8-lead MSOP	Differential input, 1 MSPS, 10-bit ADC	2.50
Single-Ended SARs												
AD7485	14	Serial	1000	1	4.75 to 5.25	80 max	•	0 to 2.5	2.5 (external/internal)	48-lead LQFP	12-bit, 1 MSPS, serial ADC	9.00
AD7940	14	Serial	100	1	2.5 to 5.5	5.2 max	•	0 to V_{DD}	V_{DD}	6-lead SOT-23, 8-lead MSOP	14-bit, serial, 100 kSPS SAR ADC	4.10
AD7274	12	Serial	3000	1	2.35 to 3.6	11.4	•	0 to V_{REF}	1.2 V to V_{DD} (external)	8-lead TSOT, 8-lead MSOP	12-bit, 3 MSPS SAR ADC with external V_{REF}	6.50
AD7276	12	Serial	3000	1	2.35 to 3.6	12.6	•	0 to V_{DD}	V_{DD}	6-lead TSOT, 8-lead MSOP	12-bit, 3 MSPS SAR ADC	6.25
AD7472	12	Parallel	1500	1	2.7 to 5.25	4.5 max	•	0 to $_{REF_{IN}}$	2.5 (external)	24-lead SOIC, 24-lead TSSOP	1.5 MSPS, 4.5 mW, 12-bit parallel ADC	6.25
AD7492	12	Parallel	1250	1	2.7 to 5.25	13.75	•	0 to 2.5	2.5 (internal)	24-lead TSSOP, 24-lead SOIC	1.25 MSPS,16 mW, internal REF and CLK, 12-bit parallel ADC	6.89
AD7475	12	Serial	1000	1	2.7 to 5.25	4.5 max	•	0 to $_{REF_{IN}}$	2.5 (external)	8-lead MSOP, 8-lead SOIC	Low power, 1 MSPS, 12-bit ADC	4.25
AD7476A	12	Serial	1000	1	2.35 to 5.25	3.6	•	0 to V_{DD}	V_{DD}	6-lead SC70, 8-lead MSOP	2.35 V to 5.25 V, 1 MSPS, 12-bit ADC	4.00
AD7495	12	Serial	1000	1	2.7 to 5.25	6 max	•	0 to 2.5	2.5 (internal)	8-lead MSOP, 8-lead SOIC	Low power, 1 MSPS, 12-bit ADC with internal V_{REF}	5.19
AD7920	12	Serial	250	1	2.35 to 5.25	3.6	•	0 to V_{DD}	V_{DD}	6-lead SC70, 8-lead MSOP	Low power, 250 kSPS, 12-bit ADC	2.05
AD7466	12	Serial	200	1	1.6 to 3.6	0.3 max	•	0 to V_{DD}	V_{DD}	6-lead SOT-23, 8-lead MSOP	1.6 V, micropower, 12-bit ADC	2.35
AD7273	10	Serial	3000	1	2.35 to 3.6	9.6	•	0 to V_{REF}	1.2 to V_{DD} (external)	8-lead TSOT, 8-lead MSOP	10-bit, 3 MSPS SAR ADC with external V_{REF}	3.75
AD7277	10	Serial	3000	1	2.35 to 3.6	10.5	•	0 to V_{DD}	V_{DD}	6-lead TSOT, 8-lead MSOP	10-bit, 3 MSPS SAR ADC	3.60
AD7470	10	Parallel	1750	1	2.7 to 5.25	4.5 max	•	0 to $_{REF_{IN}}$	2.5 (external)	24-lead SOIC, 24-lead TSSOP	1.75 MSPS, 4.5 mW, 10-bit parallel ADC	3.00
AD7477A	10	Serial	1000	1	2.35 to 5.25	3.6	•	0 to V_{DD}	V_{DD}	6-lead SC70, 8-lead MSOP	2.35 V to 5.25 V, 1 MSPS, 10-bit ADC	2.50
AD7910	10	Serial	250	1	2.35 to 5.25	3.6	•	0 to V_{DD}	V_{DD}	6-lead SC70, 8-lead MSOP	Low power, 250 kSPS, 10-bit ADC	1.75
AD7467	10	Serial	275	1	1.6 to 3.6	0.25 max	•	0 to V_{DD}	V_{DD}	6-lead SOT-23, 8-lead MSOP	1.6 V, micropower, 10-bit ADC	1.90
AD7278	8	Serial	3000	1	2.35 to 3.6	10.5	•	0 to V_{DD}	V_{DD}	6-lead TSOT, 8-lead MSOP	8-bit, 3 MSPS SAR ADC	1.85
AD7478A	8	Serial	1200	1	2.35 to 5.25	3.6	•	0 to V_{DD}	V_{DD}	6-lead SC70, 8-lead MSOP	2.35 V to 5.25 V, 1.2 MSPS, 8-bit ADC	0.95
AD7468	8	Serial	320	1	1.6 to 3.6	0.2 max	•	0 to V_{DD}	V_{DD}	6-lead SOT-23, 8-lead MSOP	1.6 V, micropower, 8-bit ADC	1.15
Parallel ADCs												
AD7484	14	Parallel	3000	1	4.75 to 5.25	90 max	•	0 to 2.5	2.5 (external/internal)	48-lead LQFP	14-bit, 3 MSPS parallel ADC	12.00
AD7482	12	Parallel	3000	1	4.75 to 5.25	90 max	•	0 to 2.5	2.5 (external/internal)	48-lead LQFP	12-bit, 3 MSPS parallel ADC	6.95
AD7934	12	Parallel	1500	4	2.7 to 5.25	6 max	•	0 to V_{REF}, 0 to 2 × V_{REF}	2.5 (external/internal)	28-lead TSSOP	4-channel, 1.5 MSPS, 12-bit parallel ADC with a sequencer	7.10
AD7938	12	Parallel	1500	8	2.7 to 5.25	6 max	•	0 to V_{REF}, 0 to 2 × V_{REF}	2.5 (external/internal)	32-lead TQFP, 32-lead LFCSP	8-channel, 1.5 MSPS, 12-bit parallel ADC with a sequencer	7.35
AD7934-6	12	Parallel	625	4	2.7 to 5.25	3.6 max	•	0 to V_{REF}, 0 to 2 × V_{REF}	2.5 (external/internal)	28-lead TSSOP	4-channel, 625 kSPS, 12-bit parallel ADC with a sequencer	4.60
AD7938-6	12	Parallel	625	8	2.7 to 5.25	3.6 max	•	0 to V_{REF}, 0 to 2 × V_{REF}	2.5 (external/internal)	32-lead TQFP, 32-lead LFCSP	8-channel, 625 kSPS, 12-bit parallel ADC with a sequencer	4.85
AD7933	10	Parallel	1500	4	2.7 to 5.25	6 max	•	0 to V_{REF}, 0 to 2 × V_{REF}	2.5 (external/internal)	28-lead TSSOP	4-channel, 1.5 MSPS, 10-bit parallel ADC with a sequencer	3.50
AD7939	10	Parallel	1500	8	2.7 to 5.25	6 max	•	0 to V_{REF}, 0 to 2 × V_{REF}	2.5 (external/internal)	32-lead TQFP, 32-lead LFCSP	8-channel, 1.5 MSPS, 10-bit parallel ADC with a sequencer	3.75
I²C ADCs												
AD7991	12	I²C	140	4	2.7 to 5.5	0.3 max	•	0 to V_{DD}, 0 to $_{REF_{IN}}$	1.2 to V_{DD} (external)	8-lead SOT	4-channel, 12-bit I²C ADC	3.18
AD7992	12	I²C	188	2	2.7 to 5.5	0.495 max	•	0 to V_{DD}, 0 to $_{REF_{IN}}$	1.2 to V_{DD} (external)	10-lead MSOP	2-channel, 12-bit ADC with I²C-compatible interface	3.00
AD7994	12	I²C	188	4	2.7 to 5.5	0.495 max	•	0 to V_{DD}, 0 to $_{REF_{IN}}$	1.2 to V_{DD} (external)	16-lead TSSOP	4-channel, 12-bit ADC with I²C-compatible interface	3.50
AD7998	12	I²C	188	8	2.7 to 5.5	0.495 max	•	0 to V_{DD}, 0 to $_{REF_{IN}}$	1.2 to V_{DD} (external)	20-lead TSSOP	8-channel, 12-bit ADC with I²C-compatible interface	3.75
AD7993	10	I²C	188	4	2.7 to 5.5	0.495 max	•	0 to V_{DD}, 0 to $_{REF_{IN}}$	1.2 to V_{DD} (external)	16-lead TSSOP	4-channel, 10-bit ADC with I²C-compatible interface	1.99
AD7995	10	I²C	140	4	2.7 to 5.5	0.3 max	•	0 to V_{DD}, 0 to $_{REF_{IN}}$	1.2 to V_{DD} (external)	8-lead SOT	4-channel, 10-bit I²C ADC	2.25
AD7997	10	I²C	188	8	2.7 to 5.5	0.495 max	•	0 to V_{DD}, 0 to $_{REF_{IN}}$	1.2 to V_{DD} (external)	20-lead TSSOP	8-channel, 10-bit ADC with I²C-compatible interface	2.25
AD7999	8	I²C	140	4	2.7 to 5.5	0.3 max	•	0 to V_{DD}, 0 to $_{REF_{IN}}$	1.2 to V_{DD} (external)	8-lead SOT	4-channel, 8-bit I²C ADC	1.55
AD7294	12	I²C	22	9	4.5 to 5.5	92 max	•	0 to V_{REF}, 0 to 2 × V_{REF}	2.5	64-lead TQFP	Multichannel ADC, DAC, 2 current sensors, and 3 temperature sensors	9.71

8-Bit to 14-Bit, Precision ADCs *(continued)*

Part Number	Resolution (Bits)	Data Bus Interface	Sample Rate (kSPS)	Number of Channels	Supply Range (V)	Power (mW)	Power-Down Mode	Analog Input Range (V)	Reference (V)	Package	Features	Price @ 1k ($U.S.)
Multichannel Serial ADCs												
AD7490	12	Serial	1000	16	2.7 to 5.25	5.4 max	•	0 to REF	2.5 (external)	28-lead TSSOP, 32-lead LFCSP	16-channel, 1 MSPS, 12-bit ADC with sequencer	5.95
AD7922	12	Serial	1000	2	2.35 to 5.25	4.8	•	0 to V_{DD}	V_{DD}	8-lead TSOT, 8-lead MSOP	12-bit, 2-channel, 1 MSPS ADC	4.25
AD7924	12	Serial	1000	4	2.7 to 5.25	6 max	•	0 to REF_{IN}	2.5 (external)	16-lead TSSOP	4-channel, 1 MSPS, 12-bit ADC with sequencer	4.50
AD7928	12	Serial	1000	8	2.7 to 5.25	6 max	•	0 to REF_{IN}	2.5 (external)	20-lead TSSOP	8-channel, 1 MSPS, 12-bit ADC with sequencer	4.75
AD7921	12	Serial	250	2	2.35 to 5.25	4	•	0 to V_{DD}	V_{DD}	8-lead TSOT, 8-lead MSOP	12-bit, 2-channel, 250 kSPS ADC	2.30
AD7923	12	Serial	200	4	2.7 to 5.25	3.6 max	•	0 to REF_{IN}	2.5 (external)	16-lead TSSOP	4-channel, 200 kSPS, 12-bit ADC with sequencer	2.55
AD7927	12	Serial	200	8	2.7 to 5.25	3.6 max	•	0 to REF_{IN}	2.5 (external)	20-lead TSSOP	8-channel, 200 kSPS, 12-bit ADC with sequencer	2.80
AD7912	10	Serial	1000	2	2.35 to 5.25	4.8	•	0 to V_{DD}	V_{DD}	8-lead TSOT, 8-lead MSOP	10-bit, 2 channel, 1 MSPS ADC	2.75
AD7914	10	Serial	1000	4	2.7 to 5.25	6 max	•	0 to REF_{IN}	2.5 (external)	16-lead TSSOP	4-channel, 1 MSPS, 10-bit ADC with sequencer	3.00
AD7918	10	Serial	1000	8	2.7 to 5.25	6 max	•	0 to REF_{IN}	2.5 (external)	20-lead TSSOP	8-channel, 1 MSPS, 10-bit ADC with sequencer	3.25
AD7911	10	Serial	250	2	2.35 to 5.25	4	•	0 to V_{DD}	V_{DD}	8-lead TSOT, 8-lead MSOP	10-bit, 2 channel, 250 kSPS ADC	2.00
AD7904	8	Serial	1000	4	2.7 to 5.25	6 max	•	0 to REF_{IN}	2.5 (external)	16-lead TSSOP	4-channel, 1 MSPS, 8-bit ADC with sequencer	1.55
AD7908	8	Serial	1000	8	2.7 to 5.25	6 max	•	0 to REF_{IN}	2.5 (external)	20-lead TSSOP	8-channel, 1 MSPS, 8-bit ADC with sequencer	1.85
Bipolar, Serial/Parallel, and Parallel ADCs												
AD7367	14	Serial	1000	4	±12 (3, 5 logic)*	50	•	±10, ±5, 0 to 10	2.5 (external/internal)	24-lead TSSOP	*i*CMOS, dual, 1 µs, 2-channel, simultaneous sampling ADC	7.55
AD7951	14	Parallel/serial	1000	1	±15 (3, 5 logic)*	215	•	±10, ±5, 5, 10	5	48-lead LQFP, 48-lead LFCSP	14-bit no missing codes, ±1 LSB INL, 84.5 dB SNR	10.99
AD7952	14	Parallel/serial	1000	1	±15 (3, 5 logic)*	215	•	Differential, ±5, ±10, ±20	5	48-lead LQFP, 48-lead LFCSP	14-bit no missing codes, ±1 LSB INL, 84.5 dB SNR	10.99
AD7367-5	14	Serial	500	4	±12 (3, 5 logic)*	46	•	±10, ±5, 0 to 10	2.5 (external/internal)	24-lead TSSOP	*i*CMOS, dual, 1 µs, 2-channel, simultaneous sampling ADC	6.55
AD7322	13	Serial	1000	2	±12 (3, 5 logic)*	21	•	±10, ±5, ±2.5, 0 to 10	2.5 (external/internal)	14-lead TSSOP	*i*CMOS, 12-bit plus sign, 1 MSPS, bipolar, 8-channel ADC	4.75
AD7324	13	Serial	1000	4	±12 (3, 5 logic)*	21	•	±10, ±5, ±2.5, 0 to 10	2.5 (external/internal)	16-lead TSSOP	*i*CMOS, 12-bit plus sign, 1 MSPS, bipolar, 4-channel ADC	5.75
AD7328	13	Serial	1000	8	±12 (3, 5 logic)*	21	•	±10, ±5, ±2.5, 0 to 10	2.5 (external/internal)	20-lead TSSOP	*i*CMOS, 12-bit plus sign, 1 MSPS, bipolar, 2-channel ADC	6.25
AD7329	13	Serial	1000	8	±12 (3, 5 logic)*	21	•	±10, ±5, ±2.5, 0 to 10	2.5 (external/internal)	24-lead TSSOP	*i*CMOS, 12-bit plus sign, 1 MSPS, bipolar, ADC with mux out	6.25
AD7321	13	Serial	500	2	±12 (3, 5 logic)*	17 max	•	±10, ±5, ±2.5, 0 to 10	2.5 (external/internal)	14-lead TSSOP	*i*CMOS, 12-bit plus sign, 500 kSPS, bipolar, 8-channel ADC	3.00
AD7323	13	Serial	500	4	±12 (3, 5 logic)*	17 max	•	±10, ±5, ±2.5, 0 to 10	2.5 (external/internal)	16-lead TSSOP	*i*CMOS, 12-bit plus sign, 500 kSPS, bipolar, 4-channel ADC	3.62
AD7327	13	Serial	500	8	±12 (3, 5 logic)*	17 max	•	±10, ±5, ±2.5, 0 to 10	2.5 (external/internal)	20-lead TSSOP	*i*CMOS, 12-bit plus sign, 500 kSPS, bipolar, 2-channel ADC	3.94
AD7366	12	Serial	1000	4	±12 (3, 5 logic)*	50	•	±10, ±5, 0 to 10	2.5 (external/internal)	24-lead TSSOP	*i*CMOS, dual, 800 ns, 2-channel, simultaneous sampling ADC	6.55
AD7366-5	12	Serial	500	4	±12 (3, 5 logic)*	46	•	±10, ±5, 0 to 10	2.5 (external/internal)	24-lead TSSOP	*i*CMOS, dual, 800 ns, 2-channel, simultaneous sampling ADC	5.55
Simultaneous Sampling ADCs												
AD7357	14	Serial	4250	2	2.5	35	•	$\pm V_{REF}/2$	2.5 (external)/2.048 (internal)	16-lead TSSOP	14-bit, simultaneous sampling, differential ADC	10.81
AD7264	14	Serial	1000	2	4.75 to 5.25	120	•	$V_{CM} \pm V_{REF}/(2 \times \text{gain})$	2.5 (external/internal)	48-lead TQFP, 48-lead LFCSP	Integrated PGA	7.50
AD7657	14	Parallel/serial	250	6	±12 (3, 5 logic)	140 max	•	$\pm 4 \times V_{REF}$, $\pm 2 \times V_{REF}$	2.5 (external/internal)	64-lead LQFP	*i*CMOS, simultaneous sampling, bipolar ADC	12.95
AD7866	12	Serial	1000/666	Dual, 2-channel	2.7 to 5.5	11.4 max	•	0 to V_{REF}, 0 to $2 \times V_{REF}$	2.5 (external/internal)	16-lead TSSOP	Dual, 1 MSPS, 12-bit, 2-channel, SAR ADC, serial interface	6.80
AD7356	12	Serial	5000	2	2.5	35	•	$\pm V_{REF}/2$	2.5 (external)/2.048 (internal)	16-lead TSSOP	12-bit, simultaneous sampling, 5 MSPS differential ADC	7.89
AD7352	12	Serial	3000	2	2.5	24	•	$\pm V_{REF}/2$	2.5 (external)/2.048 (internal)	16-lead TSSOP	12-bit, simultaneous sampling, 3 MSPS differential ADC	5.50
AD7266	12	Serial	2000	Dual, 3-channel	2.7 to 5.25	30	•	0 to V_{REF}, 0 to $2 \times V_{REF}$	2.5 (external/internal)	32-lead TQFP, 32-lead LFCSP	Differential input, dual, 2 MSPS,12-bit, 3-channel SAR ADC	7.55
AD7262	12	Serial	1000	2	4.75 to 5.25	120	•	$V_{CM} \pm V_{REF}/(2 \times \text{gain})$	2.5 (external/internal)	48-lead TQFP, 48-lead LFCSP	Integrated PGA	6.50
AD7265	12	Serial	1000	Dual, 3-channel	2.7 to 5.25	10	•	0 to V_{REF}, 0 to $2 \times V_{REF}$	2.5 (external/internal)	32-lead TQFP, 32-lead LFCSP	Differential input, dual, 1 MSPS,12-bit, 3-channel SAR ADC	5.75
AD7658	12	Parallel/serial	250	6	±12 (3, 5 logic)	140 max	•	$\pm 4 \times V_{REF}$, $\pm 2 \times V_{REF}$	2.5 (external/internal)	64-lead LQFP	*i*CMOS, simultaneous sampling, bipolar ADC	10.60

*Analog input range dependent

Printed in the U.S.A. ST07256-2-4/08

ANALOG DEVICES