

Analog Design Contest

Frequently Asked Questions



Analog Design Contest

Bring ideas to life and get noticed



Deadlines and Registration

What are the competition deadlines?

- Registration: **February 28th** at 6:00pm (CET).
- Tool and IC Requests: **April 26th** at 6:00pm (CET)
- Project Report Submission: **July 31st** at 6:00pm (CET)

What are the stages of the competition?

- Step 1: Select Your Team, Team Leader and Project
- Step 2: Submit the Entry Form
- Step 3: Request Tools and ICs
- Step 4: Complete Your Project
- Step 5: Submit a Design Report

What are the rules for the Analog Design Competition?

- The full legal definition of the contest rules and judging criteria can be found under the Analog Design Contest section at: www.ti.com/EUP

How do we register?

- The team leader (on behalf of the team) must submit the entry form.
- Entry forms can be downloaded from the Analog Design Contest Website www.ti.com/EUP
- Entry forms must be emailed to: adceurope@list.ti.com by **28th February**.

Who can enter?

- Registered Engineering or Technology students (Undergraduate and PhD students) 18 years or older in the countries listed on the ADC website: www.ti.com/adc
- All team members must be students must be studying at the **SAME** University.

Who is the team leader?

- We ask for a Team Leader to coordinate communications with TI and to receive and distribute any cash prizes that are due.
- The students choose a Team Leader from their team.
- The team leader is a member of the team (student), not the advising Professor.

Sample Devices and Development Tools

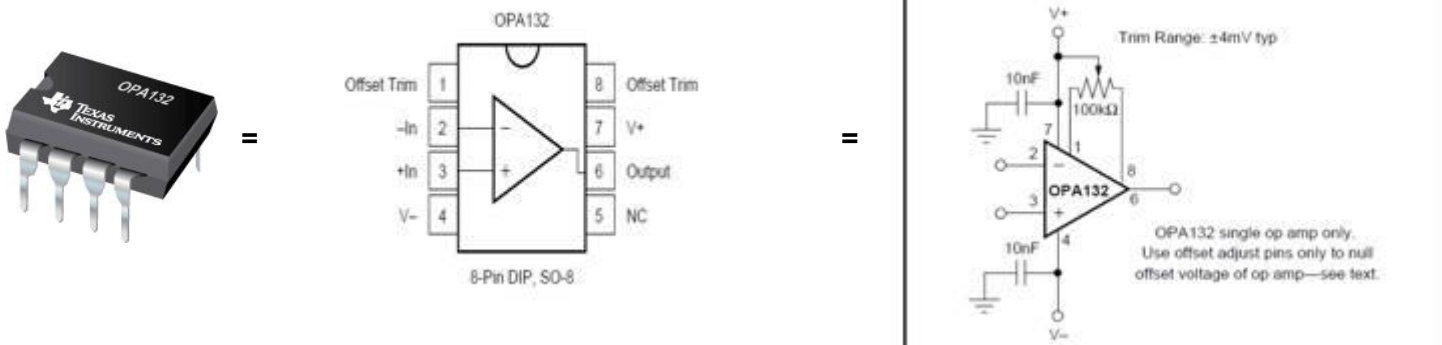
What sample devices and development tools can be used?

- Designs must incorporate **minimum three** different Texas Instruments integrated circuits (“ICs”): either 3 analog ICs, **or** 2 analog ICs and a TI processor.
- If you choose a TI processor, you can choose from:
 - MSP430
 - OMAP
 - Stellaris
 - DSP
 - Sitara
 - C2000
- Analog ICs can be chosen from the following categories:
 - Amplifiers
 - Clocks and Timers
 - Comparators
 - Data Converters
 - Interface devices
 - Power Management devices
 - RF devices
 - Switches
 - Temperature sensors
- Examples include:
 - 1 x ez430-RF2500, 1 x TPS7201 and 1x TLC251
 - 1x TPS61175, 1x OPA132 and 1x BQ24103A
 - 1x TL494CN, 1x UCC37322P and 1x UCC37321P
 - 1x MSP430F2013, 1x BQ24105 and 1x TMP123
- Other ICs may be incorporated into the design, but only those ICs in the categories above will be counted toward the IC requirement during assessment.
- If you use an EVM, such as a DSP or an MCU development board, this board counts as ONE chip towards your design (example: the C5505 eZDsp board counts as the processor chip in your design).

What’s an Analog IC?

IC refers to Integrated Circuit. Analog ICs are used to design amplifiers, oscillators, active filters, etc.

For example, the operational amplifier “OPA132” is an Analog integrated circuit with the integrated design below:



What is the amount given for tools?

- The amount for tools is \$100.
- BEFORE you submit your request, please ensure that the cost of your tools is no more than this \$100 limit (based on TI's web-published prices).

How do we order our samples and development tools?

- The process for getting free samples from TI is different from the process for getting free evaluation modules.
- The reason for the difference is that we typically provide free samples of ICs, but we do not usually give out evaluation modules for free.
- Development tools are donated directly from TI using the University Program, and the Sample Service should be used for chips.
- All teams MUST read the '**How to order samples and tools**' guidance document available to download from the Analog Design Contest section on: www.ti.com/EUP
- The guidance provides teams with a step by step guide of the different processes to order samples and development tools. Please note: Tools and EVM's are not loaned to teams.

Should all tools and chips be ordered through TI or can we use a distributor too?

- We do not give the budget of \$100 in cash.
- This budget covers **only TI products**: they must have a TI Part Number and be listed on TI's website.
- Third Party boards using a TI chip (such as the Beagle Board with the OMAP3530 chip, or an Olimex board with an MSP430) would count towards the three chips target for each project, but are NOT covered by \$100 - Teams would need to fund these boards themselves.

Are we supposed to order all items together, or can we order them in two rounds?

- Teams should make **ONLY** one order for tools.
- The best way to be sure you get your first choice is to make your requests in one order and as soon as possible.
- Check and use as appropriate the '**Recommended Tools List**' found on the ADC Website. We have pre-stocked these items to be ready for immediate shipment.

Non- EU Participants

Will there be any import charges?

TI ships tools from its European (EU) Warehouse. This means that for Non- EU Participants, shipments of tools could be subject to local import duties (such as VAT) and customs clearance charges on arrival in your country. These charges are your responsibility.

They will not be paid by TI under any circumstances!

What can we do to avoid these import charges?

In order to avoid such charges we recommend the following:

- Use your Professor and your University as the shipping address, rather than your home or lodging address.
- Combine several team requests together and have them shipped to your Professor in one shipment.
- Purchasing the tools you need from a Local Distributor in your country may be easier for some items, and avoids all Import charges.

Help and Guidance

Who do we talk to for help and support?

- Should you require any help or support during your project, you have the following routes:
 1. [TI E2E™ Community](#): you can view videos, read blogs, or access our Technical Support Forums.
 2. Have a discussion with your advising professor

Design Report Submission

Is there a page limit?

- All design reports are limited to **10 pages maximum** (including title page)
- Additional pages and appendices may be included, but will not be judged

How do we submit our design reports?

- All teams **MUST** read the ‘**Report Submission Guidelines**’ document available to download from the ADC Website at: www.ti.com/EUP
- Design reports must follow the report template available from the ADC website.
- Design reports must be submitted by the team leader to: adceurope@list.ti.com
- The deadline for design report submission is: **301st July**.
- Accepted File Formats are:
 - **.docx** (Word Document)
 - **.doc** (Word 97-2003)
 - **.pdf** (PDF)
 - **Maximum of 10MB**

Judging

What are the judging stages?

The contest involves two rounds of judging:

- **Round 1:** Each design report will be judged exclusively by at least two competent Tiers. There will be twenty winning teams.
- **Round 2:** The top twenty winning teams from ‘Round 1’ will automatically proceed to the second level of judging. These top twenty teams will compete against each other to win the “Engibus Prize For Innovation In Analog” (Engibus Prize).

What are the judging criteria?

- The full '**Judging Criteria**' can be downloaded from the ADC website at: www.ti.com/EUP
- The same assessment will be used in both rounds of the competition.
- Each criterion is worth 10 points maximum. With 10 points being exceptional, 5 points being average and 0 being no competence.
- The six judging criteria are:
 - **Idea/Concept/Originality**
 - **Engineering**
 - **Analog**
 - **Benefits of chosen TI tools/devices**
 - **Practicality**
 - **Report Quality**

Who are the judges?

- **Round 1:** Each design report will be judged exclusively by at least two competent Tlers.
- **Round 2:** The top twenty entries from round 1 will be judged by three individuals:
 - Eminent Analog Tler
 - University Professor
 - Industry Professional

When are we notified?

- First round winners will be notified by September 30th.
- The winners of the Engibous Prize will be notified by October 31st. A list of winners will be posted on the ADC Website and communicated to the Team leader via email.

What do successful teams win?

- First round winners will be awarded a cash prize of **US\$ 1,000**
- The Engibous Prize will be awarded as follows:
 - First place: **US\$ 10,000**
 - Second place: **US\$ 5,000**
 - Third place: **US\$ 2,500**
 - Fourth place: **US\$ 2,500**

How are the winners paid?

- All cash prizes are paid to the team leader of a winning team.
- If your team is selected as a winner in either the first round or the Engibous prize we will need the full banking details of the Team Leader in order for us to complete payments

Will there be a Prize giving event?

- Once judging for the Engibous Prize is complete there will be a prize giving event held at Texas Instruments Deutschland (TID), Freising, Germany. This will probably be during November.

- Team members and advising professor will be invited to TID to meet members of the TI technical community, present their projects and receive their prizes.
- The teams will present their projects within the specified time. Their presentation will not influence the final result.