

### Operational Amplifiers

Mfr.'s Type		Description	VCC (V)	DC Voltage Gain (dB)	Input Offset Voltage Typical (mV)	Input Offset Current Typical (nA)	Common-mode Rejection Ratio (dB)	Unity Gain Bandwidth (MHz)	Slew Rate (V/μs)	No. of Leads
SOIC	PDIP									
NE5534AD	NE5534AN	Single Low Noise	±22	100000	0.5	20.0	100	10.0	13.00	8
NE5534D	NE5534N	Single Low Noise	±22	100000	0.5	20.0	100	10.0	13.00	8
NE5230D	—	Single Low Voltage	1.8 to 15 or ±9	—	0.4	3.0	95	—	0.25	8
SA5230D	—	Single Low Voltage	1.8 to 15 or ±9	—	0.4	3.0	95	—	0.25	8
—	NE5532N	Dual Internally Compensated Low Noise	±22	50000	0.5	10.0	100	10.0	9.00	8
—	NE5532AN	Dual Internally Compensated Low Noise	±22	50000	0.5	10.0	100	10.0	9.00	16
—	NE532N	Dual Low Power	+32 or ±16	100	+2.0	±5.0	70	1.0	0.30	8
—	LM358N	Dual Low Power	+32 or ±16	100	+2.0	±5.0	70	1.0	0.30	8
—	NE5517N	Dual Operational Transconductance Amp	+32 or ±16	—	—	0.4	110	—	50.00	16
LM324D	LM324N	Quad Low Power	+32 or ±16	100	+2.0	±5.0	70	1.0	0.30	14
—	LM324AN	Quad Low Power	+32 or ±16	100	+2.0	±5.0	85	1.0	0.30	14

### Comparators

Mfr.'s Type	Complexity	Max. Input Offset Voltage (mV)	Max. Input Current		Supply Voltage (V)	Response Time (ms)	Voltage Range (V)	Voltage Gain (V/mV)	TTL Fanout	No. of Leads
			Bias (μA)	Offset (μA)						
LM311N	Single	7.5	0.25	0.05	±15 or +5	200	-14.5/+13	200	5	8
LM319N	Dual	10.0	1.20	0.30	±15 or +5	80	±13	40	2	14
LM393AN	Dual	4.0	0.40	0.15	+1 to ±18 or +2 to +36	1300	0 to Vs-2	200	2	8
LM393N	Dual	9.0	0.40	0.15	+1 to ±18 or +2 to +36	1300	0 to Vs-2	200	2	8
LM2903N	Dual	15.0	0.50	0.20	5	1300	0 to Vs-2	100	2	8
NE521N	Dual	15.0	40.00	12.00	-5 or +5	8	±3	—	12	14
LM339AN	Quad	4.0	0.40	0.15	+1 to ±18 or +2 to +36	1300	0 to Vs-2	200	2	14
LM339N	Quad	9.0	0.40	0.15	+1 to ±18 or +2 to +36	1300	0 to Vs-2	200	2	14

### Compandors

Mfr.'s Type		VCC (V)	ICC (mA)	ALC	Reference Voltage	Unity Gain	Power Down	Key Features	No. of Leads
SOIC	PDIP								
NE570D	—	6 to 24	3.2	Both Channels	Fixed 1.8 V	775 mVrms	No	Excellent Unity Gain Tracking Error Excellent Unity Gain Tracking Error	16
—	SA571N	6 to 18	3.2	Both Channels	Fixed 1.8 V	775 mVrms	No		16

### FM IF Systems

#### High Performance Low Power FM IF System

Mfr.'s Type		VCC (V)	ICC (mA)	Max. Input Frequency (MHz)	Max. IF Frequency (MHz)	f <sub>IF</sub> = 45 MHz			RSSI Range (dB)	Fast RSSI	Output Op. Amps	No. of Leads
SOIC	PDIP					Sensitivity Input	Power Gain	Input 3OI				
SA604AD	—	4.5 to 8	3.3 @ 6 V	25	25	0.22 μV	—	—	90	—	—	16
—	SA614AN	4.5 to 8	3.3 @ 6 V	25	25	0.22 μV	—	—	80	—	—	16

### Integrated Mixer Systems

#### Integrated Mixer Systems (Mixer + Oscillator), f<sub>r</sub> = 45 MHz

Mfr.'s Type		VCC (V)	ICC (mA)	Bandwidth		Noise Figure		1 dB Compression (Output)		3rd Order Intercept (Output)		Input Impedance		Output Impedance (Ω)	Power Gain		No. of Leads
SOIC	PDIP			LNA (MHz)	Mixer (GHz)	LNA (dB)	Mixer (dB)	LNA (dBm)	Mixer (dBm)	LNA (dBm)	Mixer (dBm)	LNA (Ω)	Mixer (Ω)		LNA (dB)	Mixer (dB)	
SA602AD	SA602AN	4.5 to 8	2.4	—	500	—	5	—	-10	—	-13	—	1.5 K	1.5 K	—	17	8
—	SA612AN	4.5 to 8	2.4	—	500	—	5	—	-10	—	-13	—	1.5 K	1.5 K	—	17	8

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### Timers

Mfr.'s Type		Description	VCC Max. (V)	Output Voltage (Low) (V)	Output Voltage (High) (V)	I <sub>OUT</sub> Max. (mA)	Output Rise Time (ms)	Output Fall Time (ms)	Oscillator Frequency I <sub>OL</sub> Min. (kHz)	No. of Leads
SOIC	PDIP									
—	NE555N	General Purpose	16	0.1	12.5	—	100	100	500	8
—	NE556N	Dual General Purpose	16	0.1	12.5	—	100	100	500	14
NE558D	NE558N	Quad General Purpose	16	—	—	—	100	100	—	16

### Relay/Peripheral Drivers

Mfr.'s Type		Description	No. of Drivers	Supply Voltage (V)	Input Voltage (V)	Output Voltage (V)	Output Current/Output (mA)	No. of Leads
SOIC	PDIP							
NE5090N	—	Addressable Relay Driver	8	-0.5 to +7	-0.5 to +15	0 to +30	200	16
NE590N	—	Addressable Peripheral Driver	8	-0.5 to +7	-0.5 to +15	0 to +7	300	16