Intersil Debuts New Family of High-Performance, Low Power, 40V Precision Operational Amplifiers

Intersil Corporation (NASDAQ Global Select: ISIL), a world leader in the design and manufacture of high-performance analog and mixed-signal semiconductors, has introduced the ISL28117 and ISL28217, the latest members of its rapidly growing bipolar low-power precision operational amplifier series.

These new products feature an ideal combination of low noise and low power coupled with low offset voltage, low bias current drift and minimal offset drift over temperature. The products are ideal for applications that require reduced power consumption, high DC accuracy and AC performance needed to condition a wide range of precision analog signals.

The single ISL28117 and dual ISL28217 are capable of reducing signal conditioning error when compared with competing solutions. This is achieved through a combination of lower noise, lower offset voltage, lower bias current and higher gain accuracy. These amplifiers enable high gain processing of wide common-mode voltage signals with much better accuracy than competing solutions.

Applications are broad and include medical instruments, precision active filters, power supply control, programmable logic controllers and digital oscilloscopes.

Key Technical Specifications
The ISL28117 and ISL28217 offer industry-leading specifications including:

• Low Input Offset . . . . . ±50microV, Max.
• Superb Offset TC . . . . . 0.6microV/degree Celsius, Max.
• Input Bias Current . . . . . .±1nA, Max.
• Input Bias Current TC . . . . . ±5 picoA/degree Celsius Max.
• Low Current Consumption . . . . . .440 microA
• Voltage Noise. . . . . .250 nanoV peak-to-peak noise
• Wide Supply Range. . . . . 2.25V to 20V

The ISL28117 and ISL28217 feature a wide operating temperature range of -40 to 125 degrees Celsius. The combination of low noise and low power meet the requirements for signal gain front ends in industrial control applications, while reducing overall power consumption for high signal-count designs. The wide supply voltage range of +/- 2.25V to +/-20V enables more flexibility for wide common-mode range applications. Full-trench isolation process technology prevents latch-up, while high ESD ratings of 4.5kV (human body model) and 500V (machine model) are designed to prevent in-field failures for industrial applications such as data acquisition and process control.

Pricing and Availability
The ISL28117 single amplifiers are available in 8-lead SOIC at $0.95 (B-grade) and $0.78 (C-grade) in 1,000-piece quantities. The ISL28217 dual amplifiers are available now in 8-lead SOIC packages at $1.48 (C-grade) and $1.89 (B-grade) each in 1,000-piece quantities.

For more information please visit:
http://www.intersil.com/products/deviceinfo.asp?pn=ISL28117 [1]

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