

# Texas Instruments

## Analog Design Contest 2012



Bring ideas to life...and get noticed

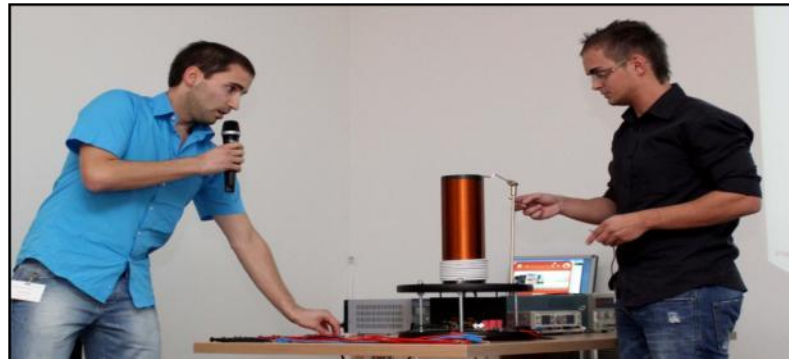


Alexander Hoch, University of Freiburg, Germany.

Presenting: Sensor Actuator System for use in a wireless installation bus with an application example

# What is the Analog Design Contest?

- An enabler to encourage system-level design within Universities.
- A chance for students to use TI's broad range of high-performance analog IC's, and TI processors, to win a cash prize.
- Teams consisting of a minimum of **2 - 5 students can participate.**
- Projects can use *either* three different analog ICs *or* two analog ICs and a TI Processor (DSP, OMAP, MCU, Stellaris or Sitara)



Christoph Unterrieder and Dominik Egarer,  
Klagenfurt University, Austria.  
Presenting: MPOT – Music Playing over Tesla



# What can teams win?

## First Round:

- Each design report will be judged by at least two Tiers.
- The top twenty teams will win: **\$1,000**



Jean-François Fau (TI EMEA President) presenting to 1st place Engibous Prize Winners: (From left to right) Prof. Steffen Leonhardt (Advising Professor), Daniel Teichmann, Jerome Foussier and Jing Jia RWTH Aachen, Germany

## Engibous Prize:

- The Engibous Prize will be awarded:

1<sup>st</sup>: **\$10,000**

2<sup>nd</sup>: **\$5,000**

3<sup>rd</sup> : **\$2,500**

4<sup>th</sup>: **\$2,500**

**Top twenty teams are then entered into the**  
European Engibous Prize For Innovation In Analog

# Why Enter?

- Make your Student Project really worthwhile!
- Be creative! Demonstrate your ideas
- Hands-on experience with key technologies
- Practice your Design & Analog skills
- Keep the tools you use!
- Compete for real CASH prizes!!
- Enjoy productive teamwork
- Make your University famous!
- Build your career reputation



Urban Medič, University of Ljubljana, Slovenia.  
Presenting: Interference Free Optical Pickup

# The steps to take

## Step 1: Select your team - Agree a project – Register!

- You select the project but **designs must incorporate three different Texas Instruments integrated circuits (“ICs”)**
  - Download the registration form: [www.ti.com/adc](http://www.ti.com/adc)

The screenshot shows the Texas Instruments website with the following elements:

- Header:** TEXAS INSTRUMENTS logo, navigation links (Products, Applications, Design Support, Sample & Buy), and search bars.
- Breadcrumbs:** TI Home > European University Program Home > Analog Design Contest > How To Enter
- Page Title:** European University Program
- Left Sidebar:** A menu with links: Home, Who Are We, Online Registration, Download Brochures, Download & Request Teaching ROMs, Picture Library, Excellence in Signal Processing Award (ESPA) (Nomination Form, Hall of Fame), and Analog Design Contest (How To Enter, Previous Winners).
- Main Content:** A section titled "How To Enter" with a tree graphic. Below it, "Step 1: Select Your Team and Project" is detailed, stating that teams must have 2-5 members aged 18+, with a team leader. It lists key skills: Organisation, Analog Knowledge, Programming Knowledge, and Confidential Report Writing.
- Right Sidebar:** A "Useful Documents" section with links to Rules, Step by Step Flow Chart, Registration Form, Pre-Stocked Tools, Ordering Samples and Tools, Judging Criteria, Design Report Guidelines, and Frequently Asked Questions (FAQ).

- Send completed forms to: [adceurope@list.ti.com](mailto:adceurope@list.ti.com)
- **Registration Deadline: FEBRUARY 28<sup>th</sup>**

# Choosing chips

Chips can be selected from the following categories:

<b>Analog</b>		<b>Processors</b>
<u>Amplifier (Audio, Op-Amps)</u>	<u>Power management</u>	<u>MCU</u> MSP430, C2000, Stellaris (ARM Cortex M3)
<u>Clocks and Timers</u>	<u>Low-Power RF,</u>	
<u>Comparators</u>	<u>Switches</u>	<u>DSP</u> C5000, C6000, OMAP, Sitara (ARM Cortex A8/9)
<u>Data converters</u>	<u>Temperature sensors</u>	
<u>Interface</u>		

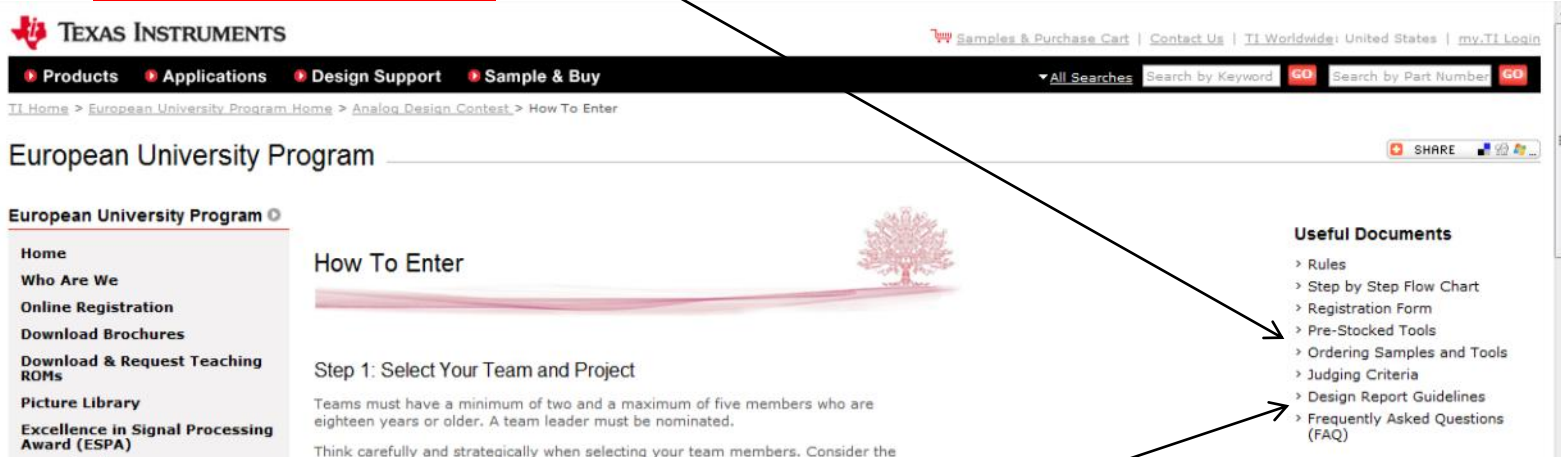
You **must** choose 3 chips of which a minimum of 2 must come from the analog section.

# The next steps...

## Step 2: Request Tools and IC's – April 26<sup>th</sup>

- Request up to \$100 worth of tools free of charge
- See how to order tools and pre-stocked tools at:

[www.ti.com/adc](http://www.ti.com/adc)



The screenshot shows the Texas Instruments website for the European University Program. The page title is 'European University Program'. The main content area is titled 'How To Enter' and features a tree graphic. Below the graphic, it says 'Step 1: Select Your Team and Project' and provides instructions: 'Teams must have a minimum of two and a maximum of five members who are eighteen years or older. A team leader must be nominated. Think carefully and strategically when selecting your team members. Consider the'. On the right side, there is a 'Useful Documents' sidebar with links to: Rules, Step by Step Flow Chart, Registration Form, Pre-Stocked Tools, Ordering Samples and Tools, Judging Criteria, Design Report Guidelines, and Frequently Asked Questions (FAQ). The top navigation bar includes 'Products', 'Applications', 'Design Support', and 'Sample & Buy'. There are also search bars for 'Search by Keyword' and 'Search by Part Number'.

## Step 3: Submission of project report – July 31<sup>st</sup>

- Provide a written description of the project, its objectives and results
- See our design report guidance at:

[www.ti.com/adc](http://www.ti.com/adc)

# The next steps cont..

## Step 4: The judging process

- **Stage one**
  - Each report judged exclusively by 2 TI'ers
- **Engibus prize, Judges:**
  - An industry professional
  - An eminent professor from a non-participating University
  - A prominent member of TI's Technical Staff



2011 Engibus Prize winners with Texas Instruments EMEA President Jean-François Fau and European University Program Team.

# The Timeline

**What?**

**When?**

**Who?**

Teams submit entry form	28th February	Teams
Teams order EVMs	26th April	Teams
Teams submit project report	31st July	Teams
Judging period	August - September	Judges
First Stage winners announced	30th September	TI European University Program
Engibous Prize winners announced	31st October	TI European University Program
Engibous Prize Giving Event at Texas Instruments, Germany	November	Teams, Professor, TI Freising

# Useful Links

- The Official Website – [www.ti.com/adc](http://www.ti.com/adc)
- The European University Program – [www.ti.com/EUP](http://www.ti.com/EUP)
- [Analog eLAB](#)
- [Online processor selector](#)
- [Chip sample service](#)
- Any Questions – [adceurope@list.ti.com](mailto:adceurope@list.ti.com)