

HIGH SPEED **OP AMPS**

Rail-to-Rail Voltage Feedback Amplifiers,
Current Feedback Amplifiers,
Slew Rate Enhanced Voltage Feedback Amplifiers,
High Performance Voltage Feedback Amplifiers,
Differential Line Drivers/Receivers,
Fixed Gain Op Amps

intersil[™]

Best in Class
Performance-to-Power Ratio

SIMPLY SMARTER[™]

High Speed Op Amps

Rail-to-Rail VFBs (Pg 3)

Single Channel

EL8100
200MHz, 200V/μs, EN
EL8101
200MHz, 200V/μs
EL8102
500MHz, 600V/μs, EN
EL8103
500MHz, 600V/μs

Dual Channel

EL8200
200MHz, 200V/μs, EN
EL8201
200MHz, 200V/μs
EL8202
500MHz, 600V/μs, EN
EL8203
500MHz, 600V/μs

Triple Channel

EL8300
200MHz, 200V/μs, EN
EL8302
500MHz, 600V/μs, EN

Quad Channel

EL8401
200MHz, 200V/μs
EL8403
500MHz, 600V/μs

Current Feedback Amplifiers (Pg 4)

Single Channel

EL5160
200MHz, 1,700V/μs, EN
EL5161
200MHz, 1,700V/μs
EL5162
500MHz, 4,000V/μs, EN
EL5163
500MHz, 4,000V/μs
EL5164
600MHz, 4,700V/μs, EN
EL5165
600MHz, 4,700V/μs
EL5166
1,400MHz, 6,000V/μs, EN
EL5167
1,400MHz, 6,000V/μs

Dual Channel

EL5260
200MHz, 2,000V/μs, EN
EL5261
200MHz, 2,000V/μs
EL5262
500MHz, 2,500V/μs, EN
EL5263
500MHz, 2,500V/μs
EL8108
300MHz, IOUT = 450mA

Triple Channel

EL5360
200MHz, 1,700V/μs, EN
EL5362
500MHz, 2,500V/μs, EN
EL5364
600MHz, 4,200V/μs, EN

Quad Channel

EL5462
500MHz, 4,000V/μs

Slew Rate Enhanced VFBs (Pg 5)

Single Channel

EL5100
200MHz, 2,200V/μs, EN
EL5101
200MHz, 2,200V/μs
EL5102
400MHz, 3,500V/μs, EN
EL5103
400MHz, 3,500V/μs
EL5104
700MHz, 4,000V/μs, EN
EL5105
700MHz, 4,000V/μs

Dual Channel

EL5202
400MHz, 3,500V/μs, EN
EL5203
400MHz, 3,500V/μs
EL5204
700MHz, 4,000V/μs, EN
EL5100
700MHz, 4,000V/μs, EN

Triple Channel

EL5300
200MHz, 2,200V/μs, EN
EL5302
400MHz, 3,500V/μs, EN
EL5304
700MHz, 4,000V/μs, EN

High Performance VFBs (Pg 6)

High Supply Voltage

Single Channel

ISL55001
220MHz, 300V/μs
±2.5V to ±15V

Dual Channel

ISL55002
220MHz, 300V/μs
±2.5V to ±15V

Quad Channel

ISL55004
220MHz, 300V/μs
±2.5V to ±8V

High Gain Bandwidth Low Noise

Single Channel

EL5131
900MHz, 1.9nV/√Hz
ISL55190
800MHz, 1.2nV/√Hz

Dual Channel

ISL55290
800MHz, 1.2nV/√Hz
EL5236
250MHz, 1.5nV/√Hz
Min Gain 2

EL5237

250MHz, 1.5nV/√Hz
Min Gain 2, EN

Fully Differential Amplifier

Single Channel

ISL55210
2.2GHz, 0.85nV/√Hz
Min Gain 4
ISL55211
1.2GHz, 0.85nV/√Hz
Gains 2, 4, 5

Differential Line Drivers/Receivers (Pg 7)

Differential Line Drivers

Single Channel

EL5170
100MHz, 1,100V/μs
2 (Fixed), EN
EL5171
250MHz, 800V/μs
EL5173
400MHz, 900V/μs
2 (Fixed), EN
EL5174
550MHz, 1,100V/μs, EN
EL5178
700MHz, 1,000V/μs

Triple Channel

EL5370
100MHz, 1,200V/μs
2 (Fixed), EN
EL5371
250MHz, 700V/μs, EN
EL5373
450MHz, 1,100V/μs
2 (Fixed), EN
EL5374
550MHz, 850V/μs, EN
EL5378
700MHz, 1,000V/μs, EN

Differential Line Receivers

Single Channel

EL5172
250MHz, 800V/μs, EN
EL5175
550MHz, 900V/μs, EN

Triple Channel

EL5372
250MHz, 800V/μs, EN
EL5375
550MHz, 900V/μs, EN

Fixed Gain Op Amps (Pg 8)

Single Channel

EL5106
1.5mA supply current
350MHz, 4,500V/μs,
±1.2 (Fixed), EN
EL5108
3.5mA supply current
450MHz, 4,500V/μs,
±1.2 (Fixed), EN

Triple Channel

EL5306
1.5mA/ch supply current
350MHz, 4,500V/μs,
±1.2 (Fixed), EN
EL5308
3.5mA/ch supply current
450MHz, 4,500V/μs,
±1.2 (Fixed), EN

*EN = Enable feature

HIGH SPEED OP AMPs

RAIL-TO-RAIL VOLTAGE FEEDBACK AMPLIFIERS



For driving and buffering today's high speed ADC and DAC applications, utilize the world's fastest rail-to-rail Voltage Feedback Amplifiers (VFAs) – EL8x0x, which offer unmatched harmonic distortion performance at the lowest quiescent power.

EL8102

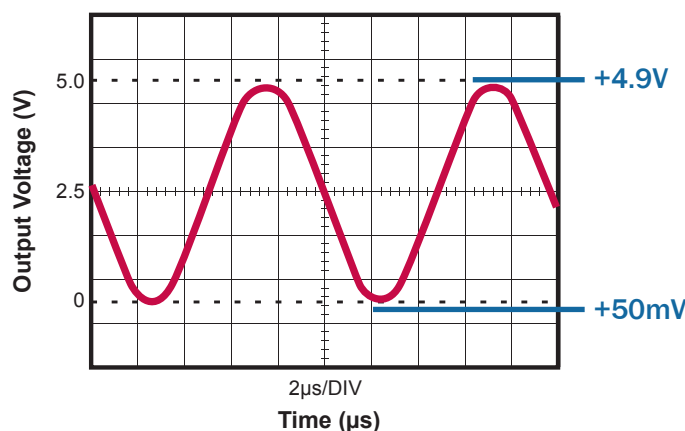
INDUSTRY'S FASTEST RAIL-TO-RAIL VFAs

Using only 5.6mA on a single +5V supply, EL8102 offers greater than 600V/ μ s slew rate and 200MHz gain bandwidth product.

KEY FEATURES

- **Wide 3dB bandwidth: 500MHz ($A_V = +1$)**
 - Suitable for various high speed systems
- **Single supply: +3V to +5.5V with shutdown**
 - Suitable for portable/handheld products
- **Rail-to-Rail outputs: +50mV to +4.9V ($V_S = +5V$)**
 - Suitable for buffering DAC outputs
- **Low power consumption: 5.6mA per channel ($V_S = +5V$)**
 - Fast shutdown (25ns) to 30 μ A supply current
- **Fast slew rate: 600V/ μ s**
 - Suitable for various distribution applications
- **Very low distortion: -87dBc (HD3)**
 - Suitable for driving high speed ADCs

RAIL-TO-RAIL OUTPUTS



APPLICATIONS

- Portable communications equipment
- ADC drivers
- DAC buffers

Rail-to-Rail Voltage Feedback Amplifiers (Single Supply)

Part Number	# of Channels	V_S Min (V)	V_S Max (V)	SSBW @ A_V Min (MHz)	A_V Min (V/V)	Slew Rate (V/ μ s)	2nd Harmonic (dBc)	3rd Harmonic (dBc)	Total Harmonic Distortion (dBc)	I_{CC} Max/Ch (mA)	V_N (nV/ \sqrt{Hz})	V_{OS} Max (mV)	I_O Min (mA)	R-R In	R-R Out	Enable
EL8100	1	3	5.5	200	1	200	-62	-65	-60	2.4	10	6	65	- V_S	Y	Y
EL8101	1	3	5.5	200	1	200	-62	-65	-60	2.4	10	6	65	- V_S	Y	N
EL8102	1	3	5.5	500	1	600	-74	-87	-74	6	12	8	65	- V_S	Y	Y
EL8103	1	3	5.5	500	1	600	-74	-87	-74	6	12	8	65	- V_S	Y	N
EL8200	2	3	5.5	200	1	200	-62	-65	-60	2.4	10	6	65	- V_S	Y	Y
EL8201	2	3	5.5	200	1	200	-62	-65	-60	2.4	10	6	65	- V_S	Y	N
EL8202	2	3	5.5	500	1	600	-74	-87	-74	6.2	12	8	65	- V_S	Y	Y
EL8203	2	3	5.5	500	1	600	-74	-87	-74	6.2	12	8	65	- V_S	Y	N
EL8300	3	3	5.5	200	1	200	-62	-65	-60	2.6	10	5	65	- V_S	Y	Y
EL8302	3	3	5.5	500	1	600	-74	-87	-74	6.2	12	7	65	- V_S	Y	Y
EL8401	4	3	5.5	200	1	200	-62	-65	-60	2.4	10	6	65	- V_S	Y	N
EL8403	4	3	5.5	500	1	600	-74	-87	-74	6.2	12	8	65	- V_S	Y	N

HIGH SPEED OP AMPs

CURRENT FEEDBACK AMPLIFIERS



For today's high speed video and communications applications, take advantage of Intersil's ultra-fast Current Feedback Amplifiers (CFAs) – EL5x6x, which offer best-in-class speed, power, and noise performance.

EL5166

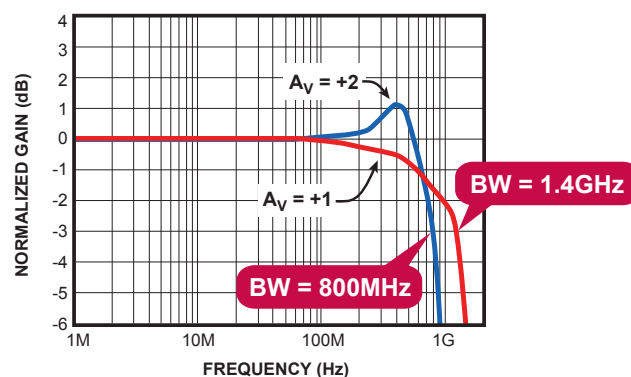
INDUSTRY'S BEST BANDWIDTH-TO-POWER RATIO

Using only 8.5mA on ±5V supplies, EL5166 offers more than 6,000V/μs slew rate and greater than 800MHz bandwidth at a gain of +2V/V.

KEY FEATURES

- **Ultra-wide 3dB bandwidth: 1.4GHz** ($A_V = +1$)
 - Suitable for driving high speed ADCs
- **Low power consumption: 8.5mA** ($V_S = \pm 5V$)
 - Provides the best bandwidth-to-power ratio in the industry
- **Ultra-fast slew rate: 6,000V/μs**
 - Allows near-perfect reproduction of pulses (no distortion)
- **Power saving fast enable/disable**
 - Suitable for shutting down the amplifier to preserve power (13μA)
- **Low input voltage noise: 1.5nV/√Hz**
 - Suitable for noise-sensitive applications

ULTRA-WIDE 3dB BANDWIDTH



KEY APPLICATIONS

- Professional video
- RF and IF gain stages
- Communication equipment
- Instrumentation
- ADC drivers
- Data acquisition systems

Current Feedback Amplifiers

Part Number	# of Channels	V _S Min (V)	V _S Max (V)	SSBW @ A _V Min (MHz)	A _V Min (V/V)	Slew Rate (V/μs)	2nd Harmonic (dBc)	3rd Harmonic (dBc)	Total Harmonic Distortion (dBc)	I _{CC} Max/Ch (mA)	V _N (nV/√Hz)	V _{OS} Max (mV)	I _O Min (mA)	R-R In	R-R Out	Enable
EL5160	1	5	10	200	1	1700	-74	-50	-50	0.85	4	5	40	N	N	Y
EL5161	1	5	10	200	1	1700	-74	-50	-50	0.85	4	5	40	N	N	N
EL5162	1	5	12	500	1	4000	-74	-50	-50	2	3	5	60	N	N	Y
EL5163	1	5	12	500	1	4000	-74	-50	-50	2	3	5	60	N	N	Y
EL5164	1	5	12	600	1	4700	-81	-74	-73	4.2	2.1	5	100	N	N	Y
EL5165	1	5	12	600	1	4700	-81	-74	-73	4.2	2.1	5	100	N	N	N
EL5166	1	5	12	1400	1	6000	-70	-78	-69	9.3	1.7	5	110	N	N	Y
EL5167	1	5	12	1400	1	6000	-70	-78	-69	9.3	1.7	5	110	N	N	Y
EL5260	2	5	10	500	1	1300	-74	-50	-50	0.85	4	5	40	N	N	Y
EL5261	2	5	10	500	1	1300	-74	-50	-50	0.85	4	5	40	N	N	N
EL5262	2	5	12	500	1	2500	-74	-50	-50	2	3	5	60	N	N	Y
EL5263	2	5	12	500	1	2500	-74	-50	-50	2	3	5	60	N	N	Y
EL8108	2	5	12	200	2	800			-70	18	6	25	450	N	N	N
EL5360	3	5	10	500	1	1700	-81	-50	-50	0.92	4	5	40	N	N	Y
EL5362	3	5	12	500	1	2500	-81	-50	-50	2	3	5	60	N	N	Y
EL5364	3	5	12	600	1	4200	-81	-74	-73	4.2	2.1	5	100	N	N	Y
EL5462	4	5	12	500	1	4000	-81	-74	-73	1.7	3	5	60	N	N	N

HIGH SPEED OP AMPs

SLEW RATE ENHANCED VFAs

Suited for a wide range of high speed applications including video and communications, the EL50x enhanced slew rate Voltage Feedback Amplifiers (VFAs) allow designers an easy to use voltage feedback architecture without sacrificing the high speed benefits of a CFA.

EL5104

HIGHEST SLEW RATE IN UNITY GAIN STABLE VFA

Offering more than 4,000V/ μ s slew rate on 9.5mA and greater than 250MHz gain bandwidth product, EL5104 is a viable alternative to a CFA where a voltage feedback solution is preferred.

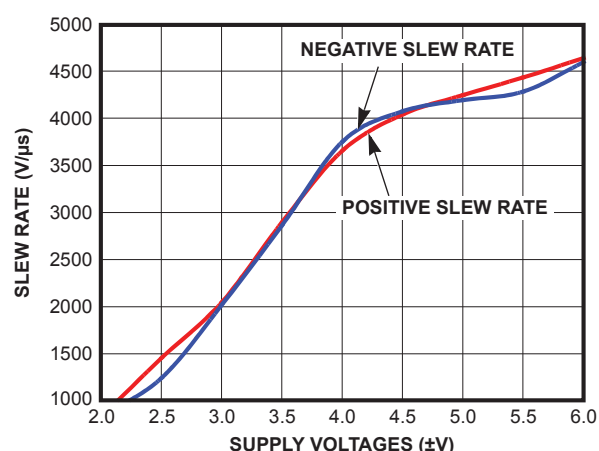
KEY FEATURES

- **Wide 3dB bandwidth: 700MHz ($A_V = +1$)**
 - Suitable for various high speed systems
- **Ultra-fast slew rate: 4,000V/ μ s**
 - Allows near-perfect reproduction of pulses (no distortion)
- **Ultra-fast 0.1% settling time: 7ns (5V step)**
 - Suitable for DC coupled applications
- **Very low distortion: -85dBc (HD3)**
 - Suitable for driving high speed ADCs
- **High output drive: 160mA**
 - Suitable for driving capacitive loads

KEY APPLICATIONS

- Video line drivers
- Communications equipment
- Broadcast equipment
- Data acquisition systems
- ADC drivers

ULTRA-FAST SLEW RATE



Slew Rate Enhanced Voltage Feedback Amplifiers

Part Number	# of Channels	V _S Min (V)	V _S Max (V)	SSBW @ A _V Min (MHz)	A _V Min (V/V)	Slew Rate (V/ μ s)	2nd Harmonic (dBc)	3rd Harmonic (dBc)	Total Harmonic Distortion (dBc)	I _{CC} Max/Ch (mA)	V _N (nV/ \sqrt Hz)	V _{OS} Max (mV)	I _O Min (mA)	R-R In	R-R Out	Enable
EL5100	1	3.3	12	200	1	2200	-76	-75	-72	2.9	10	4	60	N	N	Y
EL5101	1	3.3	12	200	1	2200	-76	-75	-72	2.9	10	4	60	N	N	N
EL5102	1	5	10	400	1	2200	-76	-75	-72	5.8	12	5	80	N	N	Y
EL5103	1	5	10	400	1	2220	-76	-75	-72	5.8	12	5	80	N	N	N
EL5104	1	4	13.2	700	1	3000	-80	-85	-79	11	10	10	90	N	N	Y
EL5105	1	4	13.2	700	1	3000	-80	-85	-79	11	10	10	90	N	N	N
EL5202	2	5	10	400	1	2200	-76	-75	-72	5.8	12	5	80	N	N	Y
EL5203	2	5	10	400	1	2200	-76	-75	-72	5.8	12	5	80	N	N	N
EL5204	2	4	13.2	700	1	3000	-80	-85	-79	11	10	10	90	N	N	Y
EL5205	2	4	13.2	700	1	3000	-80	-85	-79	11	10	10	90	N	N	N
EL5300	3	3.3	12	200	1	2200	-76	-75	-72	2.9	10	4	60	N	N	Y
EL5302	3	5	10	400	1	2200	-76	-75	-72	5.8	12	8	80	N	N	Y
EL5304	3	4	13.2	700	1	3000	-80	-85	-79	11	10	18	90	N	N	Y

HIGH SPEED OP AMPs

HIGH PERFORMANCE VFAs



For those uncompromising high voltage industrial applications, exploit Intersil's high speed, ultra wide supply voltage range Voltage Feedback Amplifiers (VFAs) – ISL55001/2/4.

High Voltage ISL55001

HIGHEST OUTPUT VOLTAGE SWING AT THE LOWEST POWER

Offering 70MHz gain bandwidth product with 280V/ μ s slew rate on only 8.3mA supply current, ISL55001 can handle moderately fast signals on a high input common mode range.

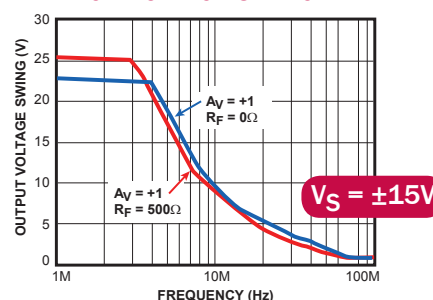
KEY FEATURES

- **Wide 3dB bandwidth: 220MHz ($A_V = +1$)**
 - Suitable for various high speed systems
- **Wide supply range: $\pm 2.5V$ to $\pm 15V$ (dual), $+5V$ to $+30V$ (single)**
 - Suitable for industrial systems with wide supply and high dynamic range requirements
 - Allows for very wide output voltage swings (higher dynamic range)
 - Wide common mode range for fast signals sitting on high DC
- **Low power consumption: 9.3mA ($V_S = \pm 15V$)**
 - Suitable for low power dissipation
- **Fast slew rate: 300V/ μ s**
 - Suitable for many pulse amplifier applications
- **High output drive: 140mA**
 - Suitable for driving capacitive loads

APPLICATIONS

- High voltage industrial
- High dynamic range data acquisition
- Pulse amplification

VERY HIGH VOLTAGE SWING



High Gain, Low Noise EL5131

HIGH GAIN BANDWIDTH LOW NOISE

Particularly suited to low noise, wideband transimpedance applications, these low power solutions offer a range of noise and gain bandwidth options for your most demanding front end applications.

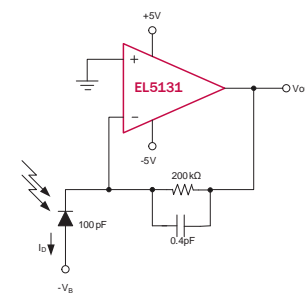
KEY FEATURES

- **Gain Bandwidth Product: 900MHz**
- **Minimum Operating Gain: 4V/V**
- **Input Voltage Noise: 1.7nV/ \sqrt{Hz}**
- **Input Current Noise: 1.6pA/ \sqrt{Hz}**
- **Input Capacitance: 1pF**
- **Supply Current ($\pm 5V$ Supplies): 2.5mA**
- **Single Supply Operating Voltage: 5 - 13V**

APPLICATIONS

- Low power, low noise photodiode amplifier (transimpedance)
- High density, low power, low noise piezo-electric element amplifier
- Multi-stage, low power active filters with passband gain
- Waveform digitizer front ends

WIDEBAND, HIGH GAIN TRANSIMPEDANCE DESIGN



High Voltage

Part Number	# of Channels	V_S Min (V)	V_S Max (V)	SSBW @ A_V Min (MHz)	A_V Min (V/V)	SR (V/ μ s)	2nd Harmonic (dBc)	3rd Harmonic (dBc)	Total Harmonic Distortion (dBc)	I_{CC} Max/Ch (mA)	V_N (nV/ \sqrt{Hz})	V_{OS} Max (mV)	I_O Min (mA)
ISL55001	1	4.5	30	220	1	280	-72	-80	-71	9.25	12	3	60
ISL55002	2	4.5	30	200	1	300	-72	-80	-71	9.25	12	5	40
ISL55004	4	4.5	30	200	1	300	-72	-80	-71	9.25	12	5	40

High Gain Bandwidth, Low Noise

Part Number	# of Channels	Gain Bandwidth Product (MHz)	SR (V/ μ s)	Min. Operating Gain	Nominal Total V_{CC} (V)	I_S (per amp) (mA)	Output Voltage Headroom (V)	Single Supply Range (V)	Typ. V_{OS} (mV)	Typ. I_B (μ A)	Input Cap Common Mode (pF)	Input En (nV)	Input In (pA)
EL5131	1	900	350	4	10	3.5	1.2	5 to 13	0.2	2.3	1	1.7	1.6
ISL55190	1	800 ($A_V=5$)	268	4	5	16	0.04	3 to 5.5	0.3	25	1.1	1.06	5.5
ISL55290	2	800 ($A_V=5$)	268	4	5	16	0.04	3 to 5.5	0.3	25	1.1	1.06	5.5
EL5236/37	2	300	128	2	12	5.8	1.3	2.5 to 6	0.1	6.5	1.6	1.5	1.8

Fully Differential Wideband Amplifier

Part Number	# of Channels	BW (MHz)	SR (V/ μ s)	V_S (min) (V)	V_S (max) (V)	I_S (per amp) (mA)	Noise V_N (nV/ \sqrt{Hz})	I_{BIAS} (μ A)	V_{OS} (max) (mV)	I_{OUT} (mA)	V_{OUT} (V)	PSRR (dB)	CMRR (dB)	Gain A_V (min)	Enable
ISL55210	1	2200	5600	3	4.2	35	0.85 (Input)	50	1.4	45	3.8	90	75	2	Y
ISL55211	1	1400	5600	3	4.2	35	9.6 (Output)	50	1.4	45	3.8	67	75	2	Y

HIGH SPEED OP AMPs

DIFFERENTIAL LINE DRIVERS/RECEIVERS



For driving and receiving video and other high speed data over twisted-pair lines or any other noisy cabling environment, utilize Intersil's family of differential amplifiers, EL5x7x, which offers best-in-class bandwidth, noise rejection, and power consumption.

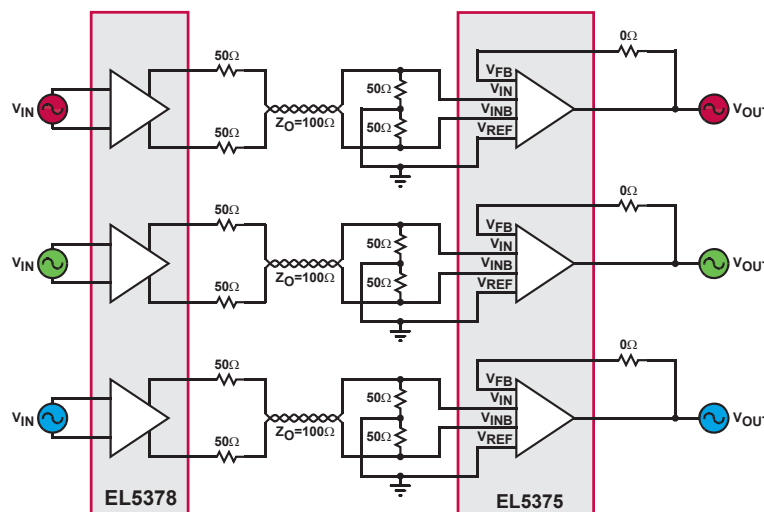
EL5375/8

TRIPLE LINE DRIVER/RECEIVER PAIR OFFERS BEST-IN-CLASS NOISE IMMUNITY

On $\pm 5V$ supplies and less than 12.5mA supply current per channel, EL5375/8 offer a low power solution for triple channel line driver/receiver pairs and still achieve better than -75dBc third order distortion.

KEY FEATURES

- **Wide 3dB bandwidth:** EL5378: 700MHz ($A_V = +2$), EL5375: 550MHz ($A_V = +1$)
 - Suitable for driving and receiving high speed data
- **Very low power consumption:** EL5378: 12.5mA, EL5375: 11mA per channel ($V_S = +5V$)
 - Suitable for low power dissipation
- **Very low distortion: <-75dBc (HD3)**
 - Suitable for driving/receiving data over noisy cabling environment
- **Triple-channel Line Driver/Receiver**
 - Reduces design time and saves considerable PCB real-estate



APPLICATIONS

- Twisted-pair lines drivers/receivers
- KVM Networking
- Differential-to-single ended amplification
- VGA over twisted-pair

Differential Line Drivers

Part Number	# of Channels	V _S Min (V)	V _S Max (V)	SSBW @ A _V Min (MHz)	A _V Min (V/V)	Slew Rate (V/μs)	2nd Harmonic (dBc)	3rd Harmonic (dBc)	Total Harmonic Distortion (dBc)	I _{CC} Max/Ch (mA)	V _N (nV/√Hz)	V _{OS} Max (mV)	I _O Min (mA)	R-R In	R-R Out	Enable
EL5170	1	4.75	11	100	2	1100	-65	-43	-43	8.4	28	25	50	-V _S	N	Y
EL5171	1	4.75	11	250	1	800	-94	-77	-77	8.2	26	25	70	-V _S	N	N
EL5173	1	4.75	11	450	2	900	-84	-62	-62	14	25	30	45	-V _S	N	Y
EL5174	1	4.75	11	550	1	1100	-95	-88	-87	14	21	25	50	N	N	N
EL5177	1	4.75	11	550	1	1100	-95	-88	-87	14	21	25	50	N	N	Y
EL5178	1	4.75	11	700	2	850	-83	-88	-82	14	18	30	50	N	N	N
EL5370	3	4.75	11	100	2	1100	-65	-43	-43	8.4	28	25	70	-V _S	N	Y
EL5371	3	4.75	11	250	1	800	-94	-77	-77	8.2	26	25	50	-V _S	N	Y
EL5373	3	4.75	11	450	2	1100	-84	-62	-62	14	25	30	40	-V _S	N	Y
EL5374	3	4.75	11	550	1	850	-95	-88	-87	14	21	25	50	N	N	Y
EL5378	3	4.75	11	700	2	1000	-83	-88	-82	14	18	30	50	N	N	Y

Differential Line Receivers

Part Number	# of Channels	V _S Min (V)	V _S Max (V)	SSBW @ A _V Min (MHz)	A _V Min (V/V)	Slew Rate (V/μs)	2nd Harmonic (dBc)	3rd Harmonic (dBc)	Total Harmonic Distortion (dBc)	I _{CC} Max/Ch (mA)	V _N (nV/√Hz)	V _{OS} Max (mV)	I _O Min (mA)	R-R In	R-R Out	Enable
EL5172	1	4.75	11	250	1	800	-59	-60	-56	7	26	25	60	-V _S	No	Y
EL5175	1	4.75	11	550	1	900	-65	-78	-65	11	21	40	40	No	No	Y
EL5372	3	4.75	11	250	1	700	-59	-60	-56	7	26	25	60	-V _S	No	Y
EL5375	3	4.75	11	550	1	900	-65	-78	-65	11	21	30	40	No	No	Y

HIGH SPEED OP AMPS

FIXED GAIN OP AMPS



For reliable gain accuracy in driving video loads, exploit the world's fastest and lowest power family of fixed gain op amps, EL5x06/8, which embeds highly accurate gain-setting resistors that simplify the system design process considerably.

EL5308

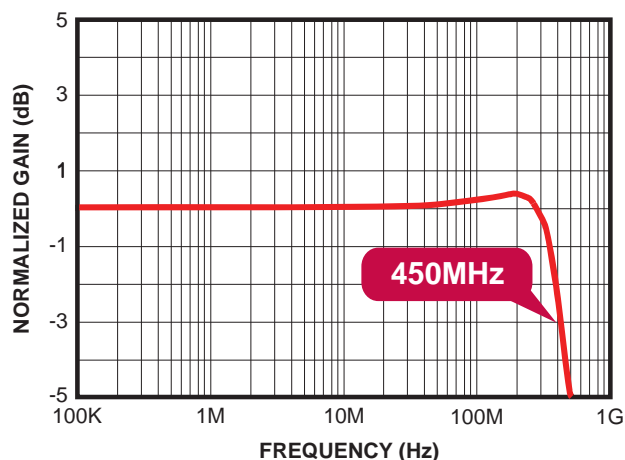
TRIPLE CHANNEL VIDEO LINE DRIVER OFFERS BEST BANDWIDTH-TO-POWER RATIO

On $\pm 5V$ supplies, EL5308's 10.5mA total supply current is only 105mW for three channels of 450MHz line driving.

KEY FEATURES

- **Wide 3dB bandwidth: 450MHz ($A_V = +2$)**
 - Suitable for various high speed systems
- **Very low power consumption: 3.5mA per channel ($V_S = \pm 5V$)**
 - Shutdown feature to $9\mu A$ /channel
- **Fast slew rate: 4,500V/ μs**
 - Allows near-perfect reproduction of pulses (no distortion)
- **Fixed gain: $A_V = -1, +1, +2$**
 - Reduces design time and saves considerable PCB real-estate
- **High gain accuracy: 0.7% ($G = +2V/V$)**
 - No external elements or trims required

WIDE 3dB BANDWIDTH AT $A_V = +2$



APPLICATIONS

- RGB video line drivers
- Professional video routing
- LCD projectors

Fixed Gain Amplifiers

Part Number	# of Channels	V_S Min (V)	V_S Max (V)	SSBW @ A_V Min (MHz)	A_V Min (V/V)	Slew Rate (V/ μs)	2nd Harmonic (dBc)	3rd Harmonic (dBc)	Total Harmonic Distortion (dBc)	I_{CC} Max/Ch (mA)	V_N (nV/ \sqrt{Hz})	V_{OS} Max (mV)	I_O Min (mA)	R-R In	R-R Out	Enable
EL5106	1	5	12	350	1	4500	-70	-54	-54	1.82	2.8	10	60	N	N	Y
EL5108	1	5	12	450	1	4500	-70	-68	-66	4.35	2	8	100	N	N	Y
EL5306	3	5	12	350	1	4500	-70	-54	-54	1.82	2.8	10	60	N	N	Y
EL5308	3	5	12	450	1	4500	-70	-68	-66	4.35	2	8	100	N	N	Y

▶ **START DESIGNING NOW**

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