

## NCS20084













# Operational Amplifier, 5.5V Rail-to-Rail Input and Output, 1.2 MHz, Quad

The NCS20081/2/4 operational amplifiers provide rail-to-rail input and output operation, 1.2 MHz bandwidth, and are available in single, dual, and quad configurations. Rail-to-rail operation gives designers use of the entire supply voltage range while taking advantage of the 1.2 MHz bandwidth. The NCS20081/2/4 can operate on supply voltages from 1.8 to 5.5 V over a temperature range from -40 to 125°C. At a 1.8 V supply, this device has a slew rate of 0.4 V/μs while consuming only 42 μA of quiescent current per channel. Since this is a CMOS device, high input impedance and low bias currents make it ideal for interfacing to a wide variety of signal sensors. The NCS20081/2/4 devices are available in a variety of compact packages.

### Product Family:

	<a href="#">NCS20081</a>	<a href="#">NCS20082</a>	<a href="#">NCS20084</a>
Channel	1	2	4
Packages	SOT23-5, SC-70-5	SOIC-8, Micro-8, TSSOP-8	TSSOP-14, SOIC-14

- Rail-to-Rail Input and Output
- Wide Supply Range: 1.8 to 5.5 V
- Wide Bandwidth: 1.2 MHz
- Low Input Offset Voltage: 3.5mV
- Low Supply Current: 42 μA per Channel at VS = 1.8 V
- NCV Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q100 Qualified and PPAP Capable
- These Devices are Pb-Free, Halogen Free/BFR Free and are RoHS Compliant
- Wide Dynamic Range
- Operated with low voltage rails
- Faster slewing and speed
- Low error added at the output
- Low power consumption
- Unity Gain Buffer
- Battery Powered / Low Quiescent Current Applications
- Low Cost Current Sensing
- Automotive
- Unity Gain Buffer
- Low Cost Current Sensing
- Automotive

	Pricing (\$/Unit)	Compliance	Status	Rail to Rail	Channels	V <sub>S</sub> Min (V)	V <sub>S</sub> Max (V)	I <sub>q</sub> Typ (mA)	V <sub>OS</sub> Max (mV)	GBW Typ (MHz)	SR Typ (V/μs)	I <sub>o</sub> Typ (mA)	ΔV <sub>OS</sub> /ΔT (μV/C)	e <sub>N</sub> (nV/√Hz)	I <sub>bias</sub> Typ (pA)	CMRR Typ (dB)	Architecture	Temperature Range (°C)	Package Type
NCS20084DR2G	0.3892	 	Active	Input/Output	4	1.8	5.5	0.042	3.5	1.2	0.4	11	1	30	1	79	CMOS	-40 to 125	SOIC-14
NCS20084DTBR2G	0.4209	 	Active	Input/Output	4	1.8	5.5	0.042	3.5	1.2	0.4	11	1	30	1	79	CMOS	-40 to 125	TSOP-14
NCV20084DR2G	0.8208	   	Active	Input/Output	4	1.8	5.5	0.042	3.5	1.2	0.4	11	1	30	1	79	CMOS	-40 to 125	SOIC-14
NCV20084DTBR2G	0.4589	   	Active	Input/Output	4	1.8	5.5	0.042	3.5	1.2	0.4	11	1	30	1	79	CMOS	-40 to 125	TSOP-14