TSZ series
ultra precision amplifiers

When the highest precision matters

The TSZ amplifier series offers low-power, zero-drift operational amplifiers in space-saving packages. They use chopper-stabilized architecture that provides very low offset voltages (8 µV max over the full operating temperature range) and near-zero drift. These miniature, ultra-precision and low quiescent current amplifiers offer high-impedance inputs that have a common-mode range 100 mV beyond the rails and rail-to-rail output that swings within 50 mV of the rails. TSZ amplifiers are optimized for low-voltage operation with single or dual supplies as low as +1.8 V (±0.9 V) up to +5.5 V (±2.75 V). The chopper architecture rejects the high 1/f noise typically found in CMOS input op amps, making it suited for a wide variety of low-frequency measurement applications.

FEATURES
- Offset: (TSZ12x) +/- 1 µV typ +/- 8 µV worst case
- Offset drift: (TSZ12x) 10 nV/°C typ 30 nV/°C max
- 400 kHz GBW (TSZ12x)
- 3 MHz GBW (TSZ18x)
- Operating range: 1.8 to 5.5 V
- Temperature range: -40 to 125 ºC
- Rail-to-rail input and output
- ESD: 4kV HBM
- Qualified for automotive applications
- Available in tiny packages:
  - SOT23 and SC70, DFN6 1,2x1,3 for single
  - MiniSO8, SO8, DFN8 2x2 for dual
  - QFN16 3x3, TSSOP14 for quad

APPLICATIONS
- Portable instrumentation
- Battery-powered devices
- Sensor interfaces
- Medical instrumentation
- Electronic scales
- Temperature measurement
- Automotive current measurement

LONGEVITY
10 YEARS COMMITMENT
HIGH-PRECISION AMPLIFIER PORTFOLIO

Gain bandwidth product

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* New: 5 V, 16 V, 36 V

Evaluation board for SOT23 and SC70 available at www.st.com

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