



PRELIMINARY

Precision CMOS Single Operational Amplifier

■ **DESCRIPTION**

The AA6081 is a precision low offset voltage operational amplifier, capable of single supply operation. Performance characteristics include ultra low input bias current, high voltage gain, rail-to-rail output swing, and an input common mode voltage range that includes ground. These features, plus its low offset voltage, make the AA6081 ideally suitable for precision circuit applications. The IC is available in **8-pin TSSOP (AA6081A)** and **8-pin SOP (AA6081S)** package. For a dual operational amplifier with similar features, see the AA6082 respectively.

■ **FEATURES**

- 1. **Low offset voltage: 150 μ V**
- 2. **Operates from 4.5V to 15V single supply**
- 3. **Ultra low input bias current: 10fA**
- 4. **Output swing to within 20mV of supply tail, 100k load**
- 5. **Input common-mode range includes V-**
- 6. **High voltage gain: 130 dB**
- 7. **Improved latch up immunity**

■ **APPLICATION**

- **Instrumentation amplifier**
- **Photodiode and infrared detector preamplifier**
- **Transducer amplifiers**
- **Medical instrumentation**
- **D/A converter**
- **Charge amplifier for piezoelectric transducers**

■ **AA6081 BLOCK DIAGRAM**

