

## Analog-to-Digital Converters

**DATE/TIME:** November 19, 2001, 9 a.m. PDT/11 a.m. CDT/12 p.m. EDT/17:00 GMT

**LENGTH:** Approximately 1 hour

**REGISTRATION:** <http://www.national.com/see/adcseminar>

### OVERVIEW:

Many of us consider Analog-to-Digital Converters (ADCs) to be mystery components. We do not understand them and may even dread using them. Yet, we may feel quite comfortable using analog components and digital components. ADCs combine both analog and digital elements, but they need not be mysterious.

In this presentation we will briefly discuss the use of the ADCs, review common ADC specifications, discuss the sources of noise and distortion in ADC circuits and how to avoid them, common application errors when using ADCs, proper evaluation of ADCs, and the use of ADCs outside of their specified conditions.

After this seminar you should know the basic operation of the ADC and be able to successfully use them in your circuit designs.

Topics to be covered in this seminar include:

- ABC's of ADCs
- Review Definitions of Applicable ADC Specifications
- Some Sources of Distortion & Noise in ADC circuits
- Common Design Mistakes with ADCs
- Evaluation of ADCs
- ADC Sample Rate vs. Circuit Needs
- High Speed ADCs @ National

### WHO SHOULD ATTEND?

Designers and Layout Specialists interested in High Speed ADCs, or anyone interested in A/D's

### PRESENTERS:

Nicholas "Nick" Gray: Staff Applications Engineer with National's Data Conversion Products Group in Santa Clara, where he has been employed for the past 10 years. He is currently working on the development of new products in the area of high speed/high resolution Analog-to-Digital Converters.

A writer of many technical articles that have appeared in electronics trade journals on three continents, Nick's career includes video circuit design and 19 years as an applications engineer for data conversion products. He has become an excellent, well-known presenter of technical seminars.

Nick holds a BSEE degree from Gonzaga University, Spokane, Washington, (1965) and has done graduate work at California State University, San Jose.

### SYSTEM REQUIREMENTS:

- Internet Explorer 4.0 (or higher) or Netscape Communicator 4.0 (or higher)
- MS Windows 3.1, 9x or NT
- Audio capabilities: sound card + speakers + RealPlayer 8.0 (recommended)

### QUESTIONS or PROBLEMS:

- TechOnLine Webcast Technical Support at (877) 472-7882, or
- send e-mail to <mailto:webcast@techonline.com?subject=NSC>