This month we are highlighting our Phased Array systems as well as providing a brief report from the ISTU Conference.



# **April 2011 Newsletter**

### Greetings

This month we are highlighting our Phased Array systems. You will also find a brief article about the ISTU Conference as well as some new details regarding the IEEE, Ultrasound Industry Association 2011 show.

## **Phased Array**

E&I has designed several <u>Phased Array systems</u>, from as few as 2 channels up to 61 channels. These are used in a variety of applications from 3D imaging to research in drug delivery. Some of the systems have incorporated gain control of the individual channels. One of the problems with using a simple PIN diode to control the power is that there is a large phase change with attenuation of a PIN diode. We have developed circuitry that allowed us to vary the output power of each channel with minimal change to the phase. With one application we produced an 8-channel system that was capable of 90 Watts per channel. In addition, this application was also customer configurable to be used as a single channel 700-Watt system.

Below are some of our products:

## **Issue 8**



## Change of Venue

Due to the devastating earthquake Japan suffered, the IEEE has decided to move the venue from it's original destination of Kobe, Japan to the USA. The conference will now take place in Orlando, Florida at the Caribe Royale on October 18th - 21st. For more details, <u>read the full report</u> here.



### What's Next..

E&I wil be traveling to Glasgow, Scotland next month to exhibit at the 40th Annual UIA (Ultrasonics Industry Association) Symposium. The show takes place at the Wolfson Medical School, University of Glasgow



If you have an application that you are working on, <u>contact us</u> to see how we can help.

## ISTU 2011 Report

E&I traveled to New York City this month to exhibit at the ISTU Conference, (International Society for Therapeutic Ultrasound) The show covered a broad range of topics such as Brain Drug Delivery, Cavitation Studies, Clinical Studies, Transducers & Devices, Tumor Delivery & Treatment, and Gene & Cell Therapy.



Above is a photo of one of the poster sessions from the conference, presented by Jin Xu et al, from the University of Iowa. They have used an <u>E&I A300 amplifier</u> in their research. The research demonstrated how ultrasound can be effective in killing bacteria that tends to colonize around medical implants. This is leading the way to a noninvasive treatment.

Check out the pictures from the conference on Flickr.

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on May 23rd - 25th, 2011. For more details regarding this event, <u>click here</u>.

## Feedback

If there is a specific topic that you would like addressed, please let us know. Any questions or comments can be sent directly to <u>Jen Elkins</u>.



#### **RF POWER AMPLIFIERS**