BROUGHT TO YOU BY

THE GREAT GLOBAL HACKERSPACE CHALLENGE





WELCOME TO THE CHALLENGE!

Hello, and welcome to The Great Global Hackerspace Challenge, brought to you by the very excited folks over at element14!

You are one of thirty hackerspaces from across the globe who have been chosen to participate in this amazing event, which seeks to stretch your hackerspace-minded ingenuity to its very limit to create an electronics build that will make a real, and very positive difference in an educational establishment. And for you to have a whole lot of fun along the way!

Exactly what that build is, and what solution it provides is entirely down to you. The only stipulation is that your build must make use of a microcontroller and a portable power source. We encourage you to reach out to an educational institute in your area so that you can test your invention as it evolves, make sure you are answering a genuine educational need, and hopefully establish a home for your product once the challenge is over.

Within this pack, you'll find detailed information on the equipment element14 will provide you with to get your creative thoughts flowing, and your talented hands building, as well as the low down on how to share your Hackerspace's ongoing progress with the world.

We'd also ask you make sure to read our Great Global Hackerspace Challenge Pact section, on which we are asking for a virtual handshake from you. It's our way of establishing mutual ground rules and understanding before the storm of genius activity begins.

We thank you once again for being a part of this incredible challenge, wish you the very best of luck, and look forward with great anticipation to seeing your work as it develops. This is a challenge in which brilliant minds collaborate so that everybody wins. Onwards!



Challenge Guidelines

Outlined below is a step-by-step guide with all the information you will need to help make your hackerspace challenge as successful as possible. There's a great deal to do in a very short space of time, and so we have created a calendar of key delivery dates which you'll find at the end of this pack to help you stay on track.

If you have any questions along the way that aren't answered here, please email **hackerspace@element14.com** and we'll be sure to get back to you.

Your tool kit

element14 is providing you with a budget of \$900 US to complete your build. You will be contacted directly to establish exactly how you would prefer to receive this money. Your microcontroller and portable power source should be procured using this money, and any additional electronic components you might need can be purchased from the element14 store. Simply go to the element14 website: (www.element14.com), click on the 'store' tab and then select your items using your \$900 stipend. Your components will then be sent directly to you.

We ask that you try not add to this budget, as one of the judging criteria is based on the total cost of the final build, but you are fully permitted to use any components or items that you might already have at your hackerspace within your build. We challenge you to be as creative as you like!

Documenting your build

Core to this challenge is to produce an electronics build that will ultimately help education, but you can also start to help people learn about hackerspaces and electronics building along the way by regularly sharing information on your design. This is also how the judging panel will be able to track your progress and pick the three semi-finalists, and a minimum of one weekly update is a mandatory element of the challenge.

Please feel free to share all your exciting moments as they happen, but as a guideline, content that would be useful for you to provide would be:

Week 1

-Introduce your team (video would be a great way to do this), explain your hackerspace's philosophy, and provide a top level summary of your first week

Week 2

-Provide a basic outline of the materials you will be using in your build and any key challenges you anticipate

Documenting your build (continued):

Week 3

-Provide an update on the status of your build and quick summary of obstacles encountered and how they are being addressed

Week 4

-Is everything going to plan? Perhaps provide footage of a visit to an educational institution you're working with

Week 5

-In your penultimate week provide a review of the challenge to date. Is the pressure on? What have you learned?

Week 6

-This is the time to really showcase your build, why it works and what features make it stand out

How to share

You will be required to contribute to your profile page within the element14 community. This is where you can upload your videos and photos and keep everyone informed via a written blog. You will be able to personalize the page so that your hackerspace's own unique character shines through. To do this, go to **element14.com,** click on "Join Now" if you are not already registered, using your Hackerspace name, and we will create your page for you.

Build Criteria

Our esteemed panel of judges will include luminaries from the worlds of technology and science, education and hackerspacing.

Following the completion of the build period, they will be judging each one on the criteria below in order to select three semi-finalists to attend the California Maker Faire for the grand finale on May 22. Semi-finalists will be notified personally by Mitch on May 6.

Criteria:

- How reproducible is the final project
- How easily can the parts be sourced in locations around the world
- How low cost is the final output
- How well are the plans documented
- plans documented
- How relevant is the project to helping education today
- How inventive and creative is the design and build of the project

The Maker Faire Grand Finale

The Great Global Hackerspace Challenge will culminate in a live demonstration of each of the three semi-finalists in front of the panel of judges at the San Mateo Maker Faire. One team member from the final three hackerspaces will be flown out to California to attend the Faire and present their build. Air fare, hotel accommodation and daily food costs will all be covered by element14 – we'll provide more detail on this if you are selected.

In the spirit of collaboration over competition, and to thank you for taking part, element14 will be sending you a set of soldering equipment, including a soldering station, for your hackerspace once you have completed the challenge.

Each of the semi-finalist hackerspaces will receive the following prizes:

- Fluke 233 DMM (worth US\$300)
- Fluke 381 Clamp Meter (worth US\$500)
- Tektronix PWS4205 Power Supply (worth US\$865)
- Agilent HH DMM (specific model TBD)

Finally, the build chosen to have that extra sprinkling of hackerspace magic will receive a suitably rocking prize: a Tektronix MSO2024 oscilloscope (worth around US\$5,600). Start clearing a space in the corner of your hackerspace now!









The Great Global Hackerspace Challenge Pact

You won't find any legal language here. We promise. The purpose of this section is to let you know that if, for any reason you are unable to finish your project you should let the organizers know as soon as possible. Particularly if you encounter circumstances beyond your control. We need to be able to manage expectations so we can accommodate the logistics of the event; judging, the Maker Faire event and the management of the content on the community.

This isn't a contract. You won't be signing your life away. We trust you. We simply want to have the best competition possible.

To quote the 1989 MGM classic "Bill & Ted's Excellent Adventure" we want everyone involved in this event to "Be excellent to each other". And that works full circle. We are investing funds into your builds and you are investing your valuable time and energy into our challenge. In the spirit of transparency and collaboration we want everyone to succeed and get as much as they can from this project however we reserve the right to withhold product and stipend if groups do not deliver on the requirements of the challenge. We will be in close communication throughout this project and, we can all work together to avoid any adverse situations.

Great Global Hackerspace Challenge

Challenge Key Dates Calendar (Weeks Begin on Monday)

May

April

March

3/7	3/14	3/21	3/28	4/4	4/11	4/18	4/25	5/2	5/9	5/16	5/23
3/21: Official Challenge Briefing / Q+A	3/21										
3/25: Deadline to create your profile and submit your first blog update		25-Mar									
4/1: Deadline for Hackerspace Challenge Blog Post 2			1-Apr								
4/15: Deadline for Hackerspace Challenge Blog Post 3				15-Apr							
4/30. End of build time					30	Apr					
05/2. 05/05: Judging period							5/2-5/5				
05/06: 3 semi-finalists will be announced								6-May			
Week Of 5/16: One team member from each of the three semi-finalist hackerspaces will travel to San Francisco Bay Area								Week of 16-May			
5/21-22: Maker Faire										5/21-22	
5/22: Maker Faire Great Global Hackerspace Challenge Grand Finale											22-M
5/23. Team members travel home											23-N