

TAPAS Community Challenge

Create something new today!

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What is TAPAS?

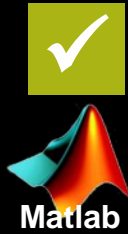
SIEMENS
Ingenuity for life




What is TAPAS?



 Algorithm
(development and test)




 Execute
algorithm
(on target platform)



Raspberry PI 1



2,3,nano,etc.

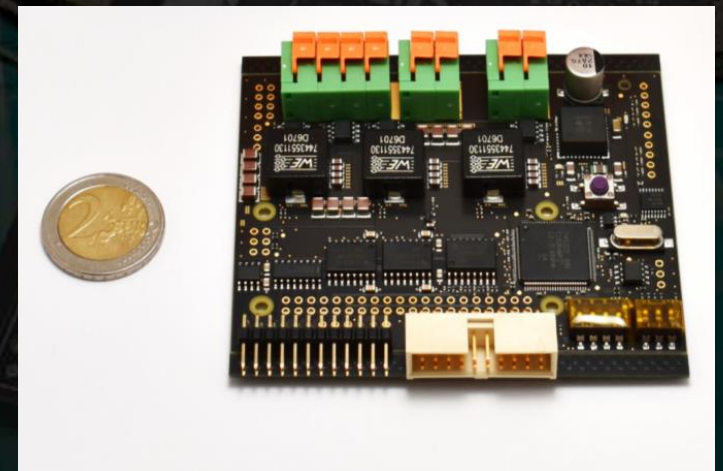
 Physical I/O
(special power converter)



TAPAS

SDI TAPAS community inverter

- ~300W @ 48V - GaN
- Light - 80 gram (200 gram incl. housing)
- No heat sink / PCB convection cooling
- High bandwidth (>300kHz switching frequency)
- Smooth output (on-board filter)
- Universal - can be used for robotics, motor drives, battery charging, DC/DC , AC/DC, audio, etc.
- Open source – Raspberry PI compatible



Time

2005

2012

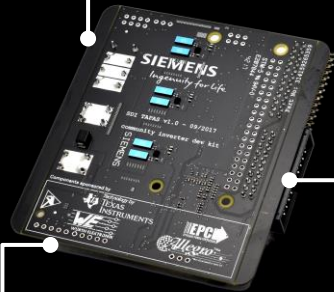
2018

TAPAS Community Challenge



Motivation for Siemens

Increase **popularity** within academic and maker community.



Build a **community** as central element in modern product development. Direct market feedback and technology testing including community generated functionalities.

Establish **Siemens as highly innovative** player in the area of software defined inverters and/or power electronics.

Maker!



Students and University Employees as participants, Professors as academic multipliers

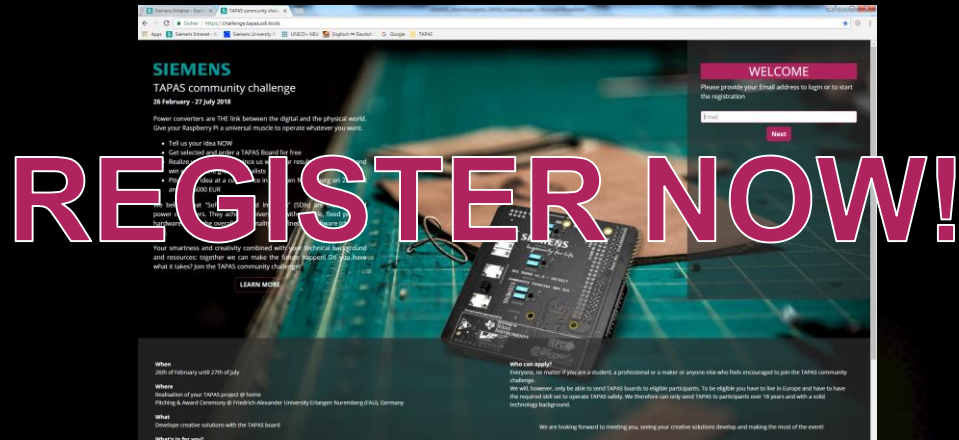


Initially **Europe**, to be expanded globally

TAPAS Community Challenge



Phases



Idea submission

(March-June)

- Registration via TAPAS webpage
- Short description of what to do with the TAPAS board
- Discussion of ideas by community
- Screening of ideas by Siemens experts and selection of those who get a **TAPAS board FOR FREE**



Project realization

(March-June)

- Teams receive TAPAS boards
- Realization of project, ongoing discussion with community and Siemens experts
- Upload of results (including link to code and short video) until 13.06.18

Round of finalists

(26.+27.7.18)

- Present project and pitch results to an audience
- Selection of winning team by a jury of experts from Siemens and Friedrich Alexander University Erlangen
- Win 5000€

5 Finalists

IN PARALLEL

TAPAS Community Challenge



Timeline

26.02.-13.06.2018

13.06.-27.06.2018

26.+27.07.2018

Idea submission

Send out TAPAS boards, Idea realization, project work

Selection of 5 Finalists

Final Round



1 Winning Team

50+ ideas

in community idea board

Continuous screening and selection
Send out TAPAS boards

50+ projects

running with TAPAS board

Individually, code at home

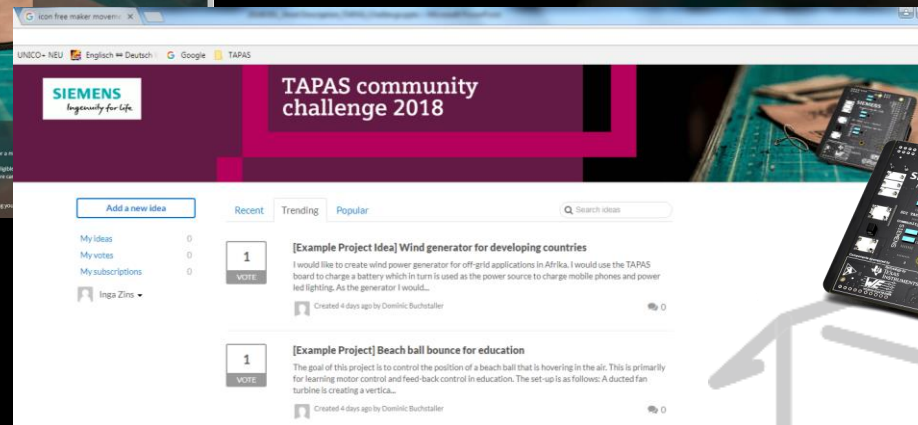
5 Finalists

On site @FAU Erlangen

TAPAS Community Challenge



How to apply and what to win



Register at
<https://challenge.tapas.sdi.tools/>

Post your idea
Discuss with the Community

Get your TAPAS board
FOR FREE

27.07.2018

1 Winning Team

5000€

What we need from you



- Are there events which would be suited to make advertisement? Could we give a short presentation?
- Do you know professors or Fachschaften we (you) could specifically address?
- Is there a maker space at the university?

What do you need?

- Flyer, Posters, digital versions?
- Fact sheet for professors?

Spread the word! → **Specific and target-group oriented advertisement at university**

Need more information?



On the Challenge

Link to the Challenge: <https://challenge.tapas.sdi.tools/>

Link to the Video auf LinkedIn

<https://www.linkedin.com/feed/update/urn:li:activity:6376826518039076864/>

Link zu Video auf Twitter <https://twitter.com/BuschRo/status/971060665019523072>

On the TAPAS Board itself

Pictures of the Future Article: <https://www.siemens.com/innovation/en/home/pictures-of-the-future/industry-and-automation/the-future-of-manufacturing-innovative-inverter.html>

GitHub Link <https://github.com/SDI-SoftwareDefinedInverter/TAPAS/blob/master/README.md>

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