

We invite you to develop solutions that will have a real-world impact based on Intel's Edge-centric FPGAs.

Enter the Design Contest today!

Team projects will focus on the sustainability theme and deliver benefits to environmental issues such as water conservation, optimizing energy usage, limiting waste, and making intelligent use of the planet's resources.

If this seems interesting to you, and maybe you've got a great idea, go to www.InnovateFPGA.com now to enter the competition.



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Contest Theme: Connecting the Edge for a Sustainable Future

Our world is facing challenges unlike any we have seen before. We are in the era of distributed intelligence, where computing is pervasive. With all these connected devices and the resulting increase in data, there will be global implications to energy and resource use, as well environmental impact.

The InnovateFPGA design contest was developed to inspire engineers to design, create, and innovate with FPGAs. This edition of the design contest will invite teams to develop solutions that will have a real-world environmental impact.

Intel is raising the bar for itself and evolving its corporate responsibility strategy to increase the scale of our work with others. We are creating a more responsible, inclusive, and sustainable world, enabled through technology and our collective actions. Today, we are applying our resources to deliver on our bold goals. And we're not doing it alone; Microsoft and Analog Devices have joined forces with Intel and Terasic to create a complete contest platform that can connect sensors and other devices via the flexibility of an Intel® Cyclone® V SoC FPGA to Microsoft Azure IoT and AI services.

Teams from across the world will compete for a spot in the Grand Final, where they will be able to demonstrate their creativity with ingenious solutions to some of the world's most challenging problems. This contest is an opportunity for Intel, Microsoft, Analog Devices and Terasic to invest in the design community from students in University, to makers, and professional engineers. Each team chosen will receive a no-cost development kit and design tools to help them showcase their creativity and ingenuity.

- Register your team and submit your project ideas by October 1st, 2021 to claim your free development kit from Intel, Microsoft, and Analog Devices.
- Cash prizes will be awarded to the regional and grand final contest winners.
- Winners of the Regional Finals (March 2022) will have their travel, meals, and lodging expenses paid to attend the Grand Final event on June 23, 2022 in San Jose, California.



AHEAD OF WHAT'S POSSIBLE™





ADI and Intel share a vision for how technology can enrich the lives of every person on the planet, and we're proud to support the engineers of the future via InnovateFPGA.

- Anelise Sacks, Senior VP, Chief Customer Officer of Analog Devices.

Imagining a Sustainable Future

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positioned to collect and relay critical data to municipalities, emergency response services, and auto manufacturers, edge-enabled vehicles will offer higher reliability without crippling network infrastructures.

Transportation: Having a connected public mass transit system can significantly reduce wait time and accelerate city-wide travel. Some examples of improved public bus services: fleet tracking, fare collection, live video monitoring, vehicle telematics, video analytics and facial recognition.

Other (reducing energy consumption): Moving computing to the edge could help optimize energy usage by reducing the amount of data traversing the network. By running the applications at the user edge, data can be stored and processed close to the end user and their devices instead of relying on centralized data centers that are often hundreds of miles away. This will lead to lower latency for the end user and could lead to a significant reduction in energy consumption.

Marine related: Ocean health is key to worldwide ecosystems. There is a huge need for sustainable marine use, including solutions to monitor waterways and marine life, enable remote diagnostics, decrease cost of equipment, enforce environmental regulations, etc.

Check out this real-world solution using Intel products, including Intel® FPGAs:

- [Using Artificial Intelligence to Save Coral Reefs](#)

To read more about corporate responsibility programs and initiatives for these companies, check out these links:

Intel corporate responsibility details:

<https://www.intel.com/content/www/us/en/corporate-responsibility/corporate-responsibility.html>

Microsoft corporate responsibility details:

<https://www.microsoft.com/en-us/corporate-responsibility>

Analog Devices corporate responsibility details:

<https://www.analog.com/en/company/corporate-social-responsibility/our-impact.html>



Terasic is dedicated in providing engineers of the future the opportunities to share their visions and innovations and demonstrate their FPGA development skills on an international stage.

Continued from the success we had with previous InnovateAsia design contests, where we see many innovative inventions, there should be no doubt that we will see more brilliant works from 2021 InnovateFPGA Design Contest.

- Sean Peng, CEO of Terasic.

Professional Support

Contest organizer Terasic will answer questions and provide technical support for contestants / developers. Stay tuned for more 'how to' details in upcoming newsletters. Go to URL to submit questions:

<https://www.innovatefpga.com/portal/support.html>



Key Dates

Contest Launch: July 1, 2021

The Design Contest launches on July 1. Register as a developer. Each entry will receive a confirmation email and a unique team ID upon registration.

Proposal Submission: Aug. 1 – Sept. 30, 2021

Registered developers can start to submit project proposal during this period. Final proposals need to be received by September 30.

Proposal Selection: October 15, 2021

The InnovateFPGA Judging Committee and community will select regional teams based on the submitted design proposals. These teams will each receive an Intel FPGA Cloud Connectivity Kit to begin developing the proposed project, turning them into real designs. Shipping will start on October 16.

Develop Designs Oct. 16, 2021 – Feb. 7, 2022

Teams develop the projects using provided resources and upload completed design paper and project video before the deadline.