Enabling AI

AT THE VERY EDGE

Presented by:

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GreenWaves Technologies

- Fabless Semiconductor Startup
- Founded in November 2014
- Twenty four staff
- Based in Grenoble area, France
- Partnerships with ETHZ (Switzerland) and UNIBO (Italy) labs
- Pioneer in Open Hardware with our IoT Application Processor, GAP8
- GAP8 has been sampling with customers since May 2018
But what happens WHEN You GET TO THE VERY EDGE?

Low power vs. No power

The very edge needs Tiny ML!
GAP8 – Key attributes

• IoT Application Processor
  • Designed as a complete solution
  • Integrated power control
  • Balances flexibility / programmability versus specialization
  • Exploits:
    • Lightweight core instruction set specialization
    • Parallelization
    • Hardwired accelerators
    • Explicit memory management
    • Strict scaling of energy proportional to demand

> 20X Energy reduction versus comparable solutions
Traction in multiple use cases

Pedestrian detection

Abnormal noises identification

Counting people in meeting room

Condition monitoring

Hierarchical activation of surveillance cameras

Smart toys
Traction in multiple use cases

- Smart detection
- Face identification

- Meter reading
- Keyword/phrase spotting
GAP8 is Available Now

01 GAPuino GAP8:

- PoC boards / modules - buy on website:
  https://greenwaves-technologies.com/store/

02 Extensive, open source SDK - get it on GitHub

  https://github.com/GreenWaves-Technologies/gap_sdk

03 GAP8 - Sampling now
  - Mass production qualified - July 2019

04 GroupGets campaign running in US now

  https://groupgets.com/campaigns/576-gapuino-combo-kit
Thank you!

Questions?