

Turning software into hardware - Hastlayer

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Lombiq

HASTLAY  R

be the hardware

Warning

Hastlayer is currently experimental!

logic expressed as software → logic expressed as hardware

...with FPGAs

- Field-programmable gate array
- Can behave as any logic circuit (within chip limits)



Image by SparkFun Electronics, Boulder, USA

computer program → FPGA logic

.NET (C#, F#, C++, Python, PHP, JavaScript...) → FPGA logic

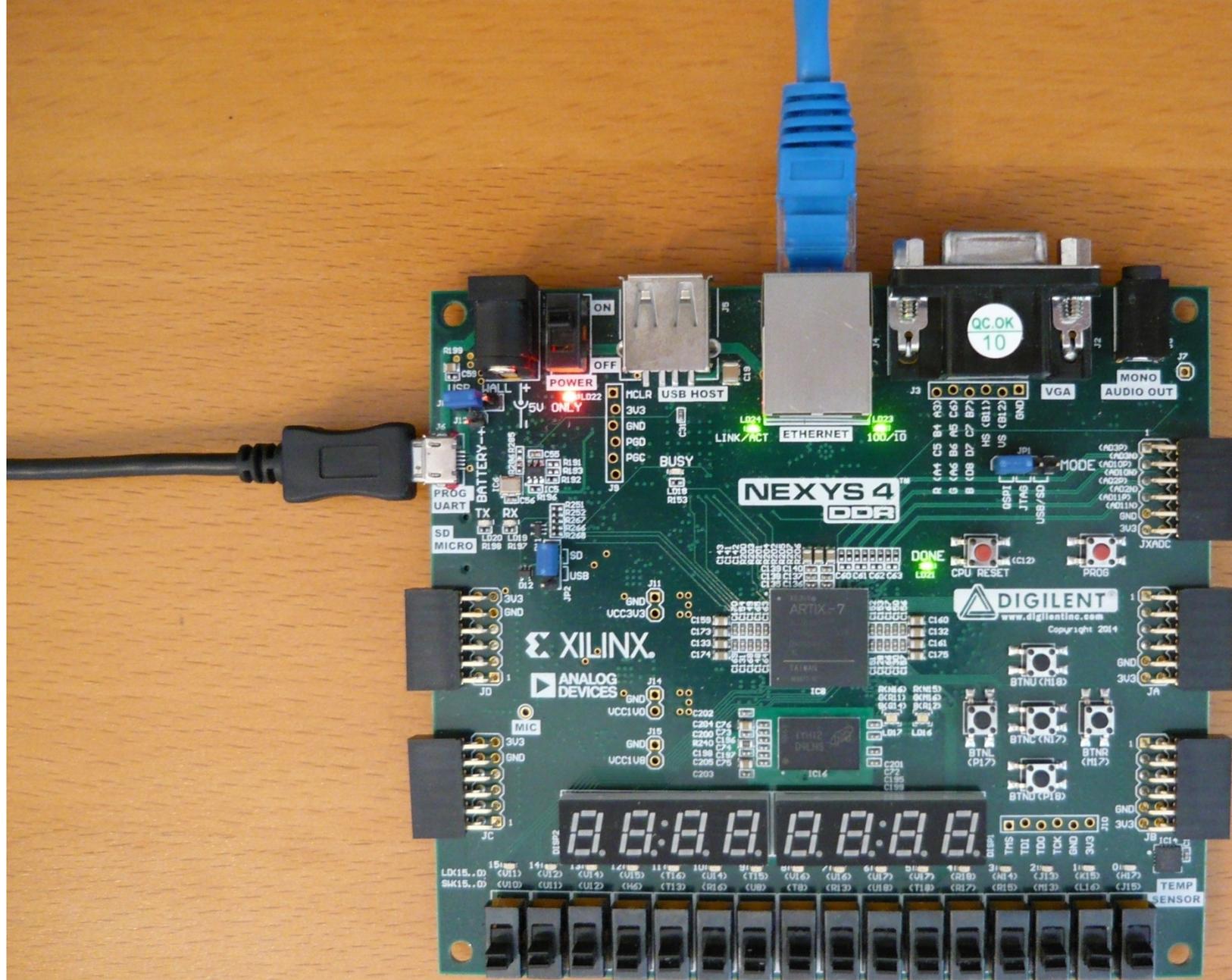
.NET → VHDL → FPGA logic

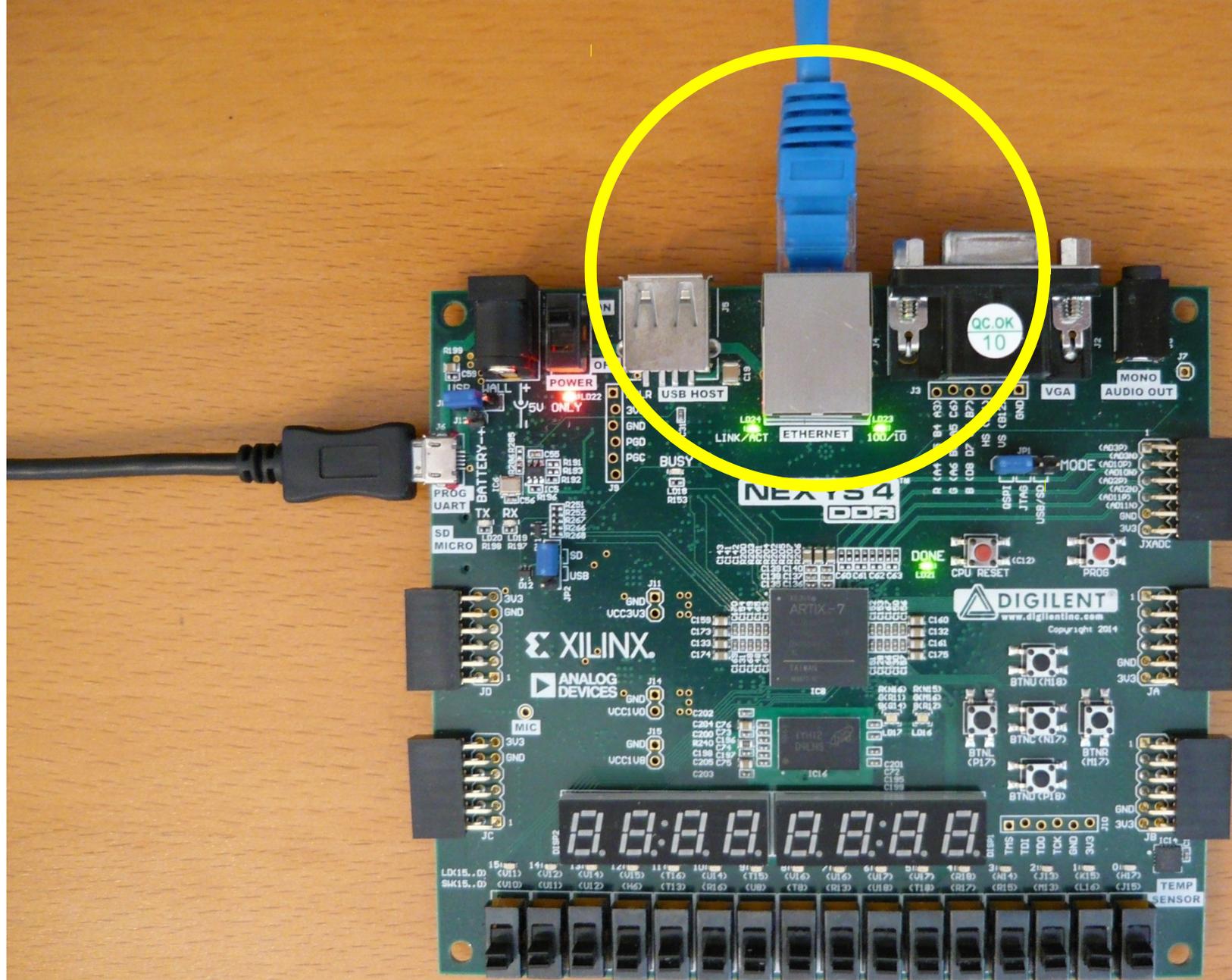
Why is this useful?

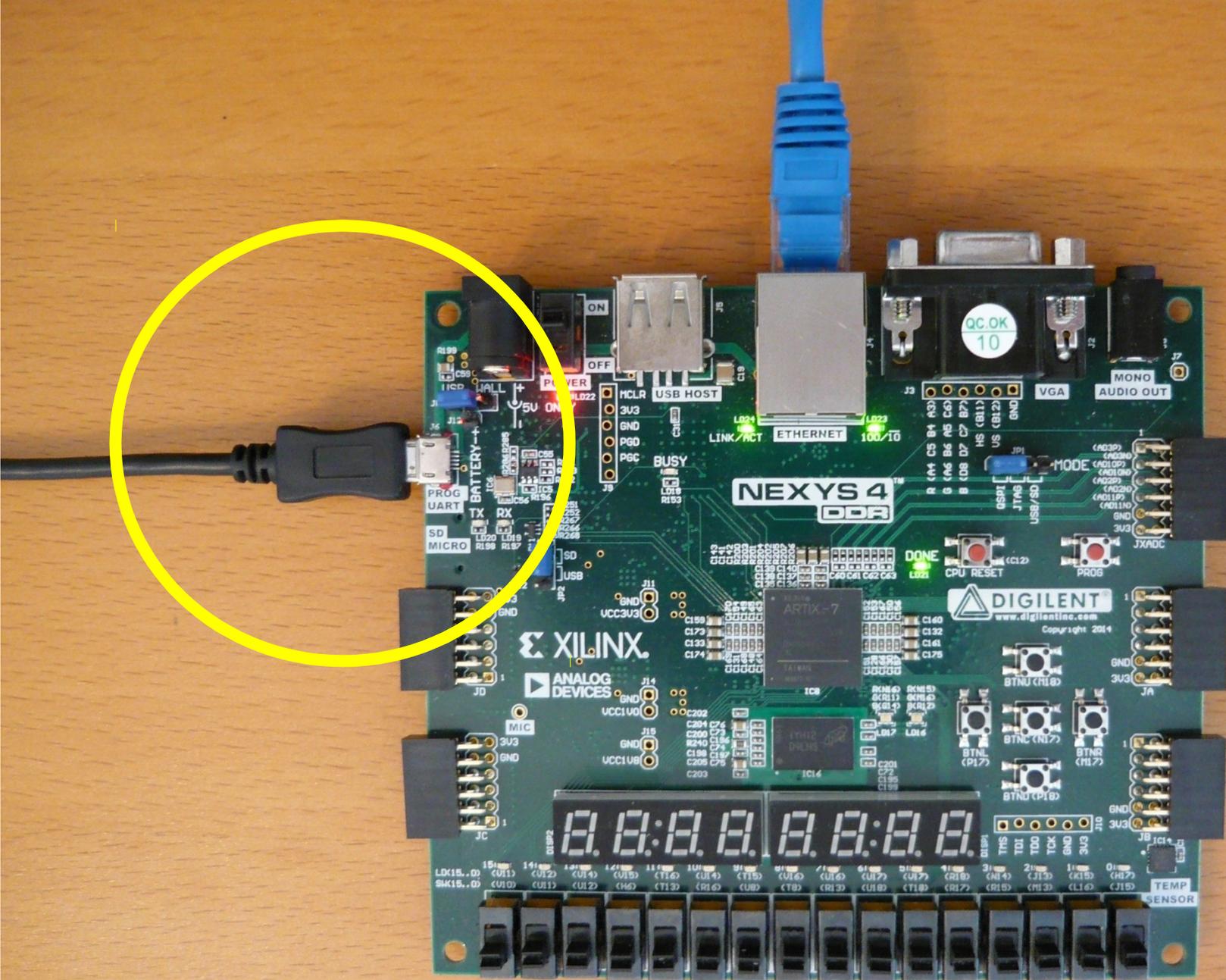
- Significant performance increase for certain algorithm
- Less power consumption
- Still easy to use

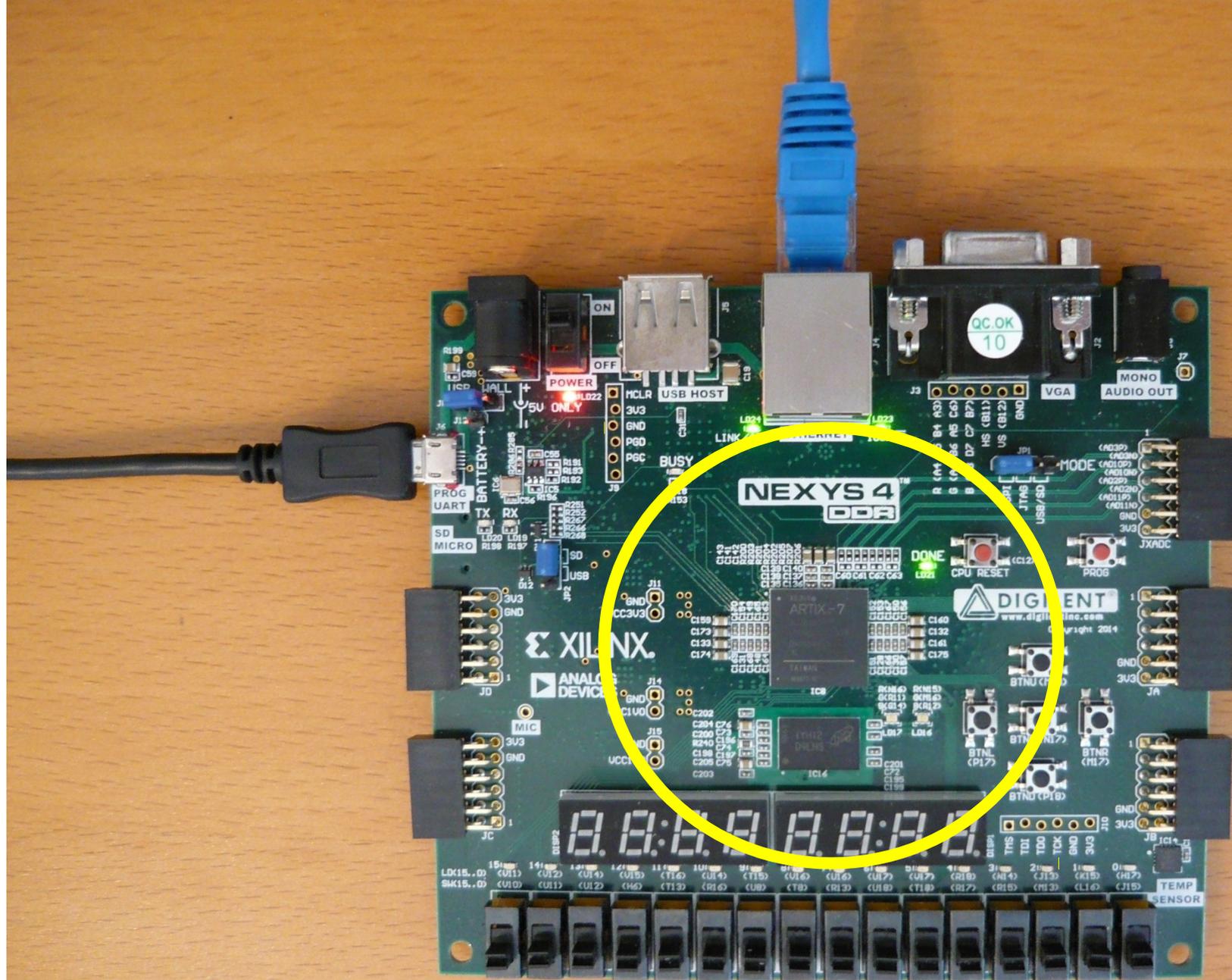
Let's see a demo!











Let's see a demo!

What does the future bring?

- Open-source
- Hastlayer Cloud
- FPGAs in every datacenter (Xeon + FPGA)

Thank you for your attention!

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- <http://hastlayer.com>
- <http://lombiq.com/>
- <https://github.com/Lombiq/>