

TLV272

Operational Amplifier, 3MHz, Low power, CMOS Op-Amp

The TLV/NCV27x operational amplifiers provide rail-to-rail output operation. The output can swing within 320 mV to the positive rail and 50 mV to the negative rail. This rail-to-rail operation enables the user to make optimal use of the entire supply voltage range while taking advantage of 3 MHz bandwidth. The opamp can operate on supply voltage as low as 2.7 V over the temperature range of -40°C to 125°C. The high bandwidth provides a slew rate of 2.4 V/ s while only consuming 550 A of quiescent current. Likewise the opamp can run on a supply voltage as high as 16 V (single) and 36 V (dual quad) making it ideal for a broad range of battery-operated applications. Since this is a CMOS device it has high input impedance and low bias currents making it ideal for interfacing to a wide variety of signal sensors. In addition it comes in a variety of compact packages with different pinout styles allowing for use in high-density PCB's

Product Family:

| | TLV271 | TLV272 | TLV274 |
|----------|------------------------|------------------------|------------------------|
| Channel | 1 | 2 | 4 |
| Packages | SOT23-5 | SOIC-8, Micro-8 | TSSOP-14, SOIC-14 |

- Rail to Rail Output
- Wide Bandwidth: 3 MHz
- Low Supply Current: 416 μ A
- Wide Power Supply Range: 2.7 to 36V
- Optimized SNR
- Enhanced Loop Gain
- Low Power Consumption
- Signal Conditioning
- Current Sensing
- Automotive
- Power Supplies
- Portable Instruments
- Notebook Computers

| | Pricing (\$/Unit) | Compliance | Status | Rail to Rail | Channels | V _s Min (V) | V _s Max (V) | I _q Typ (mA) | V _{os} Max (mV) | GBW Typ (MHz) | SR Typ (V/ μ s) | I _o Typ (mA) | $\Delta V_{os}/\Delta T$ (μ V/ $^{\circ}$ C) | e _N (nV/ \sqrt Hz) | I _{bias} Typ (μ A) | CMRR Typ (dB) | Architecture | Temperature Range ($^{\circ}$ C) | Package Type |
|-------------|-------------------|------------|--------|--------------|----------|------------------------|------------------------|-------------------------|--------------------------|---------------|---------------------|-------------------------|---|---------------------------------|----------------------------------|---------------|--------------|-----------------------------------|--------------|
| NCV272DMR2G | 0.2824 | | Active | Output | 2 | 2.7 | 36 | 0.416 | 3 | 3 | 2.6 | 65 | 2 | 20 | 5 | 110 | CMOS | -40 to 125 | Micro8 |
| NCV272DR2G | 0.23 | | Active | Output | 2 | 2.7 | 36 | 0.416 | 3 | 3 | 2.6 | 65 | 2 | 20 | 5 | 110 | CMOS | -40 to 125 | SOIC-8 |
| TLV272DMR2G | 0.3037 | | Active | Output | 2 | 2.7 | 36 | 0.416 | 3 | 3 | 2.6 | 65 | 2 | 20 | 5 | 110 | CMOS | -40 to 125 | Micro8 |
| TLV272DR2G | 0.3867 | | Active | Output | 2 | 2.7 | 36 | 0.416 | 3 | 3 | 2.6 | 65 | 2 | 20 | 5 | 110 | CMOS | -40 to 125 | SOIC-8 |