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2011 Awards

NVE received several prestigious awards and accolades in 2011:

- **Top 20 Small Public Companies in America** according to *Forbes*
- **Fastest Growing Public Companies in Minnesota** according to the *Minneapolis/St. Paul Business Journal*
- **Top 100 Largest Minnesota-Based Public Companies** according to the *Star Tribune*

[<Awards & Accolades>](#)

New Year Holiday

NVE will be closed for business Monday, January 2, 2012.



We wish customers a successful 2012.

Background Music

NVE's current telephone background music is the theme from the 1960s television show "I Spy."

The music underlines the importance of isolating SPI (pronounced "spy") interfaces.

New Distributor

Gochen Technology Co., Ltd. was recently appointed a franchised distributor for NVE sensors in China. Gochen has been an IsoLoop isolator distributor for some time.



NVE products are available in more than 75 countries and our distributors speak countless languages, including Chinese.

[<Sensor Distributor Network>](#)

New Year's Application Corner

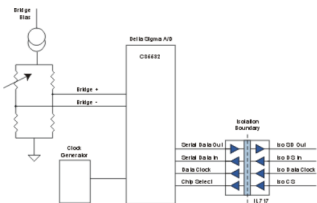
Analog-to-Digital Converter Resolution

If you have a New Year's resolution to get better ADC resolution (and who doesn't), we have a solution.

A high-resolution ADC can be done in by ground loops between analog and digital sections.

But isolating the Serial Peripheral Interface Bus (SPI) improves resolution by eliminating ground loops and reducing noise. This increases Signal-to-Noise Ratio plus Distortion (SINAD) and therefore Effective Number of Bits (ENOB).

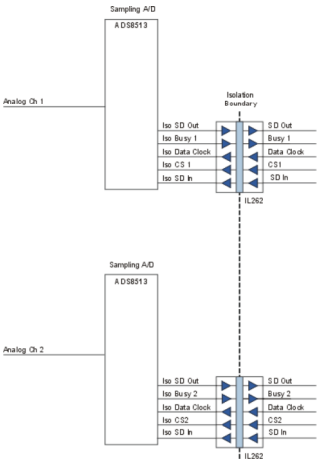
Here's an illustration of single-channel isolated delta-sigma ADC using an IL717:



Isolated Delta-Sigma ADC

The IL717 isolates the SPI control bus from the microcontroller, and the system clock is on the isolated side of the system.

Multichannel systems can be isolated with five-channel isolators (the IL200-Series):



Isolated Multi-Channel ADC

In addition to the SPI, the IL262 also isolates the ADC-busy lines for efficient interrupt-driven sampling.

This [technical video](#) has more practical circuits to improve SPI resolution:

Video: Improving SPI Resolution

For more information, visit the [ADC/DAC Application Center](#).

NVE Expansion Update

Production will begin soon in a new cleanroom bay at NVE.

The expansion allows NVE to increase the capacity of its award-winning products.