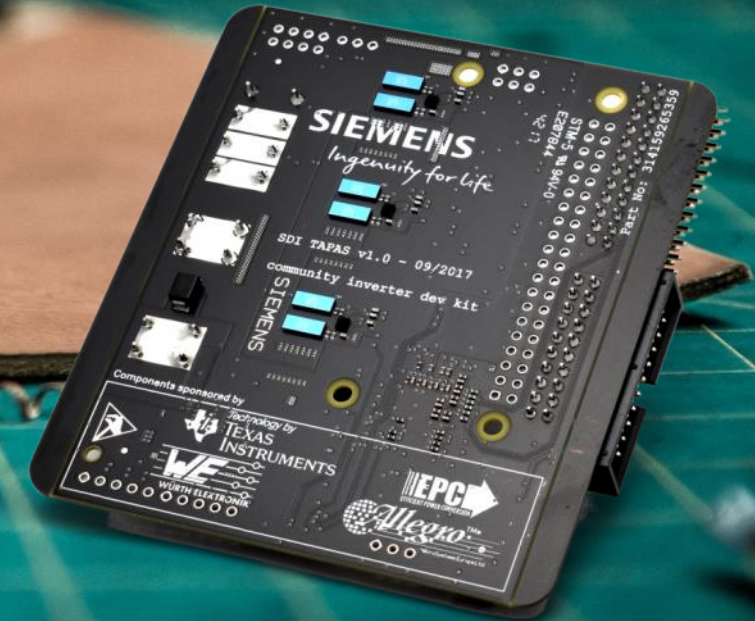


Software Defined Inverter - TAPAS

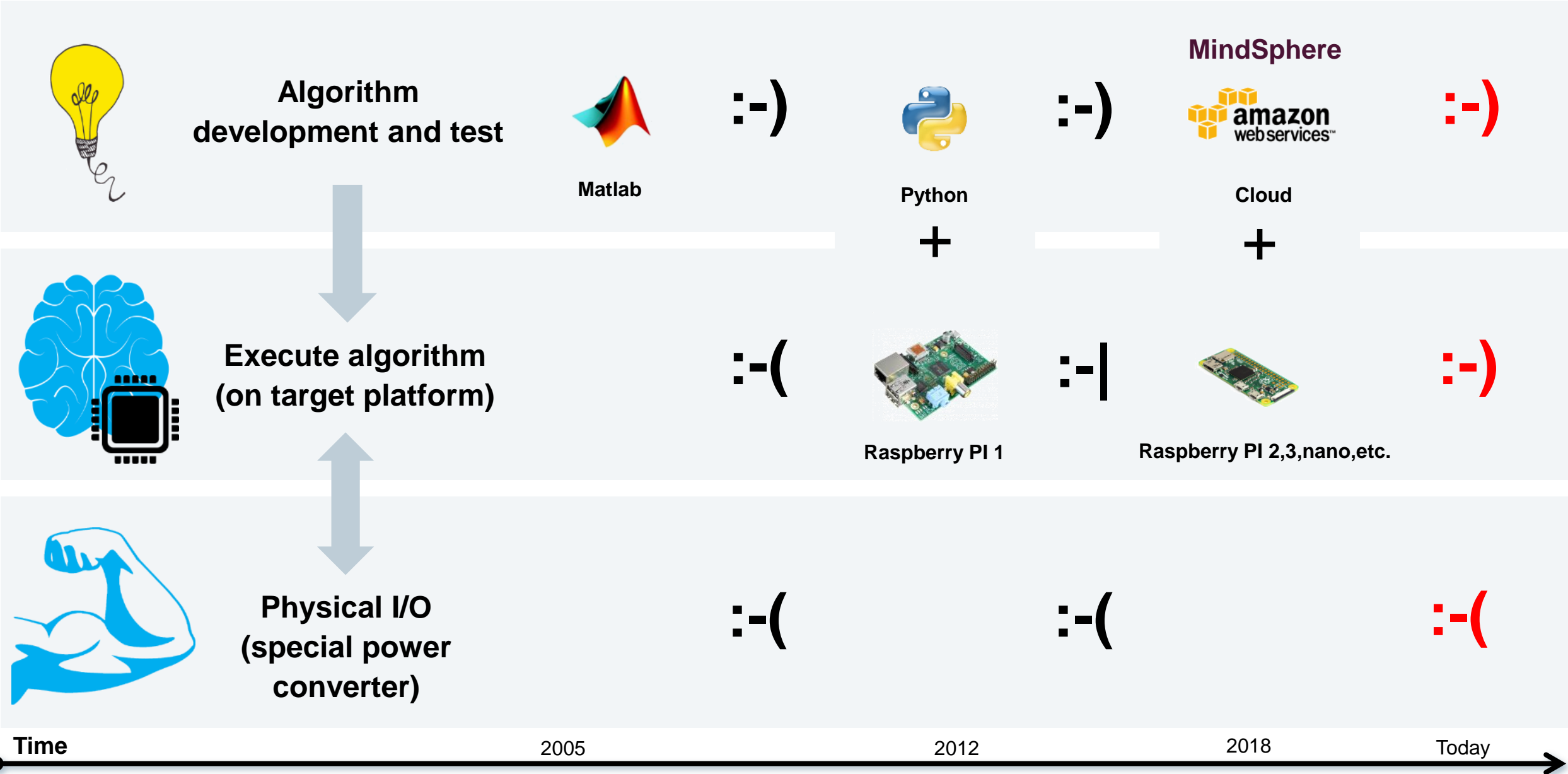
Control the world in software

Contact: dominic.buchstaller@siemens.com



**As an algorithm developer,
why should I care about power converters?**

Because I have to spend too much time on hardware!



Applications for small (<50V) power converters

Specialized closed-source soft- & hardware throughout



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Robotics



Industry



Sports equipment



Magnetic levitation



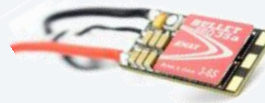
Laser / LED / Light



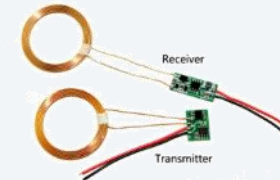
UAVs



Audio



Remote controlled



Wireless charging



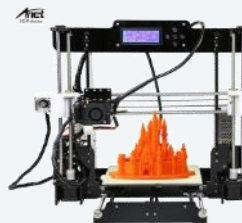
Off-grid



Drones



Battery charging



3D printing



Subsea



Maybe?

SDI TAPAS can be defined via software - no hardware development necessary!

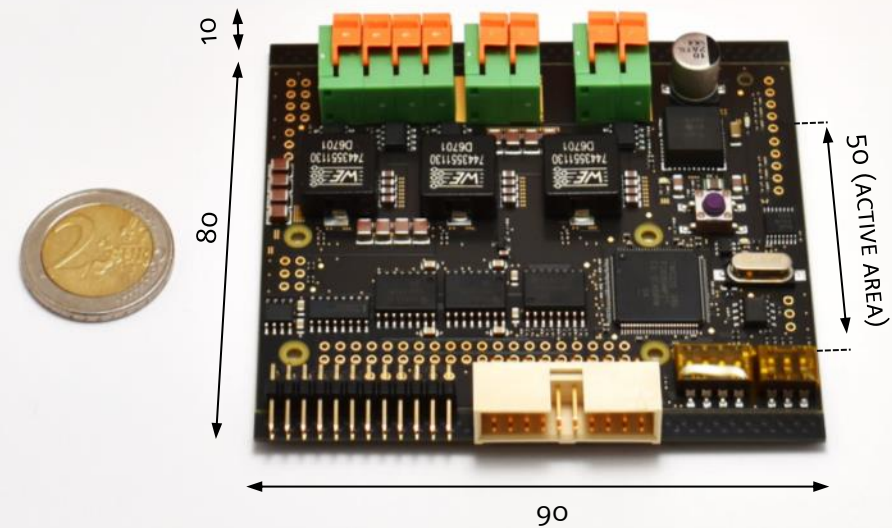
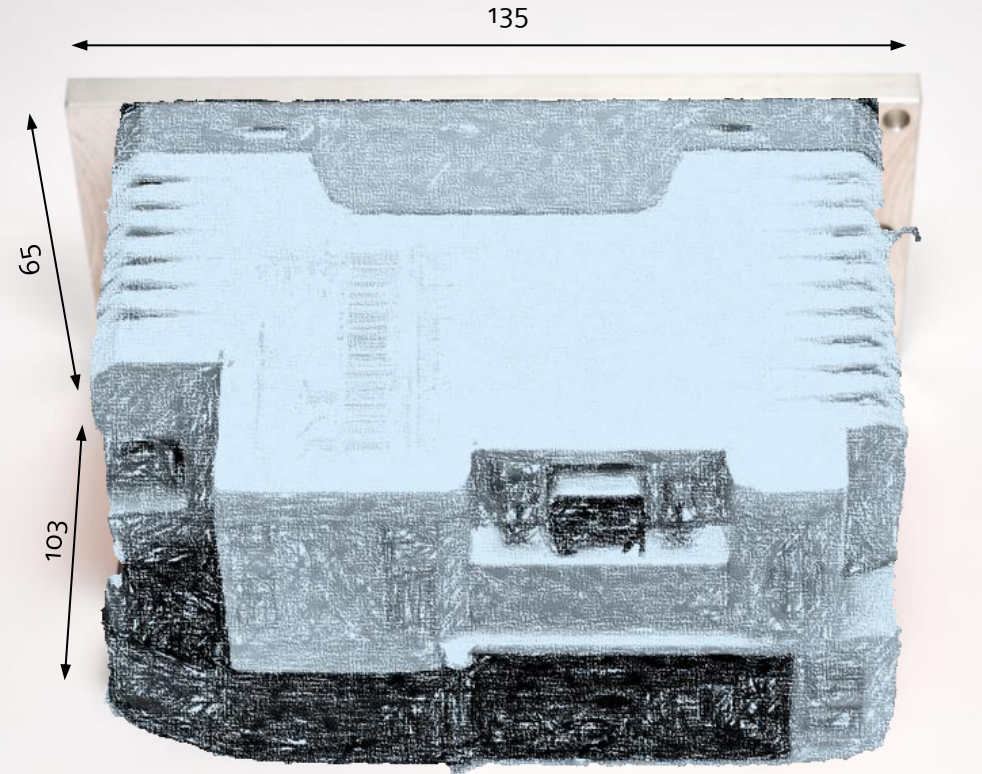
EXAMPLE: STANDARD INDUSTRIAL DRIVES INVERTER

- ~400W @ 48V – MOSFET
- VERY GOOD FOR INDUSTRIAL APPLICATIONS
- HEAVY - 640 GRAM
- BIG HEAT-SINK
- LOW BANDWIDTH (< 40KHz SWITCHING FREQUENCY)
- SQUARE-WAVE OUTPUT
- CAN BE USED FOR MOTOR DRIVES
- CLOSED TECHNOLOGY



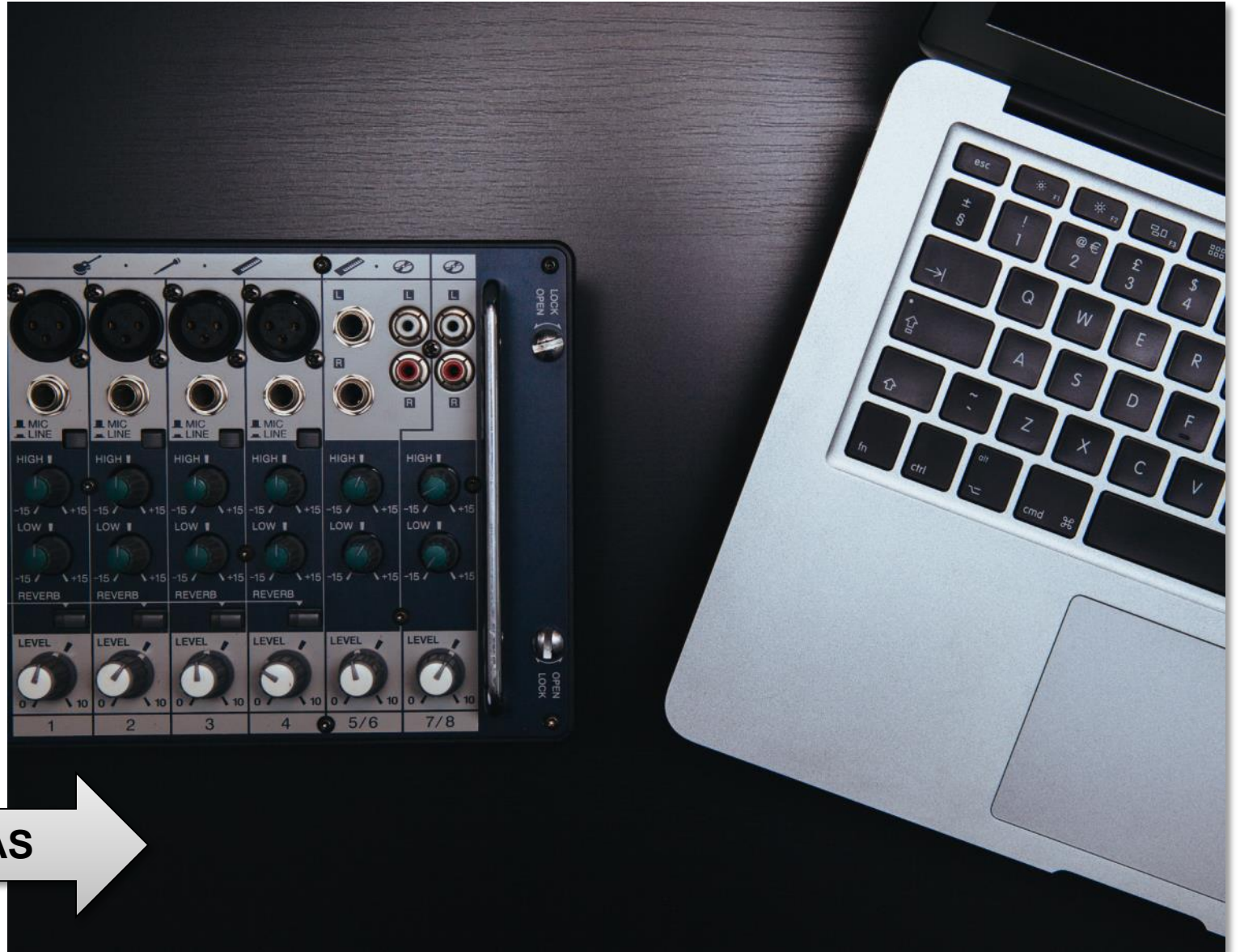
SDI TAPAS COMMUNITY INVERTER

- ~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

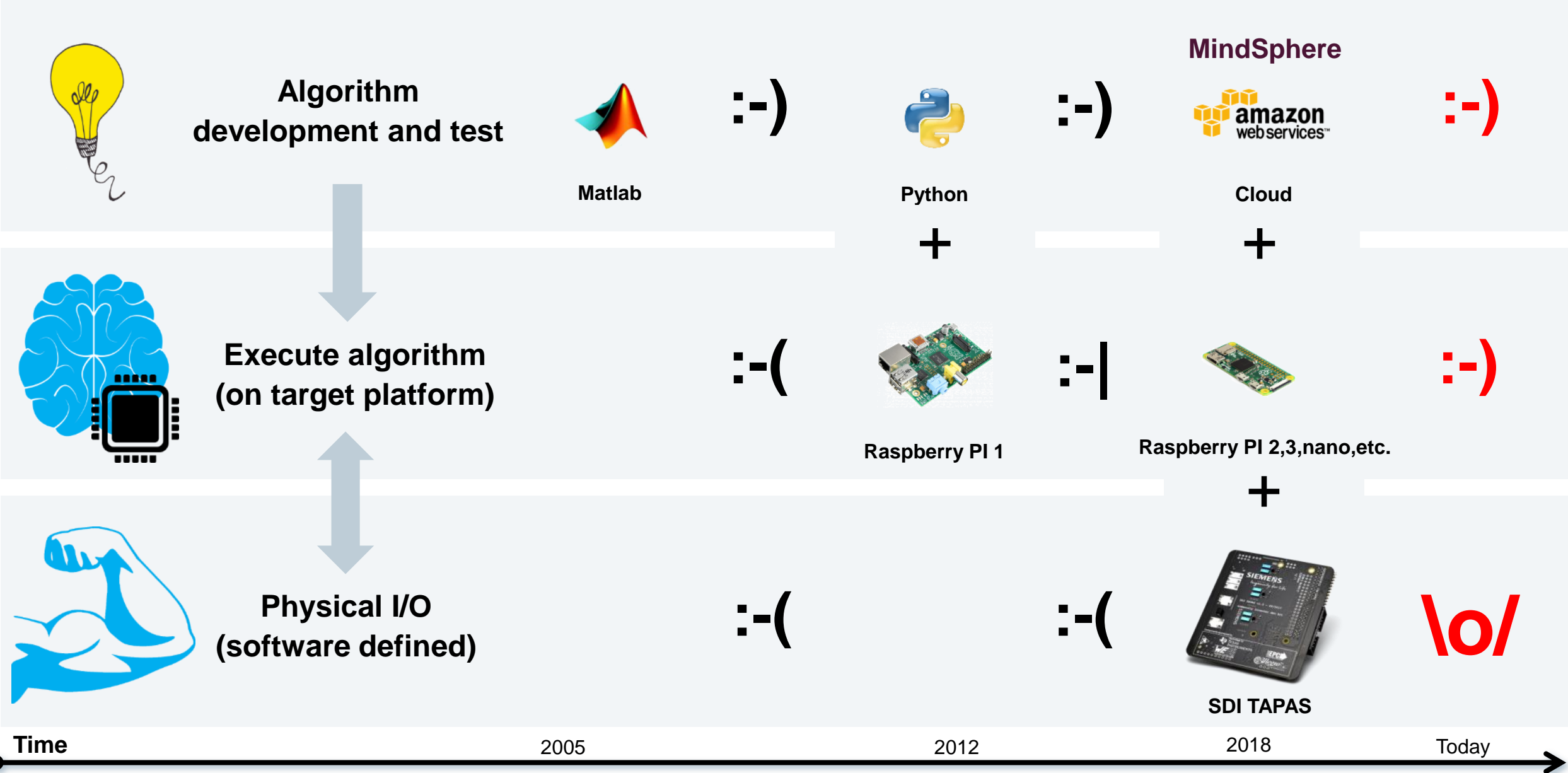




TAPAS

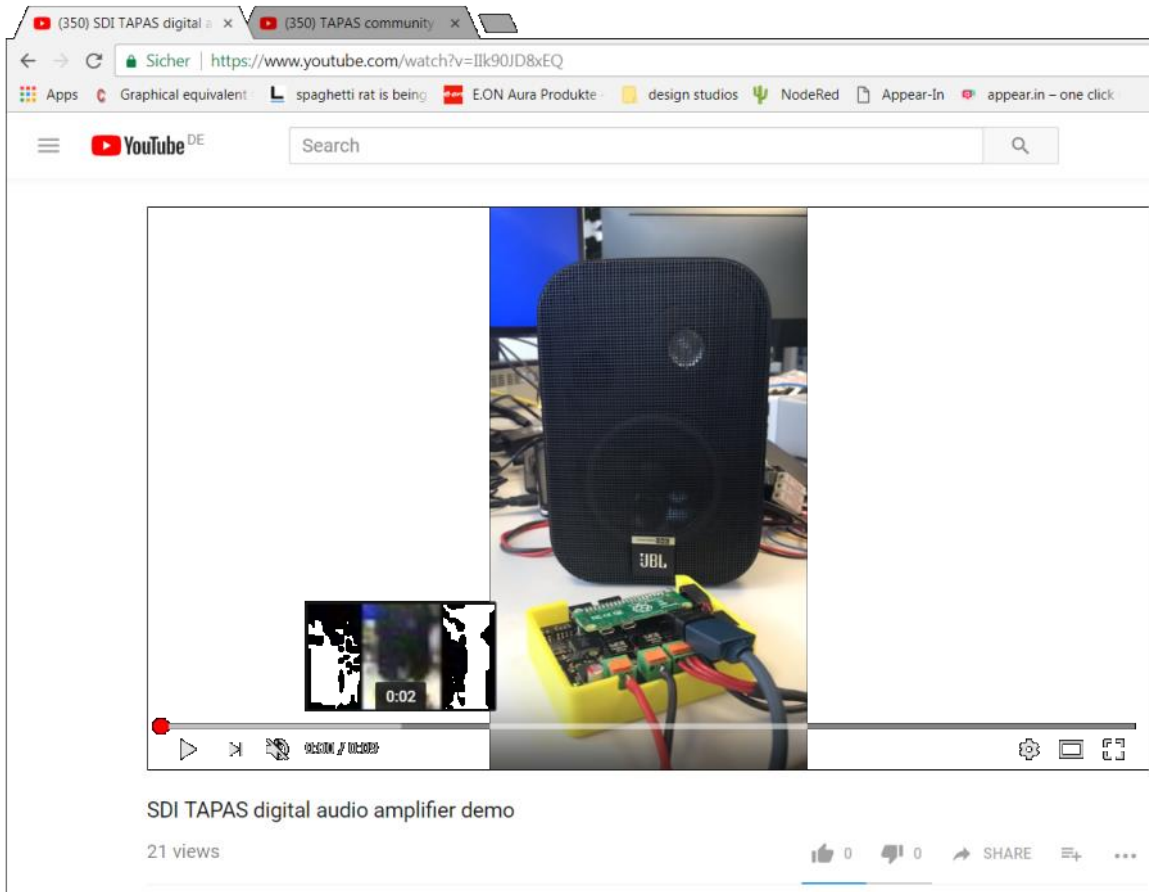


More time for algorithm development!

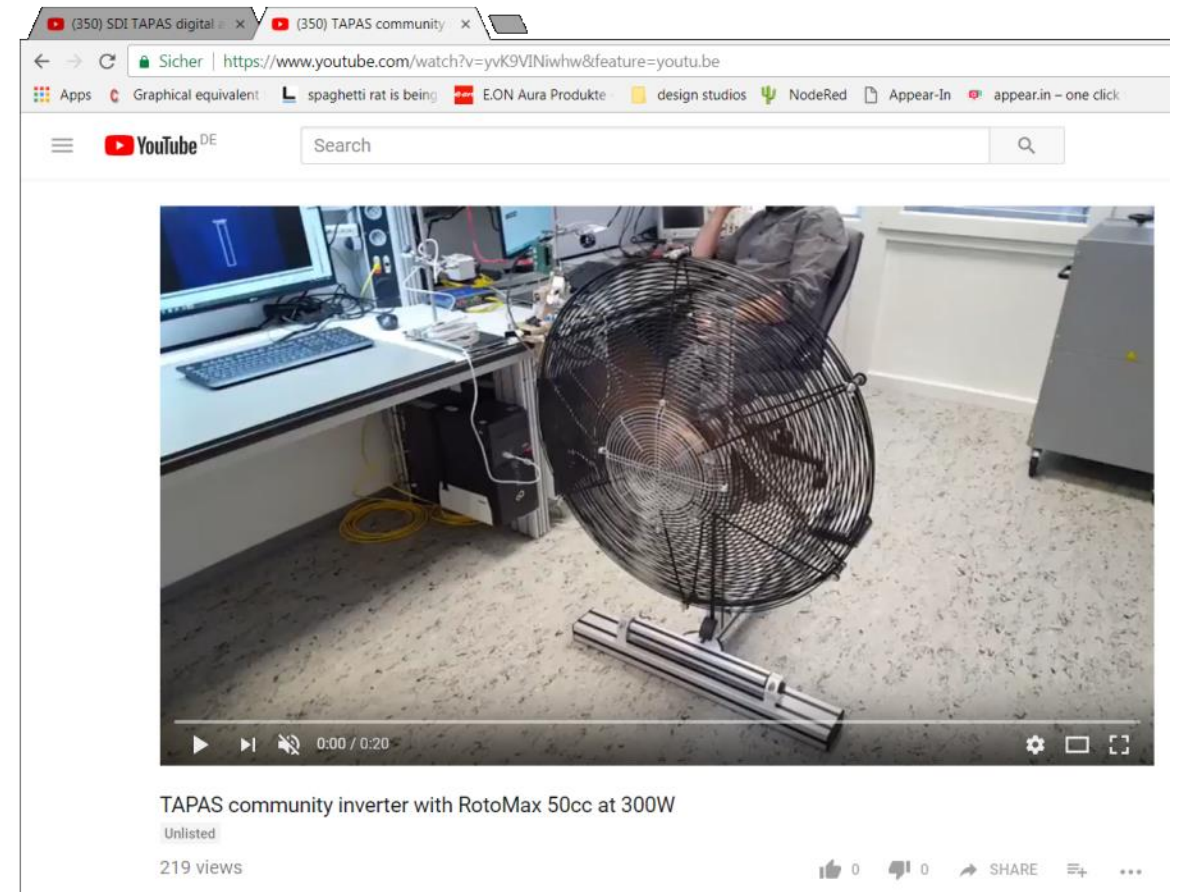


What you can build != How well you can develop hardware!
What you can build = How well you can code!

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<https://www.youtube.com/watch?v=Ilk90JD8xEQ>



<https://www.youtube.com/watch?v=yvK9VINiwhw&feature=youtu.be>

TAPAS is not the best at everything but it can do lot's of things extremely well!

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- TAPAS is available today – free of charge
- Raspberry PI compatible
- Open source software, examples & schematics

<https://github.com/SDI-SoftwareDefinedInverter/>

- You have a great project in mind?

Join the TAPAS community challenge and get a free board

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

- If you are a scientist, engineer or maker and would like a board for R&D ... please contact us
- Come and see us later for a demo!



*sponsored by



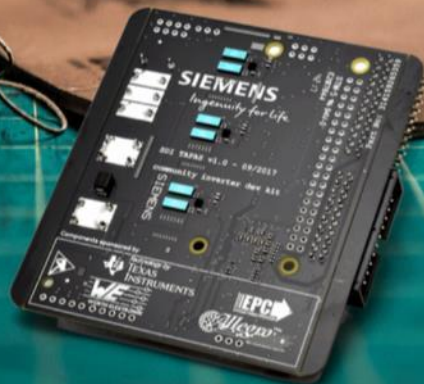
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TAPAS community challenge

26 February - 27 July 2018

Power converters are THE link between the digital and the physical world. Give your Raspberry Pi a universal muscle to operate whatever you want.

- Tell us your idea NOW
- Get selected and order a TAPAS Board for free
- Realize your project, convince us with your results until 13.06.18 and win a spot in the group of finalists
- Pitch your idea at a conference in Erlangen Nuremberg on 27.07.18 and win 5000 EUR



WELCOME

Please provide your Email address to login or to start the registration

Next

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Create something new today!

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



**TAPAS
community
challenge
2018**

#FutureMakers

Share your ideas, get a free TAPAS board, show us your prototype and win great prizes

Visit

challenge.tapas.sdi.tools

Software Defined Inverter - TAPAS

Control the world in software

Contact:
dominic.buchstaller@siemens.com

