



# SEMICONDUCTORS

- ▶ Analog Devices, Inc.....102-105
- ▶ Texas Instruments.....106-109

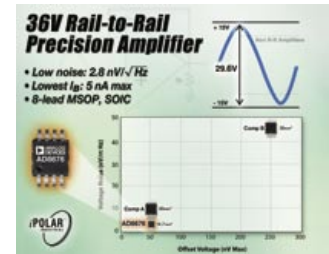


## Amplifiers

Analog Devices offers a wide portfolio of amplifier products including high precision operational amplifiers as well as differential amplifiers.

The AD8676 offers offset accuracy-over-temperature, low noise, rail-to-rail outputs, and 10 MHz gain bandwidth. It is ideal for applications that require low noise, DC precision, maximized SNR, and dynamic range. It is specified to operate from  $\pm 5V$  to  $\pm 15V$  and  $-40^{\circ}C$  to  $+125^{\circ}C$  and is available in 8-lead MSOP and narrow SOIC lead-free packages.

The ADA4937-1 and ADA4938-1 set new performance standards in noise and distortion for differential ADC drivers. These devices enable design engineers to get the most out of their high performance ADCs with resolutions up to 16 bits from DC–100 MHz. The adjustable level of the output common mode allows the ADA4937-1 and ADA4938-1 to match the input of the ADC. The ADA4937-1 works on a 3V to 5V supply range. It is specified to operate over the temperature range of  $-40^{\circ}C$  to  $+105^{\circ}C$ . The ADA4938-1 works on a 5V to 10V supply range and is specified to operate over the industrial temperature range of  $-40^{\circ}C$  to  $+85^{\circ}C$ .



AD8676 rail-to-rail op amp improves dynamic range for 16-bit and higher data conversion

### Features ▶

#### AD8676

- $\pm 2.5V$  to  $\pm 15V$  operation
- Low noise: 2.8 nV/√Hz
- Low offset voltage and offset voltage drift: 50  $\mu V$  max., 0.6  $\mu V/^{\circ}C$  max.
- High CMRR/PSSR: 130 dB/120 dB
- Rail-rail outputs:  $\pm 350$  mV max. from  $\pm 15V$  supply rails at 2 Kohm loads

#### ADA4937/8

- Very low distortion
- Adjustable output common mode

### Benefits ▶

#### AD8676

- High DC accuracy for signal-conditioning applications
- Excellent accuracy over wide temperature range:  $-40^{\circ}C$  to  $+125^{\circ}C$
- Low-noise performance for tight data acquisition error budgets
- Two options to match performance vs. price needs
- High-voltage device in small packaging: MSOP

#### ADA4937/8

- Very low noise and distortion optimizes system performance
- Eases design by enabling matching of amplifier to the ADC input range

### Applications ▶

#### AD8676

- Precision instrumentation
- PLL filters
- Thermocouple amplifiers
- Strain-gage amplifiers
- Medical instrumentation

#### ADA4937/8

- ADC drivers
- Single-ended to differential converters
- IF and baseband gain blocks
- Differential buffers
- Line drivers

### Product Specifications ▶

Part Number	Voltage Offset Max. ( $\mu V$ )	Offset Drift Over Temperature Max. $\mu V/^{\circ}C$	Voltage Noise @ 1 kHz (Hz)	Slew Rate (V/ $\mu s$ )	Gain Bandwidth (MHz)	Supply Current (mA)	Output Drive (mA)	Packaging	In/Out
AD8676A	100	0.6	2.8 nV/sqrt	2.5	10	2.7	20	SOIC, MSOP	Rail-rail output
AD8676B	50	0.6	2.8 nV/sqrt	2.5	10	2.7	20	SOIC, MSOP	Rail-rail output
Part Number	Disable	Supply Voltage (V)	BW@ACL (MHz)	Slew Rate (V/ $\mu s$ )	Distortion SFDR @BW (dBc)	Noise (nV/√Hz)	Temperature Range	Package	
ADA4937-1	Yes	3–5	1900	6000	-102@10 MHz	2.2	Industrial	3 mm x 3 mm LFCSF	
ADA4938-1	Yes	5 – $\pm 5$	1500	4700	-102@10 MHz	2.2	Industrial	3 mm x 3 mm LFCSF	

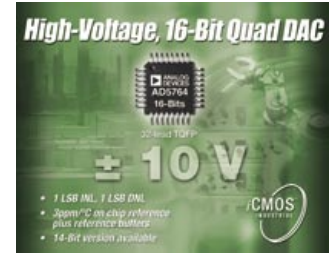




## Converters

Analog Devices offers a full series of converters for industrial applications. The AD5764 is a quad, serial-input, bipolar, voltage output DAC that features 16-bit resolution, 1 LSB INL, 1 LSB DNL, and gain-and-offset calibration to less than 1 mV. The device integrates features essential to reducing design time and overall system cost, including reference buffers, a low headroom/wide swing amplifier, a temperature sensor, power-on reset, power on/off output control, and I/O lines. This integrated functionality is housed in a 7 mm x 7 mm 32-lead TQFP package.

The AD7328 is a true bipolar-input iCMOS multichannel ADC with high impedance inputs and software-programmable analog input (AIN) ranges from  $\pm 2.5V$  to  $\pm 10V$ . These AIN ranges can be configured as single-ended, fully-differential, or pseudo-differential. Dedicated control register bits are used to configure the analog inputs. The ADCs contain a channel sequence, allowing automatic conversions on a group of preprogrammed analog input channels.



High-voltage, 16-bit quad DAC

### Features ▶

#### AD5764

- 16-bit resolution and monotonicity
- High-accuracy  $\pm 1$ LSB INL and DNL
- Low noise: 60 nV/ $\sqrt{\text{Hz}}$
- Output control during power-up/brownout
- Digital offset and gain adjust

#### AD7328

- 12-bit plus sign SAR ADC
- Low power: 25 mW
- Software-selectable input ranges:  $\pm 10V$ ,  $\pm 5V$ ,  $\pm 2.5V$ , and  $0V$  to  $10V$
- 2/4/8 analog input channels with channel sequencer
- Sample rate 500 kSPS to 1 MSPS

### Benefits ▶

#### AD5764

- High accuracy and stability for precision applications
- Large output swings for good noise immunity, and error budgeting and bipolar outputs for control systems
- Asynchronous output control for power up/down or during a fault condition
- Serial SPI interface allows the part to interface to a wide variety of processors

#### AD7328

- Software-selectable inputs
- True bipolar inputs
- Internal reference
- Serial interface
- Low power, 25 mW

### Applications ▶

#### AD5764

- Industrial automation
- Open/closed-loop servo control
- Data acquisition
- High-accuracy instrumentation
- ATE

#### AD7328

- Process control
- Factory automation
- Industrial instrumentation
- Motion control

### Product Specifications ▶

Digital-to-analog converters	Part Number	Package Description	Interface	Number of Channels	Resolution (Bits)	Accuracy
	AD5764	32-lead TQFP	Serial	4	16	$\pm 1$ LSB INL
	AD5744	32-lead TQFP	Serial	4	14	$\pm 1$ LSB INL
	AD5725	28-lead SSOP	Parallel	4	12	$\pm 1$ LSB INL
	AD5726	16-lead SSOP/SOIC	Serial	4	12	$\pm 1$ LSB INL
Analog-to-digital converters	Part Number	Package Description	Temperature Range (°C)	Number of Channels	Throughput Rate	Features
	AD7328	20-lead TSSOP	-40 to +85	8	1 MSPS	$\pm 1$ LSB INL; $\pm 0.9$ LSB DNL
	AD7329	24-lead TSSOP	-40 to +85	8	1 MSPS	$\pm 1$ LSB INL; $\pm 0.9$ LSB DNL
	AD7327	20-lead TSSOP	-40 to +85	8	500 KSPS	$\pm 1$ LSB INL; $\pm 0.9$ LSB DNL
	AD7324	16-lead TSSOP	-40 to +85	4	1 MSPS	$\pm 1$ LSB INL; $\pm 0.9$ LSB DNL
	AD7323	16-lead TSSOP	-40 to +85	4	500 KSPS	$\pm 1$ LSB INL; $\pm 0.9$ LSB DNL
	AD7322	14-lead TSSOP	-40 to +85	2	1 MSPS	$\pm 1$ LSB INL; $\pm 0.9$ LSB DNL
	AD7321	14-lead TSSOP	-40 to +85	2	500 KSPS	$\pm 1$ LSB INL; $\pm 0.9$ LSB DNL

### Arrow Industrial Selector Guide



## Blackfin® Processors

Blackfin® processors are ideal for the challenges involved in designing today's embedded systems and industrial applications. They offer a multitude of embedded interfaces, including networking, LCD, flexible bus, ADC, and DAC connectivity. They are part of a new breed of 16/32-bit embedded processors that are well-suited for products requiring a convergence of capabilities, including such applications as multi-format audio, video, voice, and image processing, as well as multi-mode baseband and packet processing, control processing, and real-time security. The Blackfin's unique combination of software flexibility and scalability has gained widespread adoption in these applications.

### Features ▶

- Add new capabilities to products by taking advantage of combined control and signal-processing capabilities on a single chip
- Code security and data integrity with Lockbox™ secure technology
- On-chip Flash memory now available with up to 1 MB of storage
- RoHS compliant
- Industrial temperatures available

### Benefits ▶

- System designers can specifically tailor the device power consumption profile to end system requirements with Dynamic Power Management (DPM)
- Minimize product development time with an easy-to-use, mixed 16/32-bit instruction-set architecture and development tool suite
- RTOS offerings from leading industrial partners such as: Green Hills Software, Quadros Systems, Express Logic, Micrium µC-OS II, open source uClinux, ADI's VisualDSP++® Kernel (VDK), Uicoi Systems, and Mentor Graphics

### Applications ▶

- Industrial control
- Factory automation
- Instrumentation
- Medical
- Voice
- Video security/surveillance
- POS systems

### Product Specifications ▶

Part Number	Package Options	Speed Range (MHz)	Memory (RAM kB)	Key Peripherals
ADSP-BF522	MiniBGA	300-600	132	PPI, UART, SPI; 2 SPORTs, NAND interface; TWI, lockbox, host DMA
ADSP-BF525	MiniBGA	300-600	132	PPI, UART, SPI, HS USB OTG; 2 SPORTs, NAND interface; TWI, lockbox, host DMA
ADSP-BF527	MiniBGA	300-600	132	PPI, UART, SPI, HS USB OTG; 2 SPORTs, NAND interface; TWI, lockbox, host DMA, 10/100 Ethernet
ADSP-BF531	PBGA, miniBGA, LQFP	400	52	PPI, UART, SPI; 2 SPORTs; 3 timers, 16 GPIOs
ADSP-BF532	PBGA, miniBGA, LQFP	400	84	PPI, UART, SPI; 2 SPORTs; 3 timers, 16 GPIOs
ADSP-BF533	PBGA, MiniBGA	500-750	148	PPI, UART, SPI; 2 SPORTs; 3 timers, 16 GPIOs
ADSP-BF534	MiniBGA, sparse miniBGA	400-500	132	CAN 2.0B, PPI, SPI, TWI; 8 timers, 48 GPIOs; 2 SPORTs, 2 UARTs
ADSP-BF535	PBGA	200-350	308	2 SPIs; 2 SPORTs; USB device, PCI
Part Number	Package Options	Speed Range (MHz)	Memory (RAM kB)	Key Peripherals
ADSP-BF536	MiniBGA, sparse miniBGA	300-400	100	10/100 Ethernet MAC, CAN 2.0B, PPI; TWI, SPI, 8 timers, 48 GPIOs; 2 SPORTs, 2 UARTs
ADSP-BF537	MiniBGA, sparse miniBGA	500-600	132	10/100 Ethernet MAC, CAN 2.0B, PPI; TWI, SPI, 8 timers, 48 GPIOs; 2 SPORTs, 2 UARTs
ADSP-BF538	MiniBGA	400-500	148; Flash 512 or 1MB	CAN 2.0B, 54 GPIOs; 3 SPIs, 2 TWIs, PPI; 4 SPORTs, 3 UARTs
ADSP-BF542	BGA	400-600	132	CAN 2.0B, pixel compositor, HS USB OTG; TWI, 2 SPIs, host DMA, 3 UARTs, PPI; 8 timers, Lockbox™ secure technology
ADSP-BF544	BGA	400-533	196	CAN 2.0B, pixel compositor, 2 TWIs, 2 SPIs; 3 UARTs, Lockbox™ secure technology; host DMA, 11 timers, PPI, 18/24-bit LCD
ADSP-BF548	BGA	533-600	260	Pixel compositor, HS USB OTG; 2 TWIs, 3 SPIs, 4 UARTs, 8 timers; Lockbox™ secure technology, 18/24-bit LCD
ADSP-BF549	BGA	533	260	Pixel compositor, HS USB OTG, 2 TWIs; 3 SPIs, 4 UARTs, MXVR, CAN 2.0B, 8 timers; Lockbox™ secure technology, 18/24-bit LCD
ADSP-BF561	PBGA, miniBGA	500-600, dual-core	328	2 PPIs, UART, 12 timers, 2 SPORTs

### Related Information ▶

The insert-ready, subminiature phyCORE®-BF537 Single Board Computer (SBC) module is at the core of our Rapid Development Kits and is used in all phases of embedded design, from evaluation and prototyping to development and OEM deployment. Save time and money with the phyCORE-BF537—don't spend weeks in specification, parts procurement, complex schematic rendering, and layout of your own microcontroller circuitry, followed by field trials and redesign iterations.

Visit [www.arrow.com/adiphytec](http://www.arrow.com/adiphytec) to purchase discounted kits and to request an onsite demo.

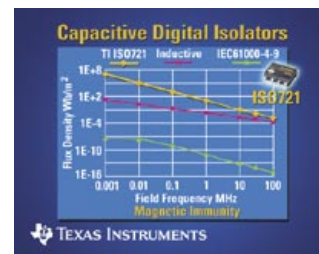




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## ISO721, ISO722-3.3V and 5V, High-Speed Digital Isolators

Texas Instruments' ISO721 digital isolator is a logic input-and-output buffer separated by a silicon oxide (SiO<sub>2</sub>) insulation barrier, which provides galvanic isolation of up to 4,000V. Used in conjunction with isolated power supplies, the device prevents noise currents on a data bus or other circuits from entering the local ground and interfering with or damaging sensitive circuitry.



Package options: SO-8

### Features ▶

- 4000V isolation
- Fail-safe output
- Signaling rate: 0 Mbps to 150 Mbps
- Transient immunity: 50 kV/μs
- UL 1577, IEC60747-5-2 (VDE 0884, rev. 2) IEC 61010-1, and CSA-approved

### Benefits ▶

- Proven reliability of SiO<sub>2</sub> dielectric, stable over temperature and moisture; life span >25 years
- High magnetic immunity (1E6>inductive)
- Lower power than optoisolators
- Filters noisy signals before they enter the system
- Flexibility with power supplies

### Applications ▶

- Industrial fieldbus
- Servo monitoring and control

### Product Specifications ▶

	Part Number	Description	Isolation Rating (UL) (V <sub>RMS</sub> )	Low-Power Sleep Mode	Data Rate Max. (Mbps)	Transient Immunity Min. (kV/μs)	Supply Voltage (V)
Digital Isolators	ISO721	Single-channel (TTL)	2500	No	100	25	3.3, 5
	ISO721M	Single-channel (CMOS)	2500	Yes	150	25	3.3, 5
	ISO722	Single-channel OUT EN (TTL)	2500	Yes	100	25	3.3, 5
	ISO722M	Single-channel OUT EN (CMOS)	2500	Yes	150	25	3.3, 5
	ISO150	Dual-channel bi-directional	1500	No	80	1.6	5
	ISO7220A	Dual-channel uni-directional (TTL)	2500	No	1	25	3.3, 5
	ISO7220C	Dual-channel uni-directional (TTL)	2500	No	25	25	3.3, 5
	ISO7220M	Dual-channel uni-directional (CMOS)	2500	No	150	25	3.3, 5
	ISO7221A	Dual-channel bi-directional (TTL)	2500	No	1	25	3.3, 5
	ISO7221C	Dual-channel bi-directional (TTL)	2500	No	25	25	3.3, 5
	ISO7221M	Dual-channel bi-directional (CMOS)	2500	No	150	25	3.3, 5



Package options: single, MSOP-8,  
SON-8, TSSOP-16, SSOP-28

## Highest Accuracy and Industrial Bipolar DACs

The DAC88xx and DAC78xx families of current output DACs from Texas Instruments are designed to operate from a single 2.7V to 5.5V supply and are available in single, dual, and quad versions. A double-buffered, serial data interface offers high-speed, 3-wire SPI and microcontroller-compatible inputs using serial data-in, a clock and a chip-select. Parallel versions are available.

### Features ▶

- Relative accuracy: 1 LSB (max.)
- $\pm 2$  mA full-scale current with  $V_{REF} = \pm 10V$
- Settling time: 0.5  $\mu s$
- Reference bandwidth: 10 MHz
- Reference dynamics: -105 dB THD

### Benefits ▶

- Industry-standard pin configuration
- Provides the flexibility to configure circuits to match customer requirements
- Very low-power, high-accuracy applications
- Low-distortion attenuators

### Applications ▶

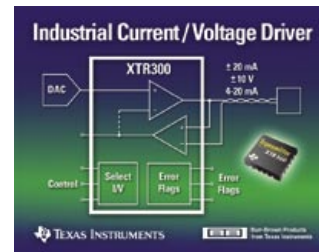
- Automatic test equipment
- Instrumentation
- Digitally-controlled calibration
- Industrial control PLCs

### Product Specifications ▶

	Part Number	Resolution (Bits)	Settling Time ( $\mu s$ )	Number of DAC Channels	Interface	Output (V)	$V_{REF}$	Integral Non-Linearity (%)	Monotonic (Bits)	Power Typ. (mW)
Highest Accuracy, Low-Power DACs	DAC8811	16	0.5	1	Serial, SPI	$I_{OUT} (\pm 10)$	Ext.	0.0015	16	0.027
	DAC8820	16	0.5	1	P16	$I_{OUT} (\pm 10)$	Ext.	0.0015	16	0.027
	DAC8812	16	0.5	2	Serial, SPI	$I_{OUT} (\pm 10)$	Ext.	0.0015	16	0.027
	DAC8822	16	0.5	2	P16	$I_{OUT} (\pm 10)$	Ext.	0.0015	16	0.027
	DAC8814	16	1	4	Serial, SPI	$I_{OUT} (\pm 10)$	Ext.	0.0015	16	0.027
	DAC8801	14	0.5	1	Serial, SPI	$I_{OUT} (\pm 10)$	Ext.	0.0061	14	0.027
	DAC8806	14	0.5	1	P14	$I_{OUT} (\pm 10)$	Ext.	0.0061	14	0.027
	DAC8802	14	0.5	2	Serial, SPI	$I_{OUT} (\pm 10)$	Ext.	0.0061	14	0.027
	DAC8805	14	0.5	2	P14	$I_{OUT} (\pm 18)$	Ext.	0.0061	14	0.0027
	DAC8803	14	1	4	Serial, SPI	$I_{OUT} (\pm 10)$	Ext.	0.0061	14	0.0275
	DAC7811	12	0.2	1	Serial, SPI	$I_{OUT} (\pm 10)$	Ext.	0.012	12	0.001
	DAC7821	12	0.2	1	P12	$I_{OUT} (\pm 10)$	Ext.	0.012	12	0.001
	DAC7822	12	0.2	2	P12	$I_{OUT} (\pm 10)$	Ext.	0.0244	12	0.275

## XTR300: Industrial Analog Voltage or Current Output Driver

The XTR300 from Texas Instruments is a complete output driver for industrial and process control applications. The output can be selected as current or voltage by the digital I/V select pin, and error flags allow for convenient fault detection. Separate driver and receiver channels provide added flexibility. The integrated instrumentation amplifier can be used for remote voltage sensing or as a high-voltage, high-impedance measurement channel. Maximum output current limit and thermal protection are provided.



TSSOP-20, 5 x 5 QFN

### Features ▶

- Pin select I or V output or input
- Pin select for output enable/disable (OE)
- Gain or transconductance set by external resistors
- Output voltage swing:  $\pm 16$  at  $V_S = \pm 19V$
- Output current:  $\pm 24$  mA (linear range)

### Benefits ▶

- Makes remote configuration and troubleshooting easy
- Provides additional circuit and board protection
- Compact solution for industrial interface
- Adaptable for application needs
- Allows maximum design flexibility

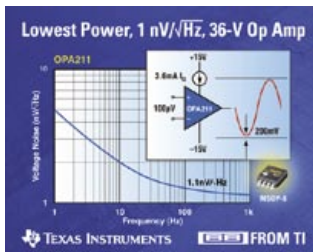
### Applications ▶

- Analog interface between industrial high-voltage and low-voltage signal processing: PLC - I/O, field bus I/O

### Product Specifications ▶

	Part Number	Description	Sensor Excitation	Loop Voltage (V)	Full-Scale Input Range	Output Range (mA)	Additional Power Available (V at mA)	Package(s)
2-Wire, 4 mA-20 mA Transmitters	XTR105	100 $\Omega$ RTD conditioner with linearization	Two 800 $\mu$ A	7.5-36	5 mV-1V	4-20	5.1 at 0.5	DIP-14, SOIC-14
	XTR106	Bridge conditioner with linearization	5V and 2.5V	7.5-36	5 mV-1V	4-20	5.1 at 1	DIP-14, SOIC-14
	XTR108	10 $\Omega$ to 10 k $\Omega$ RTD conditioner, 6-channel input max, extra op amp can	Two 500 $\mu$ A	7.5-24	5 mV-320mV	4-20	5.1 at 2.1	SSOP-24, EVM*
Convert to voltage sensor excitation, calibration stored in external EEPROM	XTR112	1 k $\Omega$ RTD conditioner with linearization	Two 250 $\mu$ A	7.5-36	5 mV-1V	4-20	5.05 at 1	SOIC-14
	XTR114	10 k $\Omega$ RTD conditioner with linearization	Two 100 $\mu$ A	7.5-36	5 mV-1V	4-20	5.05 at 1	SOIC-14
	XTR115	$I_{IN}$ to $I_{OUT}$ converter, external resistor scales $V_{IN}$ to $I_{IN}$	$V_{REF} = 2.5V$	7.5-36	40 $\mu$ A-250 $\mu$ A	0.25-25	4.9 at 1	SOIC-8
	XTR116	$I_{IN}$ to $I_{OUT}$ converter, external resistor scales $V_{IN}$ to $I_{IN}$	$V_{REF} = 4.096V$	7.5-36	40 $\mu$ A-250 $\mu$ A	0.25-25	4.9 at 1	SOIC-8
	XTR117	Current loop, 7.5V-40V, 5V voltage regulator	$V_{REG} = 5V$	7.5-40	5 mV-1V	0.25-25	4.9 at 1	MSOP-8, DFN-8
Bridge conditioner with digital calibration for linearization, span, and offset-over-temperature	PGA309	Complete digitally-calibrated bridge sensor conditioner, voltage output, calibration stored in external EEPROM, one-wire/two-wire interface	$V_{EXC} = V_S$ , 2.5V 4.096V	2.7-5.5	1m V/V-245 mV/V	0.1V-4.9V, at $V_S = +5V$	NA	TSSOP-16, EVM*
Industrial current/voltage drivers	XTR110	Precision V-to-I converter/transmitter, selectable I/O ranges	$V_{REF} = 10V$	13.5-40	0V-5V, 0V-10V	0-20, 4-20, 5-25	NA	DIP-16, SOL-16
	XTR111	Precision V-to-I converter/transmitter, adjustable $V_{REG}$ 3V-15V	$V_{REG} = 3$ to 15V	7-40	0V to 12V	0-20, 4-20, 5-25	3V-15V	DFN/MSOP-10
	XTR300	Industrial analog current/voltage output driver	NA	<34	V(-)+3 to V(+)-3, digitally-selected $V_{O\leq}$	$\pm 17V$ , $\pm 24$ mA	NA	5 x 5 QFN, TSSOP-20, EVM*
4 mA-20 mA current loop receiver	RCV420	4 mA-20 mA input, 0V-5V output, 1.5V loop drop	$V_{REF} = 10V$	+11.5/-5 to $\pm 18$	4 mA-20 mA	0V-5V	NA	DIP-16

\* Available Evaluation Module



Package options: DFN-8 (3 mm x 3 mm),  
MSOP-8, SO-8

## OPA211 and OPA827 Amplifiers

The new OPA211 (bipolar) and OPA827 (JFET) precision amplifiers from Texas Instruments offer lower power, smaller package size, and low noise, enabling breakthrough performance in test and measurement, instrumentation, imaging, medical, audio, and industrial process control applications. These amplifiers were developed using the industry's first complementary bipolar 36V SiGe process—BiCom3HV.

### Features ▶

- Low-noise voltage: 1.1 nV/√Hz at 1 kHz (OPA211 specifications)
- 100 nV<sub>PP</sub> inputs voltage noise, 0.1 Hz–10 Hz
- Low-offset voltage: 100 μV (max.)
- Low-offset voltage drift: 0.2 μV/°C (typ.)
- Wide supply range: ±2.25V to ±18V, +4.5V to +36V

### Benefits ▶

- Provides minimal signal distortion
- Very high signal accuracy
- Spans 5V to full industrial range
- Maximum amplification at any V<sub>CC</sub> range
- Small package

### Applications ▶

- Phase lock loop filters
- High performance ADC drivers
- High performance DAC output amplifiers
- Professional audio preamps
- Medical

### Product Specifications ▶

Low-Noise Operational Amplifiers (V <sub>n</sub> ≤ 10 nV/rtHz)	Part Number	Description/Technology	Channels	V <sub>S</sub> Min. (V)	V <sub>S</sub> Max. (V)	I <sub>Q</sub> Per Ch. Max. (mA)	GBW Typ. (MHz)	Slew Rate Typ. (V/μs)	V <sub>OS</sub> Max. (25°C) (mV)	V <sub>OS</sub> Drift Typ. (μV/°C)
	OPAy211	Ultra-low noise, high-precision	1, 2	4.5	36	3.6	58	27	0.15	0.2
	TLE2027	Wide supply, bipolar	1	8	38	5.3	13	2.8	0.1	0.4
	OPA300	Very wide bandwidth	S	2.7	5.5	12	150	80	2.5	5
	OPA227	High-precision, bipolar	1, 2, 4	5	36	3.8	8	2.3	0.075	0.1
	OPA228	High-speed, precision	1, 2, 4	5	36	3.8	33	11	0.075	0.1
	OPAy827	Ultra-low THD+N, high-precision	1, 2	8	36	4.5	18	22	0.25	1
	OPAy350	Excellent ADC driver	1, 2, 4	2.7	5.5	7.5	38	22	0.5	4
	OPA365	High-speed, zero crossover	1, 2	2.2	5.5	5	50	25	0.5	1
	OPA353	Good ADC driver, low THD+N, CMOS	1, 2, 4	2.7	5.5	8	44	22	8	5
	OPA627, OPA637	Precision, high-speed, Difet	1	9	36	7.5	16, 80	55, 135	0.1	0.4
	OPA376	Low-power RRIO	1, 2, 4	2.2	5.5	0.95	5	4	0.05	2
	OPA121	Precision, Difet	1	10	36	4.5	2	2	3	3
	OPAy277	High-precision	1, 2, 4	4	36	0.825	1	0.8	0.02	0.1
	OPA124	Low-noise, precision, bipolar	1	10	36	2.5	1.5	1.6	0.25	2
	TLC220x	Precision, low-power, LinCMOS	1, 2	4.6	16	1.5	1.8	2.5	0.5	0.5
	OPAy132	Wide-bandwidth, FET-input	1, 2, 4	5	36	4.8	8	20	0.5	2



**Arrow Industrial Selector Guide**

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