Digital Potentiometers

Part Number	Resolution (Number of Wiper Steps)	Number of Channels	Maximum Terminal Voltage Range (V)	Interface	Nominal Resistance (kΩ)	Absolute Tempco (ppm/°C)	Package Leads	Price @ 1k ($U.S.)	Comments
One-Time Programmable Memory (OTP)									
AD5273	64	1	5.5	I²C	1, 10, 50, 100	300	8-lead SOT-23	0.69	1 kΩ option has high bandwidth
AD5171	64		5.5	I²C	5, 10, 50, 100	35	8-lead SOT-23	0.72	Tempco is 5 ppm/°C in potentiometer mode
AD5172	256	2	5.5	I²C	2.5, 10, 50, 100	35	10-lead MSOP	1.32	Tempco is 15 ppm/°C in potentiometer mode
AD5173	256		5.5	I²C	2.5, 10, 50, 100	35	10-lead MSOP	1.32	Additional address pins (AD0 and AD1)
Multitime Programmable Memory (MTP)									
AD5271	256	1	±2.75, +5.5	SPI	20, 100	35	10-lead LFCSP, 10-lead MSOP	0.95	1% R-tol, 50 TP,† internal fuse programming supply
AD5291	256		±16.5, +33	SPI	20, 50, 100	35	14-lead TSSOP	2.29	High voltage, 1% R-tol, 20 TP,† internal fuse programming supply, low THD
AD5170	256		5.5	I²C	2.5, 10, 50, 100	35	10-lead MSOP	1.00	2 TP†
AD5274	256		±2.75, +5.5	I²C	20, 100	35	10-lead LFCSP, 10-lead MSOP	0.95	1% R-tol, 50 TP,† internal fuse programming supply
AD5270	1024		±2.75, +5.5	SPI	20, 50, 100	35	10-lead LFCSP, 10-lead MSOP	1.59	1% R-tol, 50 TP,† internal fuse programming supply
AD5174	1024		±2.75, +5.5	SPI	10	35	10-lead LFCSP, 10-lead MSOP	1.45	50 TP,† internal fuse programming supply
AD5292	1024		±16.5, +33	SPI	20, 50, 100	35	14-lead TSSOP	2.62	High voltage, 1% R-tol, 20 TP,† internal fuse programming supply, low THD
AD5272	1024		±2.75, +5.5	I²C	20, 50, 100	35	10-lead LFCSP, 10-lead MSOP	1.59	1% R-tol, 50 TP,† internal fuse programming supply
AD5175	1024		±2.75, +5.5	I²C	10	35	10-lead LFCSP, 10-lead MSOP	1.45	50 TP,† internal fuse programming supply
EEPROM									
AD5114 ***New***	32	1	5.5	I²C	10, 80	35	8-lead LFCSP	0.60	8% R-tol; 2.3 V supply operation, low power consumption
AD5115 ***New***	32		5.5	Up/down	10, 80	35	8-lead LFCSP	0.60	8% R-tol; 2.3 V supply operation, low power consumption
AD5112 ***New***	64		5.5	I²C	5, 10, 80	35	8-lead LFCSP	0.68	8% R-tol; 2.3 V supply operation, low power consumption
AD5113 ***New***	64		5.5	Up/down	5, 10, 80	35	8-lead LFCSP	0.68	8% R-tol; tempco is 5 ppm/°C in potentiometer mode
AD5116 ***New***	64		5.5	Push-button	5, 10, 80	35	8-lead LFCSP	0.66	8% R-tol; 2.3 V supply operation, low power consumption
AD5258	64		5.5	I²C	1, 10, 50, 100	300	10-lead MSOP	0.59	% R-tol error stored in NVM
AD5110 ***New***	128		5.5	I²C	10, 80	35	8-lead LFCSP	0.76	8% R-tol; 2.3 V supply operation, low power consumption
AD5111 ***New***	128		5.5	Up/down	10, 80	35	8-lead LFCSP	0.76	8% R-tol; 2.3 V supply operation, low power consumption
AD5121 ***New***	128		±2.75, +5.5	SPI/I²C	10, 100	35	16-lead LFCSP	0.70	LGST,* 8% R-tol; 2.3 V supply operation
AD5259	256		5.5	I²C	5, 10, 50, 100	300	10-lead LFCSP, 10-lead MSOP	0.9	% R-tol error stored in NVM
AD5141 ***New***	256		±2.75, +5.5	SPI/I²C	10, 100	35	16-lead LFCSP	0.90	LGST,* 8% R-tol; 2.3 V supply operation
AD5231	1024		±2.75, +5.5	SPI	10, 50, 100	600	16-lead TSSOP	1.97	28 bytes of user-programmable NVM
AD5251	64	2	±2.75, +5.5	I²C	1, 10, 50, 100	600	14-lead TSSOP	1.97	% R-tol error stored in NVM, 12 bytes of user-programmable NVM
AD5122A ***New***	128		±2.75, +5.5	I²C	10, 100	35	16-lead LFCSP, 16-lead TSSOP	1.45	LGST,* 8% R-tol; 2.3 V supply operation
AD5122 ***New***	128		±2.75, +5.5	SPI	10, 100	35	16-lead LFCSP, 16-lead TSSOP	1.45	LGST,* 8% R-tol; 2.3 V supply operation
AD5232	256		±2.75, +5.5	SPI	10, 50, 100	300	16-lead TSSOP	2.40	14 bytes of user-programmable NVM
AD5252	256		±2.75, +5.5	I²C	1, 10, 50, 100	300	14-lead TSSOP	1.61	% R-tol error stored in NVM, 12 bytes of user-programmable NVM
AD5142A ***New***	256		±2.75, +5.5	I²C	10, 100	35	16-lead LFCSP, 16-lead TSSOP	1.65	LGST,* 8% R-tol; 2.3 V supply operation
AD5142 ***New***	256		±2.75, +5.5	SPI	10, 100	35	16-lead LFCSP, 16-lead TSSOP	1.65	LGST,* 8% R-tol; 2.3 V supply operation
AD5235	1024		±2.75, +5.5	SPI	25, 250	35	16-lead TSSOP	3.52	% R-tol error stored in NVM, 26 bytes of user-programmable NVM
ADN2850	1024		±2.75, +5.5	SPI	25, 250	35	16-lead LFCSP, 16-lead TSSOP	3.52	% R-tol error stored in NVM, 26 bytes of user-programmable NVM
AD5233	64	4	±2.75, +5.5	SPI	10, 50, 100	600	24-lead TSSOP	2.50	11 bytes of user-programmable NVM
AD5253	64		±2.75, +5.5	I²C	1, 10, 50, 100	300	20-lead TSSOP	2.49	% R-tol error stored in NVM, 12 bytes of user-programmable NVM
AD5123 ***New***	128		±2.75, +5.5	I²C	10, 100	35	16-lead LFCSP	2.45	LGST,* 8% R-tol; 2.3 V supply operation
AD5124 ***New***	128		±2.75, +5.5	SPI/I²C	10, 100	35	24-lead LFCSP, 20-lead TSSOP	2.50	LGST,* 8% R-tol; 2.3 V supply operation
AD5254	256		±2.75, +5.5	I²C	1, 10, 50, 100	300	20-lead TSSOP	2.58	% R-tol error stored in NVM, 12 bytes of user-programmable NVM
AD5143 ***New***	256		±2.75, +5.5	I²C	10, 100	35	16-lead LFCSP	2.85	LGST,* 8% R-tol; 2.3 V supply operation
AD5144A ***New***	256		±2.75, +5.5	I²C	10, 100	35	20-lead TSSOP	2.90	LGST,* 8% R-tol; 2.3 V supply operation
AD5144 ***New***	256		±2.75, +5.5	SPI/I²C	10, 100	35	24-lead LFCSP, 20-lead TSSOP	2.90	LGST,* 8% R-tol; 2.3 V supply operation

†TP = times programmable
*Linear gain setting mode

For more information, visit *www.analog.com/digipots*.

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AD5228	32	1	5.5	Push-button	10, 50, 100	35	8-lead TSOT	0.34	Manual with built-in debouncer
AD5201	33		±2.75, +5.5	SPI	10, 50	500	10-lead MSOP	0.50	Low wiper resistance
AD5227	64		5.5	Up/down	10, 50, 100	35	8-lead TSOT	0.36	Tempco is 10 ppm/°C in potentiometer mode
AD5246	128		5.5	I²C	5, 10, 50, 100	35	6-lead SC70	0.45	Ultracompact, rheostat only
AD5247	128		5.5	I²C	5, 10, 50, 100	35	6-lead SC70	0.45	Ultracompact
AD5220	128		5.5	Up/down	10, 50, 100	800	8-lead MSOP, 8-lead SOIC	0.90	
AD7376	128		±16.5, +33	SPI	10, 50, 100	300	14-lead TSSOP, 16-lead SOIC	2.86	High voltage
AD5160	256		5.5	SPI	5, 10, 50, 100	35	8-lead SOT-23	0.64	
AD5165	256		5.5	SPI	100	35	8-lead TSOT	0.58	Low power: 0.05 μA
AD5245	256		5.5	I²C	5, 10, 50, 100	35	8-lead SOT-23	0.64	
AD5161	256		5.5	SPI	5, 10, 50, 100	35	10-lead MSOP	0.65	
AD5241	256		±2.75, +5.5	I²C	10, 100, 1000	30	14-lead TSSOP, 14-lead SOIC	0.93	
AD5200	256		±2.75, +5.5	SPI	10, 50	500	10-lead MSOP	0.89	
AD8400	256		5.5	SPI	1, 10, 50, 100	500	8-lead SOIC	1.13	1 kΩ option has high bandwidth
AD5260	256		±5.5, +16.5	SPI	20, 50, 200	35	14-lead TSSOP	1.80	
AD5280	256		±5.5, +16.5	I²C	20, 50, 200	35	14-lead TSSOP	1.80	
AD5290	256		±16.5, +33	SPI	10, 50, 100	35	10-lead MSOP	1.97	High voltage
AD5293	1024		±16.5, +33	SPI	20, 50, 100	35	14-lead TSSOP	2.55	High voltage, 1% R-tol, low THD
AD5222	128	2	±2.75, +5.5	Up/down	10, 50, 100, 1000	35	14-lead TSSOP, 14-lead SOIC	0.80	
AD5162	256		5.5	SPI	2.5, 10, 50, 100	35	10-lead MSOP	1.00	1 rheostat, 1 potentiometer
AD5207	256		±2.75, +5.5	SPI	10, 50, 100	500	14-lead TSSOP	1.06	AD8402 replacement
AD8402	256		5.5	SPI	1, 10, 50, 100	500	14-lead TSSOP, 14-lead SOIC	1.68	1 kΩ option has high bandwidth
AD5262	256		±5.5, +16.5	SPI	20, 50, 200	35	16-lead TSSOP	1.97	
AD5243	256		5.5	I²C	2.5, 10, 50, 100	35	10-lead MSOP	1.00	Rheostat/potentiometer
AD5248	256		5.5	I²C	2.5, 10, 50, 100	35	10-lead MSOP	1.00	Rheostat only
AD5242	256		±2.75, +5.5	I²C	10, 100, 1000	30	16-lead TSSOP, 16-lead SOIC	1.27	
AD5282	256		±5.5, +16.5	I²C	20, 50, 200	35	16-lead TSSOP	1.97	
AD5203	64	4	5.5	SPI	10, 100	700	24-lead TSSOP, 24-lead SOIC	1.47	
AD5204	256		±2.75, +5.5	SPI	10, 50, 100	700	32-lead LFCSP, 24-lead TSSOP, 24-lead SOIC	1.52	Preset to midscale/zero-scale pin
AD8403	256		5.5	SPI	1, 10, 50, 100	500	24-lead TSSOP, 24-lead SOIC	2.79	1 kΩ option has high bandwidth
AD5263	256		±7.5, +16.5	SPI/I²C	20, 50, 200	30	24-lead TSSOP	2.58	Additional I²C address pins (AD0 and AD1)
AD5206	256	6	±2.75, +5.5	SPI	10, 50, 100	700	24-lead TSSOP, 24-lead SOIC	1.94	Preset to midscale/zero-scale pin

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

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