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### Facts about Intersil Space Parts

Intersil offers a broad range of radiation hardened and Single-Event Effects (SEE) hardened IC products for RH and space applications.

- Over 300 space-qualified radiation hardened products available.
- Consistent design and manufacturing in Intersil's MIL-PRF-38535-qualified facility located in Palm Bay, Florida.
- Intersil is one of only 11 RHA Defense Logistics Agency (Land and Maritime) QML suppliers.
- All products are fully Class V (space level) compliant.
- All products are on individual DLA SMD drawings.

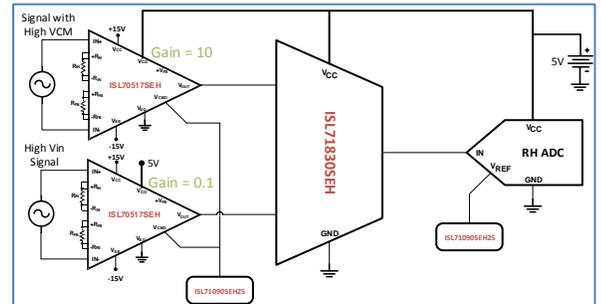
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## New RadHard ISL70517SEH 36V Precision Instrumentation Amplifier Rail-to-Rail Output ADC Driver

The **ISL70517SEH** is a high performance, differential input, single-ended output instrumentation amplifier designed for precision analog-to-digital applications. It can operate over a supply range of 8V ( $\pm 4V$ ) to 36V ( $\pm 18V$ ) and features a differential input voltage range up to  $\pm 30V$ . The output stage has rail-to-rail output drive capability optimized for ADC driver applications. The output stage is powered by separate supplies. This feature enables the output to be driven by the same low voltage supplies powering the ADC, thereby providing protection from high voltage signals and the low voltage digital circuits. Its versatility makes it suitable for a variety of general purpose applications. Additional features not found in other instrumentation amplifiers enable high levels of DC precision and excellent AC performance.



The gain of the **ISL70517SEH** can be programmed from 0.1 to 10,000 via two external resistors, RIN and RFB. The gain accuracy is determined by the matching of RIN and RFB. The gain resistors have Kelvin sensing, which removes gain error due to PC trace resistance. The input and output stages have individual power supply pins, which enable input signals riding on a high common-mode voltage to be level shifted to a low voltage device, such as an A/D converter. The rail-to-rail output stage can be powered from the same supplies as the ADC, which preserves the ADC maximum input dynamic range and eliminates ADC input overdrive.

The **ISL70517SEH** is offered in a 24 Ld ceramic flatpack package with an operating temperature range of  $-55^{\circ}C$  to  $+125^{\circ}C$ .

### Applications:

- ADC driver
- Precision test and measurement
- High voltage process control
- Signal conditioning for remote powered sensors

