Precision DACs

Part Number	Resolution (Bits)	Outputs	Interface	Package	Comments
Single-Supply, Low Voltage Output (≤5 V)					
AD5300	8	1	SPI	6-lead SOT-23	140 µA typ at 5 V
AD5601	8	1	SPI	6-lead SC70, 6-lead LFCSP	*nano*DAC,® 100 µA max at 5 V
AD5301	8	1	I²C	6-lead SOT-23	150 µA typ at 5 V
AD5602	8	1	I²C	6-lead SC70, 6-lead LFCSP	*nano*DAC, 100 µA max at 5 V
AD5330	8	1	Parallel	20-lead TSSOP	140 µA typ at 5 V; CLR, LDAC, and PD pins
AD7801	8	1	Parallel	20-lead TSSOP	Fast settling (2 µs)
AD5302	8	2	SPI	10-lead MSOP	230 µA typ at 5 V, LDAC pin
AD7303	8	2	SPI	8-lead MSOP	Fast settling (2 µs)
AD5337	8	2	I²C	8-lead MSOP	
AD5332	8	2	Parallel	20-lead TSSOP	300 µA typ at 5 V; CLR, LDAC, and PD pins
AD7302	8	2	Parallel	20-lead TSSOP	Fast settling (2 µs)
AD5304	8	4	SPI	10-lead MSOP, 10-lead LFCSP	
AD5307	8	4	SPI	16-lead TSSOP	LDAC, CLR, SDO, DCEN, and PD pins
AD5305	8	4	I²C	10-lead MSOP	
AD5306	8	4	I²C	16-lead TSSOP	LDAC and PD pins
AD5334	8	4	Parallel	20-lead TSSOP	LDAC, CLR, PD, and GAIN pins
AD7339	8	4	Serial, parallel	52-lead QFP	Includes 8-bit ADC
AD5308	8	8	SPI	16-lead TSSOP	LDAC pin
AD5346	8	8	Parallel	38-lead TSSOP, 40-lead LFCSP	PD, LDAC, CLR, and GAIN pins
AD5310	10	1	SPI	6-lead SOT-23	140 µA typ at 5 V
AD5310R ***New***	10	1	SPI	10-lead MSOP	*nano*DAC; V_{LOGIC}, LDAC, and RESET pins; ESD = 4 kV; 2 ppm/°C, 2.5 V reference
AD5611	10	1	SPI	6-lead SC70, 6-lead LFCSP	*nano*DAC, 100 µA max at 5 V
AD5311	10	1	I²C	6-lead SOT-23	150 µA typ at 5 V
AD5311R ***New***	10	1	I²C	10-lead MSOP	*nano*DAC; V_{LOGIC}, LDAC, and RESET pins; ESD = 4 kV; 2 ppm/°C, 2.5 V reference
AD5612	10	1	I²C	6-lead SC70, 6-lead LFCSP	*nano*DAC, 100 µA max at 5 V
AD5331	10	1	Parallel	20-lead TSSOP	140 µA typ at 5 V; CLR, LDAC, and PD pins
AD5312	10	2	SPI	10-lead MSOP	230 µA typ at 3 V, LDAC pin
AD5313R ***New***	10	2	SPI	16-lead TSSOP, 16-lead LFCSP	V_{LOGIC}, RSTSEL, LDAC, and SDO pins; ESD = 4 kV; 2 ppm/°C, 2.5 V reference
AD5313	10	2	SPI	16-lead TSSOP	230 µA typ at 3 V; LDAC, CLR, SDO, PD, and DCEN pins
AD5338	10	2	I²C	8-lead MSOP	
AD5338R ***New***	10	2	I²C	16-lead TSSOP, 16-lead LFCSP	V_{LOGIC}, RSTSEL, and LDAC pins; ESD = 3.5 kV; 2 ppm/°C, 2.5 V reference
AD5333	10	2	Parallel	20-lead TSSOP	300 µA; CLR, LDAC, and PD pins
AD5314	10	4	SPI	10-lead MSOP, 10-lead LFCSP	LDAC, CLR, SDO, DCEN, and PD pins
AD5317R ***New***	10	4	SPI	16-lead TSSOP, 16-lead LFCSP	V_{LOGIC}, RSTSEL, LDAC, and SDO pins; ESD = 4 kV; 2 ppm/°C, 2.5 V reference
AD5317	10	4	SPI	16-lead TSSOP	LDAC, CLR, SDO, DCEN, and PD pins
AD5315	10	4	I²C	10-lead MSOP	
AD5316R ***New***	10	4	I²C	16-lead TSSOP, 16-lead LFCSP	V_{LOGIC}, RSTSEL, and LDAC pins; ESD = 3.5 kV; 2 ppm/°C, 2.5 V reference
AD5316	10	4	I²C	16-lead TSSOP	LDAC and PD pins
AD5336	10	4	Parallel	20-lead TSSOP	LDAC, CLR, GAIN, and PD pins
AD5335	10	4	Parallel, byte	20-lead TSSOP	LDAC, CLR, and PD pins
AD5318	10	8	SPI	16-lead TSSOP	LDAC pin
AD5347	10	8	Parallel	38-lead TSSOP, 40-lead LFCSP	PD, LDAC, CLR, and GAIN pins
AD5320	12	1	SPI	6-lead SOT-23	140 µA typ at 5 V
AD5512A	12	1	SPI	16-lead LFCSP	*nano*DAC, fast settling, low glitch, 1.8 V logic
AD5620	12	1	SPI	8-lead MSOP, 8-lead SOT-23	*nano*DAC, 5 ppm/°C reference, VFB pin
AD5621	12	1	SPI	6-lead SC70, 6-lead LFCSP	*nano*DAC, 1 LSB INL max, 100 µA max at 5 V
AD5626	12	1	SPI	8-lead MSOP, 8-lead LFCSP	*nano*DAC, 1 LSB INL max, LDAC and CLR pins (upgrade to DAC8512)
AD5681R ***New***	12	1	SPI	8-lead LFCSP, 10-lead MSOP	*nano*DAC+™; V_{LOGIC}, LDAC, and RESET pins; ESD = 4 kV; 2 ppm/°C, 2.5 V reference
AD5321	12	1	I²C	6-lead SOT-23	150 µA typ at 5 V
AD5622	12	1	I²C	6-lead SC70, 6-lead LFCSP	*nano*DAC, 100 µA max at 5 V
AD5691R ***New***	12	1	I²C	8-lead LFCSP, 10-lead MSOP	*nano*DAC+; V_{LOGIC}, LDAC, and RESET pins; ESD = 4 kV; 2 ppm/°C, 2.5 V reference
AD5340	12	1	Parallel	20-lead TSSOP	140 µA typ at 5 V; CLR, LDAC, and PD pins
AD5341	12	1	Parallel, byte	20-lead TSSOP	140 µA typ at 5 V; CLR, LDAC, and PD pins
AD5025	12	2	SPI	14-lead TSSOP	*nano*DAC; 1 LSB INL max; LDAC, CLR, SDO, PDL, and POR pins
AD5322	12	2	SPI	10-lead MSOP	230 µA typ at 5 V, LDAC pin
AD5623R	12	2	SPI	10-lead MSOP, 10-lead LFCSP	*nano*DAC, 5 ppm/°C reference, LDAC and CLR pins
AD5323	12	2	SPI	16-lead TSSOP	230 µA typ at 5 V; LDAC, CLR, SDO, PD, and DCEN pins

For more information on ADI precision DACs, visit *www.analog.com/DACs*.

ANALOG DEVICES

Part Number	Resolution (Bits)	Outputs	Interface	Package	Comments
Single-Supply, Low Voltage Output (≤5 V) (continued)					
AD5687R ***New***	12	2	SPI	16-lead TSSOP, 16-lead LFCSP	*nano*DAC+; V_{LOGIC}, RSTSEL, LDAC, and SDO pins; ESD = 4 kV; 2 ppm/°C, 2.5 V reference
AD5687 ***New***	12	2	SPI	16-lead TSSOP, 16-lead LFCSP	*nano*DAC+; V_{LOGIC}; RSTSEL, LDAC, and SDO pins; ESD = 4 kV
AD5339	12	2	I²C	8-lead MSOP	
AD5627R	12	2	I²C	10-lead MSOP, 10-lead LFCSP	*nano*DAC, 5 ppm/°C reference, LDAC and CLR pins,100 kHz/400 kHz and 3.4 MHz interface
AD5627	12	2	I²C	10-lead MSOP, 10-lead LFCSP	*nano*DAC, LDAC and CLR pins, 100 kHz/400 kHz and 3.4 MHz interface
AD5697R ***New***	12	2	I²C	16-lead TSSOP, 16-lead LFCSP	*nano*DAC+; V_{LOGIC}, RSTSEL, and LDAC pins; ESD = 3.5 kV; 2 ppm/°C, 2.5 V reference
AD5342	12	2	Parallel	20-lead TSSOP	300 μA typ at 5 V; CLR, LDAC, GAIN, and PD pins
AD5343	12	2	Parallel, byte	20-lead TSSOP	300 μA typ at 5 V; CLR, LDAC, and PD pins
AD5024	12	4	SPI	16-lead TSSOP	*nano*DAC; 1 LSB INL max; LDAC, CLR, and POR pins; 4 reference inputs, 4.5 V to 5.5 V
AD5324	12	4	SPI	10-lead MSOP, 10-lead LFCSP	
AD5327	12	4	SPI	16-lead TSSOP	LDAC, CLR, SDO, DCEN, and PD pins
AD5624R	12	4	SPI	10-lead MSOP, 10-lead LFCSP	*nano*DAC, 5 ppm/°C reference
AD5624	12	4	SPI	10-lead MSOP, 10-lead LFCSP	*nano*DAC
AD5684R ***New***	12	4	SPI	16-lead TSSOP, 16-lead LFCSP	*nano*DAC+; V_{LOGIC}, RSTSEL, LDAC, and SDO pins; ESD = 4 kV; 2 ppm/°C, 2.5 V reference
AD5684 ***New***	12	4	SPI	16-lead TSSOP, 16-lead LFCSP	*nano*DAC+; V_{LOGIC}, RSTSEL, LDAC, and SDO pins; ESD = 4 kV
AD5325	12	4	I²C	10-lead MSOP	
AD5326	12	4	I²C	16-lead TSSOP	LDAC and PD pins
AD5625R	12	4	I²C	14-lead TSSOP, 10-lead LFCSP	*nano*DAC, 5 ppm/°C reference, LDAC and CLR pins, 100 kHz/400 kHz and 3.4 MHz interface
AD5625	12	4	I²C	14-lead TSSOP, 10-lead LFCSP	*nano*DAC, LDAC, and CLR pins, 100 kHz/400 kHz and 3.4 MHz interface
AD5694R ***New***	12	4	I²C	16-lead TSSOP, 16-lead LFCSP	*nano*DAC+; V_{LOGIC}, RSTSEL, and LDAC pins; ESD = 3.5 kV; 2 ppm/°C, 2.5 V reference
AD5694 ***New***	12	4	I²C	16-lead TSSOP, 16-lead LFCSP	*nano*DAC+; V_{LOGIC}, RSTSEL, and LDAC pins; ESD = 3.5 kV
AD5344	12	4	Parallel	20-lead TSSOP	LDAC, CLR, and PD pins
AD5328	12	8	SPI	16-lead TSSOP	LDAC pin
AD5628	12	8	SPI	14-lead TSSOP, 16-lead TSSOP, 16-lead LFCSP, 16-ball WLCSP	*dense*DAC,® 5 ppm/°C reference, LDAC and CLR pins
AD5672R ***New***	12	8	SPI	20-lead TSSOP, 16-lead LFCSP	*nano*DAC+; INL 3 LSB, SDO, V_{LOGIC}, and LDAC (TSSOP); 2 ppm/°C, 2.5 V reference
AD5671R ***New***	12	8	I²C	20-lead TSSOP, 16-lead LFCSP	*nano*DAC+; INL 3 LSB, SDO, V_{LOGIC}, and LDAC (TSSOP); 2 ppm/°C, 2.5 V reference
AD5629R	12	8	I²C	16-lead TSSOP, 16-lead LFCSP, 16-ball WLCSP	*dense*DAC, 5 ppm/°C reference, LDAC and CLR pins
AD5592R ***New***	12	8	SPI	16-lead LFCSP, 16-lead TSSOP, 16-ball WLCSP	Configurable ADC/DAC/GPIO with on-chip reference and V_{LOGIC} (AD5592R-1)
AD5593R ***New***	12	8	I²C	16-lead TSSOP, 16-lead LFCSP, 16-ball WLCSP	Configurable ADC/DAC/GPIO with on-chip reference, V_{LOGIC}, and RESET pins
AD5348	12	8	Parallel	38-lead TSSOP, 40-lead LFCSP	PD, LDAC, CLR, and GAIN pins
AD5391	12	16	SPI, I²C	52-lead LQFP, 64-lead LFCSP	*dense*DAC, 3 V/5 V on-chip reference, programmable offset and gain
AD5590	12	16	SPI	80-ball CSP_BGA	Includes 16-channel, 12-bit ADC, references, and 8 op amps
AD5383	12	32	Parallel, SPI, I²C	100-lead LQFP	*dense*DAC, 3 V/5 V on-chip reference, programmable offset and gain
AD5381	12	40	Parallel, SPI, I²C	100-lead LQFP	*dense*DAC, 3 V/5 V on-chip reference, programmable offset and gain
AD5040	14	1	SPI	8-lead SOT-23	*nano*DAC, buffered, 1 LSB INL max
AD5551	14	1	SPI	8-lead SOIC	Fast settling (1 μs)
AD5552	14	1	SPI	14-lead SOIC	Fast settling (1 μs), bipolar mode
AD5640	14	1	SPI	8-lead MSOP, 8-lead SOT-23	*nano*DAC, 5 ppm/°C reference, VFB pin
AD5641	14	1	SPI	6-lead SC70, 6-lead LFCSP	*nano*DAC, 4 LSB INL max, 100 μA max at 5 V
AD5682R ***New***	14	1	SPI	8-lead LFCSP	*nano*DAC+; LDAC pin; ESD = 4 kV; 2 ppm/°C, 2.5 V reference
AD5692R ***New***	14	1	I²C	8-lead LFCSP	*nano*DAC+; LDAC pin; ESD = 4 kV; 2 ppm/°C, 2.5 V reference
AD5045	14	2	SPI	14-lead TSSOP	*nano*DAC; 1 LSB INL max; LDAC, CLR, SDO, and POR pins; 4 reference inputs, 4.5 V to 5.5 V
AD5643R	14	2	SPI	10-lead MSOP, 10-lead LFCSP	*nano*DAC, 5 ppm/°C reference, LDAC and CLR pins
AD5647R	14	2	I²C	10-lead MSOP, 10-lead LFCSP	*nano*DAC, 5 ppm/°C reference, LDAC and CLR pins, 100 kHz/400 kHz and 3.4 MHz interface
AD5044	14	4	SPI	16-lead TSSOP	*nano*DAC; 1 LSB INL max; LDAC, CLR, and POR pins; 4 reference inputs
AD5644R	14	4	SPI	10-lead MSOP, 10-lead LFCSP	*nano*DAC, 5 ppm/°C reference
AD5685R ***New***	14	4	SPI	16-lead TSSOP, 16-lead LFCSP	*nano*DAC+; V_{LOGIC}, RSTSEL, LDAC, and SDO pins; ESD = 4 kV; 2 ppm/°C, 2.5 V reference
AD5645R	14	4	I²C	14-lead TSSOP, 10-lead LFCSP	*nano*DAC; 5 ppm/°C reference; LDAC, CLR, and POR pins; 100 kHz/400 kHz and 3.4 MHz interface
AD5695R ***New***	14	4	I²C	16-lead TSSOP, 16-lead LFCSP	*nano*DAC+; V_{LOGIC}, RSTSEL, and LDAC pins; ESD = 3.5 kV; 2 ppm/°C, 2.5 V reference
AD5648	14	8	SPI	14-lead TSSOP, 16-lead TSSOP	*dense*DAC; 5 ppm/°C reference, LDAC and CLR pins
AD5392	14	8	SPI, I²C	52-lead LQFP, 64-lead LFCSP	*dense*DAC, 3 V/5 V on-chip reference, programmable offset and gain
AD5390	14	16	SPI, I²C	52-lead LQFP, 64-lead LFCSP	*dense*DAC, 3 V/5 V on-chip reference, programmable offset and gain
AD5382	14	32	Parallel, SPI, I²C	100-lead LQFP	*dense*DAC, 3 V/5 V on-chip reference, programmable offset and gain
AD5380	14	40	Parallel, SPI, I²C	100-lead LQFP	*dense*DAC, 3 V/5 V on-chip reference, programmable offset and gain
AD5060	16	1	SPI	8-lead SOT-23	*nano*DAC, buffered, 1 LSB INL max
AD5061	16	1	SPI	8-lead SOT-23	*nano*DAC, buffered, 4 LSB INL max

Part Number	Resolution (Bits)	Outputs	Interface	Package	Comments
Single-Supply, Low Voltage Output (≤5 V) (continued)					
AD5062	16	1	SPI	8-lead SOT-23	*nano*DAC, unbuffered, 1 LSB INL max
AD5063	16	1	SPI	10-lead MSOP	*nano*DAC, unbuffered, 1 LSB INL max, on-chip precision resistors
AD5541A	16	1	SPI	10-lead MSOP, 8-lead LFCSP, 10-lead LFCSP	Improved AD5541, lower offset and gain error, lower power, lower glitch
AD5541	16	1	SPI	8-lead SOIC	*nano*DAC, 1 LSB INL max; unbuffered, fast settling (1 μs)
AD5542A	16	1	SPI	16-lead TSSOP, 10-lead LFCSP, 16-lead LFCSP	Improved AD5542, lower glitch, lower noise
AD5542	16	1	SPI	14-lead SOIC	Fast settling (1 μs) bipolar mode
AD5660	16	1	SPI	8-lead MSOP, 8-lead SOT-23	*nano*DAC, 5 ppm/°C reference, VFB pin
AD5662	16	1	SPI	8-lead MSOP, 8-lead SOT-23	*nano*DAC, VFB pin
AD5683R ***New***	16	1	SPI	8-lead LFCSP, 10-lead MSOP	*nano*DAC+; 2 LSB INL; V_{LOGIC}, LDAC, SDO, and RESET pins; ESD = 4 kV; 2 ppm/°C, 2.5 V reference
AD5683 ***New***	16	1	SPI	8-lead LFCSP	*nano*DAC+; 2 LSB; LDAC pin; ESD = 4 kV
AD5693 ***New***	16	1	I²C	8-lead LFCSP	*nano*DAC+; 2 LSB INL; LDAC pin; ESD = 4 kV
AD5693R ***New***	16	1	I²C	8-lead LFCSP, 10-lead MSOP	*nano*DAC+; 2 LSB INL; V_{LOGIC}, LDAC, and RESET pins; ESD = 4 kV; 2 ppm/°C, 2.5 V reference
AD5065	16	2	SPI	14-lead TSSOP	*nano*DAC; 1 LSB INL max; LDAC, CLR, SDO, and POR pins; 4 reference inputs
AD5663R	16	2	SPI	10-lead MSOP, 10-lead LFCSP	*nano*DAC, 5 ppm/°C reference, LDAC and CLR pins
AD5663	16	2	SPI	10-lead MSOP, 10-lead LFCSP	*nano*DAC, LDAC and CLR pins
AD5689R ***New***	16	2	SPI	16-lead TSSOP, 16-lead LFCSP	*nano*DAC+; 2 LSB INL max; V_{LOGIC}, RSTSEL, LDAC, and SDO pins; ESD = 4 kV; 2 ppm/°C, 2.5 V reference
AD5689 ***New***	16	2	SPI	16-lead TSSOP, 16-lead LFCSP	*nano*DAC+; 2 LSB INL max; V_{LOGIC}, RSTSEL, LDAC, and SDO pins; ESD = 4 kV
AD5667R	16	2	I²C	10-lead MSOP, 10-lead LFCSP	*nano*DAC, 5 ppm/°C reference, LDAC and CLR pins, 100 kHz/400 kHz and 3.4 MHz interface
AD5667	16	2	I²C	10-lead MSOP, 10-lead LFCSP	*nano*DAC, LDAC and CLR pins, 100 kHz/400 kHz and 3.4 MHz interface
AD5064	16	4	SPI	14-lead TSSOP, 16-lead TSSOP	*nano*DAC; 1 LSB INL max; LDAC, CLR, and SDO pins; 4 reference inputs (except AD5064-1); see also AD5750/AD5751—industrial V/I output driver, 4.5 V to 5.5 V
AD5066	16	4	SPI	16-lead TSSOP	*nano*DAC; unbuffered; 1 LSB INL max; LDAC, CLR, and POR pins; 4 reference inputs
AD5666	16	4	SPI	14-lead TSSOP	*nano*DAC; 5 ppm/°C reference; SDO, LDAC, and CLR pins
AD5664R	16	4	SPI	10-lead MSOP, 10-lead LFCSP	*nano*DAC, 5 ppm/°C reference
AD5664	16	4	SPI	10-lead MSOP, 10-lead LFCSP	*nano*DAC, see also AD5750/AD5751—industrial V/I output driver
AD5686R ***New***	16	4	SPI	16-lead TSSOP, 16-lead LFCSP	*nano*DAC+; 2 LSB INL max; V_{LOGIC}, RSTSEL, LDAC, and SDO pins; ESD = 4 kV; 2 ppm/°C, 2.5 V reference
AD5686 ***New***	16	4	SPI	16-lead TSSOP, 16-lead LFCSP	*nano*DAC+; 2 LSB INL max; V_{LOGIC}, RSTSEL, LDAC, and SDO pins; ESD = 4 kV
AD5665R	16	4	I²C	10-lead LFCSP, 14-lead TSSOP	*nano*DAC, 5 ppm/°C reference, LDAC and CLR pins, 100 kHz/400 kHz and 3.4 MHz interface
AD5665	16	4	I²C	10-lead LFCSP, 14-lead TSSOP	*nano*DAC, LDAC and CLR pins; 100 kHz/400 kHz and 3.4 MHz interface
AD5696R ***New***	16	4	I²C	16-lead TSSOP, 16-lead LFCSP	*nano*DAC+; 2 LSB INL max; V_{LOGIC}, RSTSEL, and LDAC pins; ESD = 3.5 kV; 2 ppm/°C, 2.5 V reference
AD5696 ***New***	16	4	I²C	16-lead TSSOP, 16-lead LFCSP	*nano*DAC+; 2 LSB INL max; V_{LOGIC}, RSTSEL, and LDAC pins; ESD = 3.5 kV
AD5676R ***New***	16	8	SPI	20-lead TSSOP, 16-lead LFCSP	*nano*DAC+; INL 3 LSB, SDO, V_{LOGIC}, and LDAC (TSSOP); 2 ppm/°C, 2.5 V reference
AD5676 ***New***	16	8	SPI	20-lead TSSOP, 16-lead LFCSP	*nano*DAC+; INL 3 LSB, SDO, V_{LOGIC}, and LDAC (TSSOP)
AD5675R ***New***	16	8	I²C	20-lead TSSOP, 16-lead LFCSP	*nano*DAC+; INL 3 LSB, SDO, V_{LOGIC}, and LDAC (TSSOP); 2 ppm/°C, 2.5 V reference
AD5675 ***New***	16	8	I²C	20-lead TSSOP, 16-lead LFCSP	*nano*DAC+; INL 3 LSB, SDO, V_{LOGIC}, and LDAC (TSSOP)
AD5668	16	8	SPI	16-lead TSSOP, 16-lead LFCSP, 16-ball WLCSP	*dense*DAC, 5 ppm/°C reference, LDAC and CLR pins
AD5669R	16	8	I²C	16-lead TSSOP, 16-lead LFCSP, 16-ball WLCSP	*dense*DAC, 5 ppm/°C reference, LDAC and CLR pins
AD5678	12/16	8	SPI	14-lead TSSOP, 16-lead TSSOP	*dense*DAC, 4 × 16-bit and 4 × 12-bit DAC, 5 ppm/°C reference, LDAC and CLR pins
AD5680	18	1	SPI	8-lead SOT-23	*nano*DAC, buffered
Bipolar (±V) or High Voltage Output (>5 V)					
AD7224	8	1	Parallel	18-lead SOIC	Voltage output DAC with output buffer; dual and single supply; max output range 0 V to 10 V
AD7304	8	4	SPI	16-lead TSSOP	Unipolar (3 V and 5 V) and bipolar (±5 V) voltage output DAC with SPI interface
AD7225	8	4	Parallel	24-lead SOP	Single-/dual-supply operation with separate external reference inputs per channel
AD7226	8	4	Parallel	20-lead SOP	Fast (4 μs); like AD7225, except common reference
AD7305	8	4	Parallel	20-lead TSSOP	Unipolar (3 V and 5 V) and bipolar (±5 V) voltage output DAC with parallel interface
AD7228	8	8	Parallel	24-lead SOIC	Single-/dual-supply voltage output DAC with up to 10 V output range
AD5583	10	4	Parallel	48-lead TSSOP	Single-/dual-supply operation, bipolar or unipolar output modes, 20 mA output drive capability
AD7399	10	4	SPI	16-lead TSSOP	Single-/dual-supply operation, ±5 V or 0 V to +5 V/+3 V outputs
AD5501	12	1	SPI	16-lead TSSOP	High voltage, 40 V/80 V; LDAC, CLR, R_SEL, ALARM, RFB, and V_{LOGIC} pins
AD5530	12	1	SPI	16-lead TSSOP	Dual-supply, voltage output, bipolar DAC with ±10 V or ±8.192 V output ranges; 14-bit pin-compatible AD5531
AD5721 ***New***	12	1	SPI	16-lead TSSOP, 16-lead LFCSP_WQ	Software-programmable voltage output ±3 V, +5 V, ±5 V, +10 V, ±10 V, +20 V, −2.5 V to +7.5 V, 5% overrange, single-/dual-supply operation
AD5721R ***New***	12	1	SPI	16-lead TSSOP, 16-lead LFCSP_WQ	Software-programmable voltage output ±3 V, +5 V, ±5 V, +10 V, ±10 V, +20 V, −2.5 V to +7.5 V, 5% overrange, single-/dual-supply operation; 5 ppm internal reference
AD5722R	12	2	SPI	24-lead TSSOP	Software-programmable voltage output +5 V, ±5 V, +10 V, ±10 V; single-/dual-supply operation; 5 ppm/°C reference

Part Number	Resolution (Bits)	Outputs	Interface	Package	Comments
Bipolar (±V) or High Voltage Output (>5 V) (continued)					
AD5722	12	2	SPI	24-lead TSSOP	Software-programmable voltage output +5 V, ±5 V, +10 V, ±10 V; single-/dual-supply operation
AD7249	12	2	SPI	16-lead SOIC	Bipolar and unipolar supply modes, three selectable output ranges per channel ±5 V, 0 V to +5 V, 0 V to +10 V; 0.5 LSB INL; internal reference
AD7247	12	2	Parallel	24-lead SOIC	Bipolar and unipolar supply modes; three selectable output ranges per channel ±5 V, 0 V to +5 V, 0 V to +10 V; 0.5 LSB INL; internal reference with separate reference buffer per channel
AD7847	12	2	Parallel	24-lead SOIC	Bipolar supply modes, external reference, 0.5 LSB INL
AD7237	12	2	Parallel, byte	24-lead SOIC	Bipolar and unipolar supply modes; three selectable output ranges per channel ±5 V, 0 V to +5 V, 0 V to +10 V, 0.5 LSB INL; internal reference with separate reference buffer per channel; 8 + 4 loading structure; byte wide
AD7837	12	2	Parallel, byte	28-lead SOIC	Bipolar supply modes; external reference, 0.5 LSB INL; 8 + 4 loading structure; byte wide
DAC8412	12	4	Parallel	28-lead PLCC	True voltage output DAC with unipolar and bipolar capability. External positive and negative voltage reference sets output range. Reset to midscale
DAC8413	12	4	Parallel	28-lead PLCC	True voltage output DAC with unipolar and bipolar capability. External positive and negative voltage reference sets output range. Reset to zero-scale
AD5504	12	4	SPI	16-lead TSSOP	High voltage, 40 V/80 V; LDAC, CLR, R_SEL, ALARM, RFB, and V_{LOGIC} pins
AD5724R	12	4	SPI	24-lead TSSOP	Software-programmable voltage output +5 V, ±5 V, +10 V, ±10 V; single-/dual-supply operation; 5 ppm/°C reference
AD5724	12	4	SPI	24-lead TSSOP	Software-programmable voltage output +5 V, ±5 V, +10 V, ±10 V; single-/dual-supply operation
AD5726	12	4	SPI	16-lead SOIC, 16-lead SSOP, 20-lead SSOP	Single-/dual-supply operation; CLR, LDAC, and CLRSEL pins
AD7398	12	4	SPI	16-lead TSSOP	Single-/dual-supplyy operation, ±5 V or 0 to +5 V/+3 V outputs
DAC8420	12	4	SPI	16-lead QFP	Unipolar and bipolar supply modes, operation is specified with supplies ranging from +5 V only to ±15 V; references of +2.5 V to ±10 V respectively; external reference
AD5725	12	4	Parallel	28-lead SSOP	Single-/dual-supply operation, CLR and LDAC pins
AD5516	12	16	SPI	74-ball CSP_BGA	*dense*DAC, 14-bit increment/decrement mode, ±10 V output range (AD5516-3)
AD7839	13	8	Parallel	44-lead QFP	Dual-supply, voltage output bipolar DAC with ±10 V or ±8.192 V output ranges; 12-bit AD5530 pin-compatible
AD5531	14	1	SPI	16-lead TSSOP	±15 V, 12-bit/14-bit, pin-compatible, bipolar supplies; internal 3 V reference, analog output range of ±3 V
AD5732R	14	2	SPI	24-lead TSSOP	Software-programmable voltage output +5 V, ±5 V, +10 V, ±10 V; single-/dual-supply operation; 5 ppm/°C reference
AD5732	14	2	SPI	24-lead TSSOP	Software-programmable voltage output +5 V, ±5 V, +10 V, ±10 V; single-/dual-supply operation
AD5734R	14	4	SPI	24-lead TSSOP	Software-programmable voltage output +5 V, ±5 V, +10 V, ±10 V; single-/dual-supply operation; 5 ppm/°C reference
AD5734	14	4	SPI	24-lead TSSOP	Software-programmable voltage output +5 V, ±5 V, +10 V, ±10 V; single-/dual-supply operation
AD5744R	14	4	SPI	32-lead TQFP	±15 V, 1 LSB INL max, 10 ppm/°C reference, on-board reference buffers, gain and offset adjust
AD7834	14	4	SPI	28-lead SOIC	Bipolar supplies; external common reference inputs; serial interface; output range set by reference min +5 V, max ±13 V
AD7835	14	4	Parallel	44-lead QFP	Bipolar supplies; two sets of external reference inputs (positive and negative); parallel interface; output range set by reference min +5 V, max ±13 V
AD7836	14	4	Parallel	44-lead QFP	Bipolar supply mode only, offset adjustment for each output, separate reference and output ground (DUTGND) for each DAC
AD5363	14	8	SPI	52-lead LQFP, 56-lead LFCSP	*dense*DAC, user-programmable gain and offset, 20 V output span
AD7841	14	8	Parallel	44-lead QFP	*dense*DAC, ±10 V output range
AD5361	14	16	SPI	52-lead LQFP, 56-lead LFCSP	*dense*DAC, user-programmable gain and offset, 20 V output span
AD5373	14	32	SPI	64-lead LQFP, 64-lead LFCSP	*dense*DAC, user-programmable gain and offset, 20 V output span
AD5532	14	32	SPI	74-ball CSP_BGA	*dense*DAC, DAC, and infinite SHA modes, ±10 V output range (AD5532-2)
AD5532B	14	32	SPI	74-ball CSP_BGA	*dense*DAC, improved AD5532, 10 V output span
AD5532HS	14	32	SPI	74-ball CSP_BGA	*dense*DAC, faster interface, 5 V output span
AD5535B	14	32	SPI	124-ball CSP_BGA	*dense*DAC, 200 V output range
AD5378	14	32	SPI, parallel	108-ball CSP_BGA	*dense*DAC, user-programmable gain and offset, 17.5 V output span
AD5371	14	40	SPI, LVDS	80-lead LQFP, 100-ball CSP_BGA	*dense*DAC, user-programmable gain and offset, 20 V output span
AD5379	14	40	SPI, parallel	108-ball CSP_BGA	*dense*DAC, user-programmable gain and offset, 17.5 V output span
AD5760	16	1	SPI	24-lead LFCSP	Ultrastable, low noise voltage output DAC with ±0.5 LSB INL and integrated reference buffers
AD5570	16	1	SPI	16-lead SOP	Dual-supply, voltage output bipolar DAC; 1 LSB INL; max output voltage up to ±14 V; internal positive and negative reference buffers; 0°C to 125°C temperature grade
AD5761 ***New***	16	1	SPI	16-lead TSSOP, 16-lead LFCSP_WQ	Software-programmable voltage output ±3 V, +5 V, ±5 V, +10 V, ±10 V, +20 V, –2.5 V to +7.5 V, 5% overrange, single-/dual-supply operation
AD5721R ***New***	16	1	SPI	16-lead TSSOP, 16-lead LFCSP_WQ	Software-programmable voltage output ±3 V, +5 V, ±5 V, +10 V, ±10 V, +20 V, –2.5 V to +7.5 V, 5% overrange, single-/dual-supply operation. 5 ppm internal reference
AD7849	16	1	SPI	20-lead SOIC	Bipolar ±15 V supply; voltage output DAC with max range ±11 V; requires external ± reference inputs

Part Number	Resolution (Bits)	Outputs	Interface	Package	Comments
Bipolar (±V) or High Voltage Output (≤5 V) (continued)					
AD7846	16	1	Parallel	28-lead PLCC	Voltage output DAC, which can be configured to give a unipolar output range (0 V to 5 V, 0 V to 10 V) or bipolar output ranges (±5 V, ±10 V); requires external ± reference inputs
AD5752R	16	2	SPI	24-lead TSSOP	Software-programmable voltage output +5 V, ±5 V, +10 V, ±10 V; single-/dual-supply operation; 5 ppm/°C reference
AD5752	16	2	SPI	24-lead TSSOP	Software-programmable voltage output +5 V, ±5 V, +10 V, ±10 V; single-/dual-supply operation
AD5762R	16	2	SPI	32-lead TQFP	±15 V, 1 LSB INL max, on-board reference buffers, gain and offset adjust, 10 ppm/°C reference
AD5763	16	2	SPI	32-lead TQFP	±5 V, 1 LSB INL max, on-board reference buffers, gain and offset adjust
AD5754R	16	4	SPI	24-lead TSSOP	Software-programmable voltage output +5 V, ±5 V, +10 V, ±10 V; single-/dual-supply operation; 5 ppm/°C reference
AD5754	16	4	SPI	24-lead TSSOP	Software-programmable voltage output +5 V, ±5 V, +10 V, ±10 V; single-/dual-supply operation
AD5764R	16	4	SPI	32-lead TQFP	±15 V, 1 LSB INL max, on-board reference buffers, gain and offset adjust, 10 ppm/°C reference
AD5764	16	4	SPI	32-lead TQFP	±15 V, 1 LSB INL max, on-board reference buffers, gain and offset adjust
AD5765	16	4	SPI	32-lead TQFP	±5 V, 1 LSB INL max, on-board reference buffers, gain and offset adjust
AD5362	16	8	SPI	52-lead LQFP, 56-lead LFCSP	*dense*DAC, user-programmable gain and offset, 20 V output span
AD5360	16	16	SPI	52-lead LQFP, 56-lead LFCSP	*dense*DAC, user-programmable gain and offset, 20 V output span
AD5372	16	32	SPI	64-lead LQFP, 64-lead LFCSP	*dense*DAC, user-programmable gain and offset, 20 V output span
AD5370	16	40	SPI	64-lead LQFP, 64-lead LFCSP	*dense*DAC, user-programmable gain and offset, 20 V output span
AD5780	18	1	SPI	24-lead LFCSP	Ultrastable, system ready, low noise voltage output DAC with ±1 LSB INL and integrated reference buffers
AD5781	18	1	SPI	20-lead TSSOP	True 18-bit, low noise voltage output DAC with ±0.5 LSB INL
AD5790	20	1	SPI	24-lead LFCSP	System ready, low noise voltage output DAC with ±2 LSB INL and integrated reference buffers
AD5791	20	1	SPI	20-lead TSSOP	1 ppm, true 20-bit voltage output DAC with low noise and ±1 LSB INL
Current Output					
AD5426	8	1	SPI	10-lead MSOP	>10 MHz BW, ±10 V signals; see also AD5425 fast load
AD5450	8	1	SPI	8-lead SOT-23	See AD5425 fast load
AD5425	8	1	SPI, 8-bit load	10-lead MSOP	>10 MHz BW, ±10 V signals; see also AD5426
AD5424	8	1	Parallel	16-lead TSSOP, 20-lead LFCSP	>10 MHz BW, ±10 V signals
AD7524	8	1	Parallel	16-lead SOIC	See AD5424; also AD5426, AD5425, and AD5450
AD5428	8	2	Parallel	20-lead TSSOP	>10 MHz BW, ±10 V signals
AD5429	8	2	SPI	16-lead TSSOP	>10 MHz BW, ±10 V signals
AD5398A	10	1	I²C	8-lead LFCSP, 9-ball WLCSP	120 mA current sink with current sensing resistor, reference, inductive flyback protection; for use with a voice coil motor in camera autofocus applications
AD5821A	10	1	I²C	9-ball WLCSP	120 mA current sink with 1.8 V I²C interface voltage, current sensing resistor, reference, inductive flyback protection; for use with a voice coil motor in camera autofocus applications
AD5432	10	1	SPI	10-lead MSOP	>10 MHz BW, ±10 V signals
AD5451	10	1	SPI	8-lead SOT-23	
AD5433	10	1	Parallel	20-lead TSSOP, 20-lead LFCSP	>10 MHz BW, ±10 V signals
AD7533	10	1	Parallel, unbuffered	16-lead SOIC	See AD5433; also AD5432 and AD5451
AD5439	10	2	SPI	16-lead TSSOP	>10 MHz BW, ±10 V signals
AD5440	10	2	Parallel	24-lead TSSOP	>10 MHz BW, ±10 V signals
AD5441	12	1	SPI	8-lead MSOP, 8-lead LFCSP	1 LSB INL max, 1 μs settling time, LDAC pin, upgrade to DAC8043A
AD5443	12	1	SPI	10-lead MSOP	>10 MHz BW, ±10 V signals
AD5444	12	1	SPI	10-lead MSOP	Higher accuracy version of AD5443; see also AD5452
AD5452	12	1	SPI	8-lead SOT-23, 8-lead MSOP	
AD7543	12	1	SPI	16-lead SOIC	See AD5443; also AD5452 and AD5444
AD7943	12	1	SPI	20-lead SOP	Improved AD7543; see AD5443; also AD5452 and AD5444
DAC8043A	12	1	SPI	8-lead TSSOP	>2 MHz bandwidth, see AD5443; also AD5452 and AD5444
DAC8143	12	1	SPI	16-lead SOIC	SDO for daisy-chaining; see AD5443; also AD5452 and AD5444
AD5445	12	1	Parallel	20-lead TSSOP, 20-lead LFCSP	>10 MHz BW, ±10 V signals
AD7545A	12	1	Parallel	20-lead SOIC	See AD5445; also AD5443, AD5452, and AD5444

Part Number	Resolution (Bits)	Outputs	Interface	Package	Comments
Current Output (continued)					
AD7945	12	1	Parallel	20-lead SOP	Improved AD7545; see AD5445; also AD5443, AD5452, and AD5444
AD7541A	12	1	Parallel, unbuffered	20-lead PLCC	Transparent latches; see AD5445; also AD5443, AD5452, and AD5444
AD7548	12	1	Parallel, byte	20-lead SOIC	Byte wide; see AD5445; also AD5443, AD5452, and AD5444
AD7948	12	1	Parallel, byte	20-lead SOP	Improved AD7548; see AD5445; also AD5443, AD5452, and AD5444
AD7542	12	1	Parallel, nibble	16-lead SOIC	Nibble wide; see AD5445; also AD5443, AD5452, and AD5444
AD5415	12	2	SPI	24-lead TSSOP	>10 MHz BW, ±10 V signals, uncommitted resistors
AD5449	12	2	SPI	16-lead TSSOP	>10 MHz BW, ±10 V signals
AD5405	12	2	Parallel	40-lead LFCSP	>10 MHz BW, ±10 V signals, uncommitted resistors
AD5447	12	2	Parallel	24-lead TSSOP	>10 MHz BW, ±10 V signals
AD7547	12	2	Parallel	24-lead SOIC	See AD5447; also AD5449, AD5405, and AD5415
AD7537	12	2	Parallel, byte	24-lead SOIC	See AD5447; also AD5449, AD5405, and AD5415
AD7549	12	2	Parallel, nibble	20-lead PLCC	Nibble wide; see AD5447; also AD5449, AD5405, and AD5415
AD5449	12	2	SPI	16-lead TSSOP	>10 MHz BW, ±10 V signals
AD5415	12	2	SPI	24-lead TSSOP	>10 MHz BW, ±10 V signals, uncommitted resistors
AD7564	12	4	SPI	28-lead SOP	Individual reference and RFB per DAC, LDAC, and CLR pins
AD7568	12	8	SPI	44-lead QFP	Individual reference and RFB per DAC, LDAC, and CLR pins
AD5453	14	1	SPI	8-lead SOT-23, 8-lead LFCSP, 8-lead MSOP	
AD5446	14	1	SPI	10-lead MSOP	MSOP version of AD5453; compatible with AD5443, AD5432, and AD5426
AD5553	14	1	SPI	8-lead MSOP	4 MHz BW, ±15 V signals
AD5556	14	1	Parallel	28-lead TSSOP	4 MHz BW, ±15 V signals
AD7535	14	1	Parallel	28-lead PLCC	Word wide, see AD5453 and AD5446
AD7538	14	1	Parallel	24-lead SOIC	Word wide, see AD5453 and AD5446
AD7534	14	1	Parallel, byte	20-lead PLCC	Byte wide, see AD5453 and AD5446
AD5557	14	2	Parallel	38-lead TSSOP	4 MHz BW, ±15 V signals
AD5555	14	2	SPI	16-lead TSSOP	4 MHz BW, ±15 V signals
AD5554	14	4	SPI	28-lead SOP	4 MHz BW, ±15 V signals
AD5543	16	1	SPI	8-lead MSOP, 8-lead LFCSP	1 LSB INL max, 10 MHz bandwidth
AD5546	16	1	Parallel	28-lead TSSOP	1 LSB INL max, 10 MHz bandwidth
AD5545	16	2	SPI	16-lead TSSOP	1 LSB INL max, 10 MHz bandwidth
AD5547	16	2	Parallel	38-lead TSSOP	1 LSB INL max, 10 MHz bandwidth
AD5544	16	4	SPI	28-lead SOP, 32-lead LFCSP	1 LSB INL max, 10 MHz bandwidth
Industrial DACs (Voltage and/or 4 mA to 20 mA Current Outputs)					
AD5410	12	1	SPI	24-lead TSSOP, 40-lead LFCSP	4 mA to 20 mA current output DAC, programmable ranges, 60 V compliance
AD5412	12	1	SPI	24-lead TSSOP, 40-lead LFCSP	4 mA to 20 mA current and voltage output DAC, programmable ranges, 0.1% TUE
AD5735	12	4	SPI	64-lead LFCSP	Programmable 4 mA to 20 mA current output DAC with dynamic power control
AD5737	12	4	SPI	64-lead LFCSP	Programmable 4 mb to 20 mA current output DAC with dynamic power control
AD5420	16	1	SPI	24-lead TSSOP, 40-lead LFCSP	4 mA to 20 mA current output DAC, programmable ranges, 60 V compliance
AD5422	16	1	SPI	24-lead TSSOP, 40-lead LFCSP	4 mA to 20 mA current and voltage output DAC, programmable ranges, 0.1% TUE
AD5755	16	4	SPI	64-lead LFCSP	Programmable 4 mA to 20 mA current output DAC with dynamic power control and V_{SENSE} capability
AD5755-1	16	4	SPI	64-lead LFCSP	Programmable 4 mA to 20 mA current output DAC with dynamic power control and HART capability
AD5757	16	4	SPI	64-lead LFCSP	Programmable 4 mA to 20 mA current output DAC with dynamic power control
AD5421	16	1	SPI	28-lead TSSOP	Loop-powered DAC with programmable 4 mA to 20 mA current outputs

I²C refers to a communications protocol originally developed by Philips Semiconductors (now NXP Semiconductors).

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