Remove the waste. Release the power.

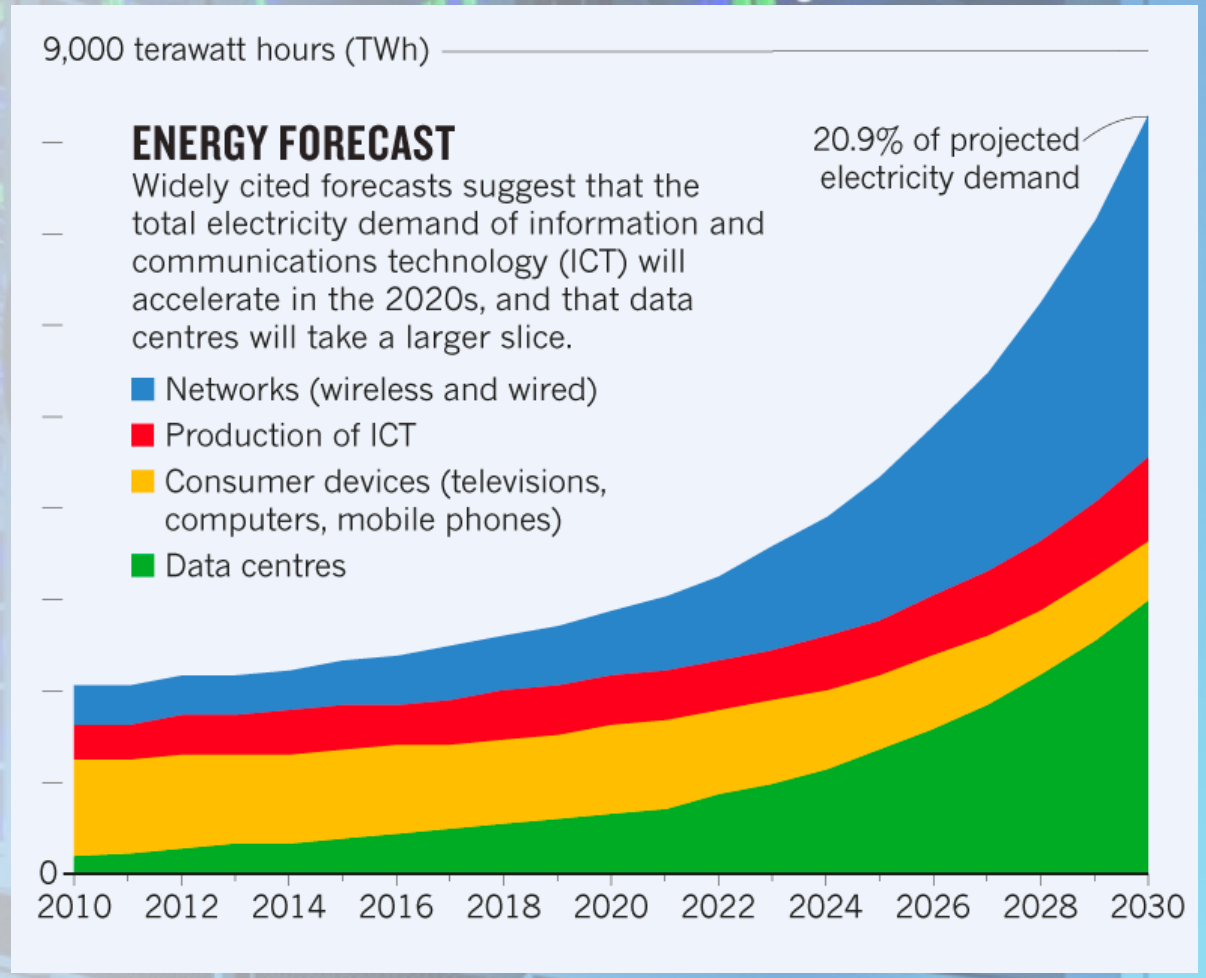
Klas Moreau
CEO
klas.moreau@zptcorp.com

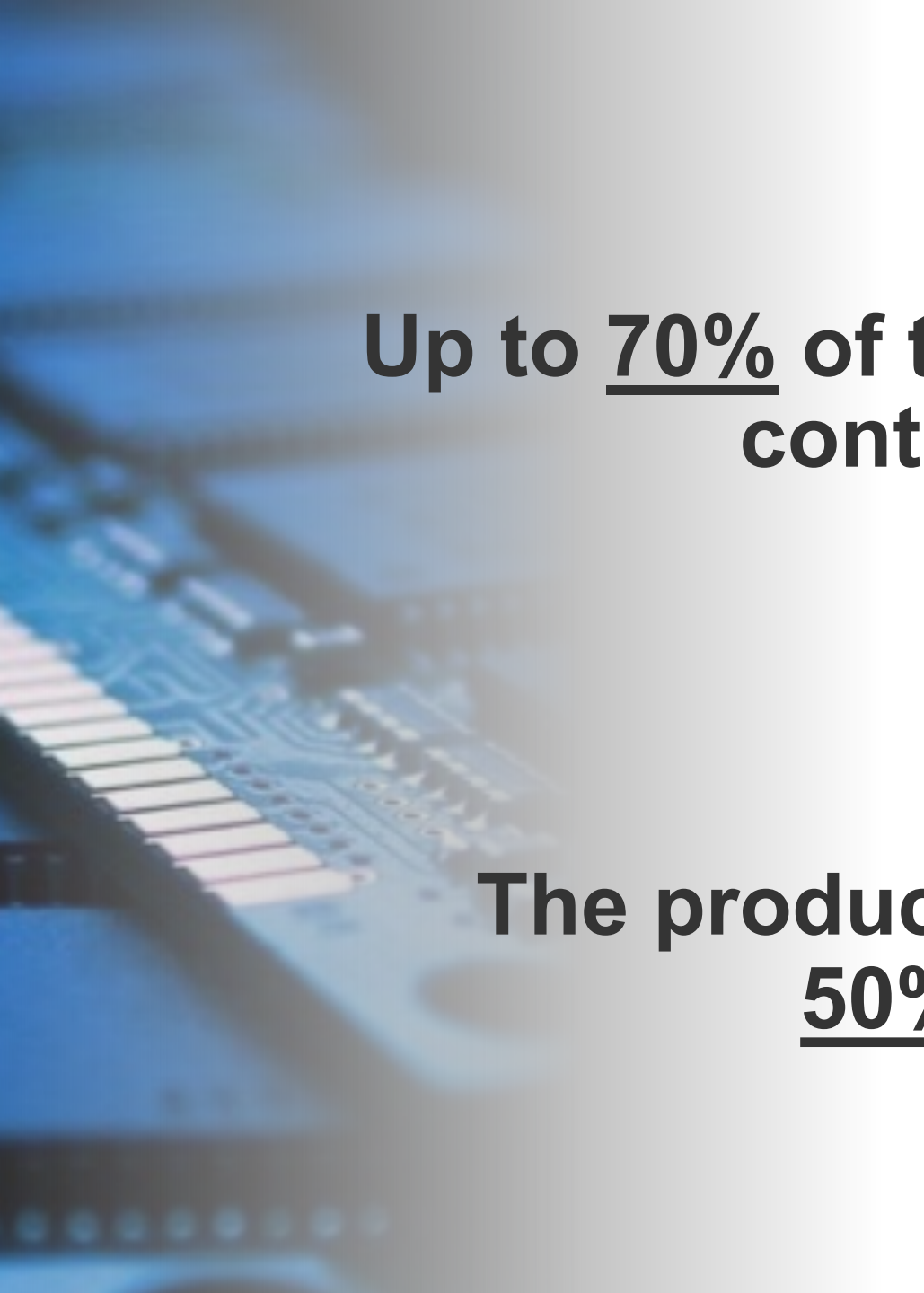
Datacenters consumed 2% of the electricity produced 2021

…and is expected to grow 5-fold to 2030

Smart devices may each have a small contribution, but 5.3 billion unique subscribers globally, adds up to a significant energy footprint.

ICT is the fastest growing energy consumer industry



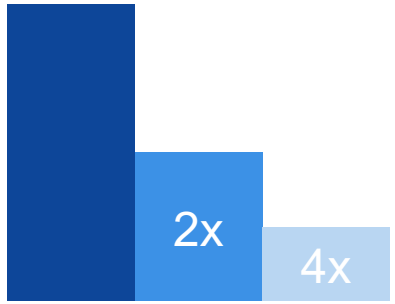


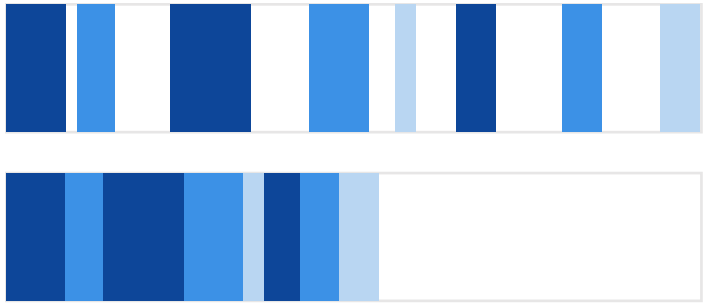
Our research shows that
Up to 70% of the memory of ICT equipment
contain unnecessary information!

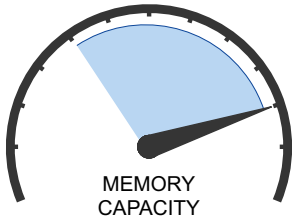
ZeroPoint technology
puts this waste to work

The product and business value is up to
50% more Performance per Watt

The Innovation
ZeroPoint technology







Data Compression
ZeroPoint Proprietary Algorithms
- 2-4x Compression Ratio
- **Ultra-fast**, high performance and low latency
- General purpose and lossless
- Real time analysis and training

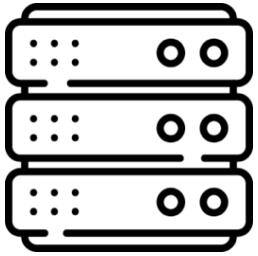
Data Compaction
ZeroPoint Proprietary Algorithms
- **Real-time**, high performance and low latency
- Adaptive in real time

Memory Management
ZeroPoint Developed Driver
- **Transparent** to operating system and application
- Hardware accelerated

ZeroPoint
TECHNOLOGIES

The Customer

Smart mobile



Server

Embedded System

ZeroPoint TECHNOLOGIES

The Opportunity

"**Requests per Watt is one of our defining characteristics** when testing new hardware …
We continually strive to reduce our operational costs **and power consumption reduction is one of the most important parts of this**. It's good for the planet and we can fit more servers into a rack, reducing our physical footprint."

Quote from Cloudflare server evaluation

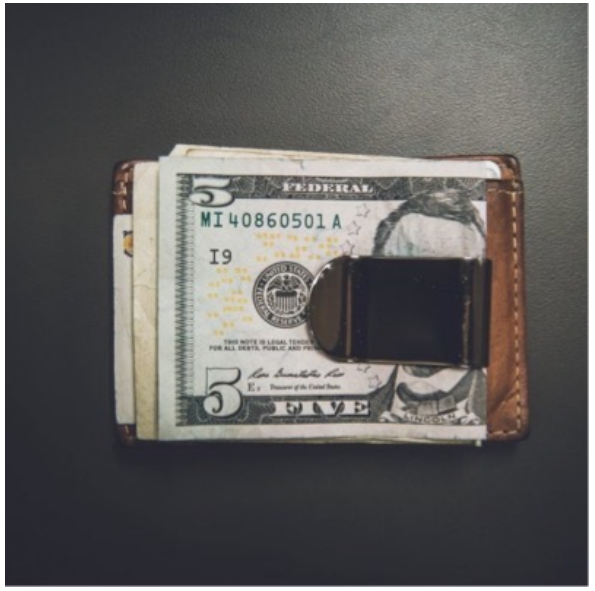
ZeroPoint TECHNOLOGIES

Environmentally friendly and financially cleaver

Efficient use of energy

A data center could save 20% of the energy cost per year (OPEX).

Facebook's Luleå site – 10 M€ saving per year



Efficient use of memory

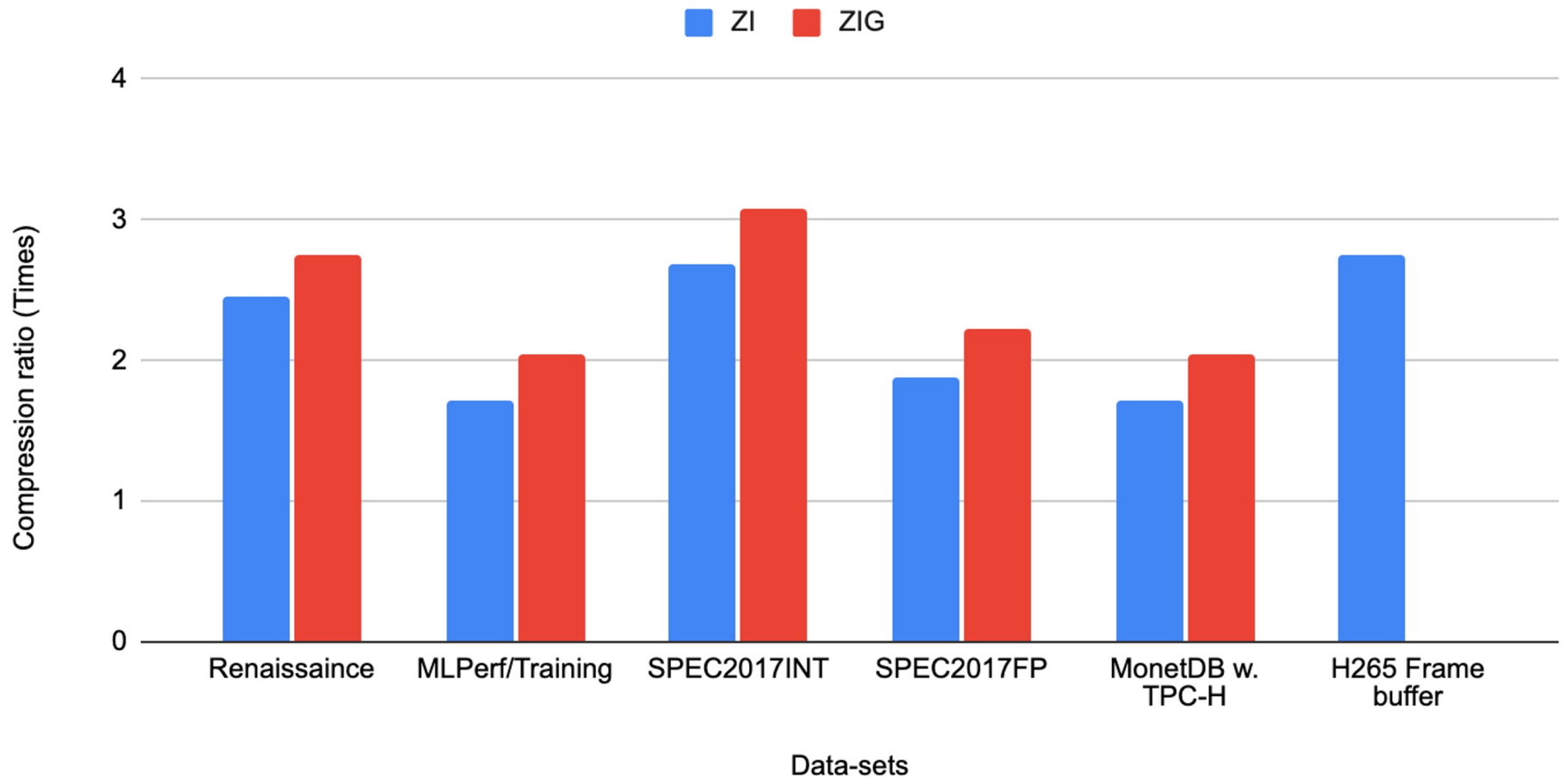
A data center could cut 15% of the server investment cost (CAPEX).

Memory is 30% of server cost today, estimated to become 40% in 5 years.

ZeroPoint TECHNOLOGIES

Performance

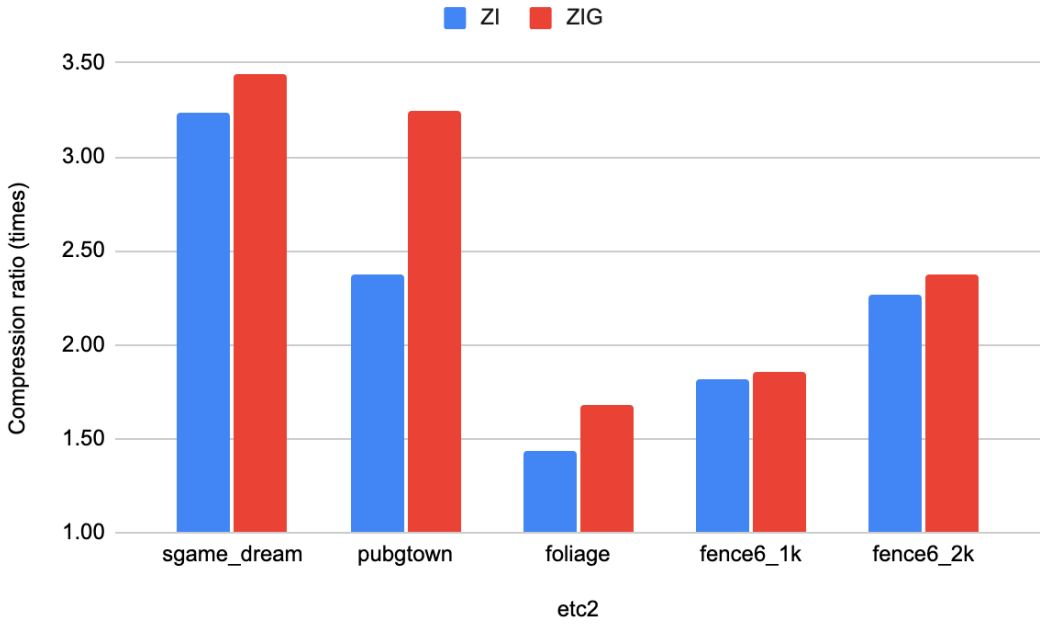
Compression performance on various server data-sets
(Higher is better)

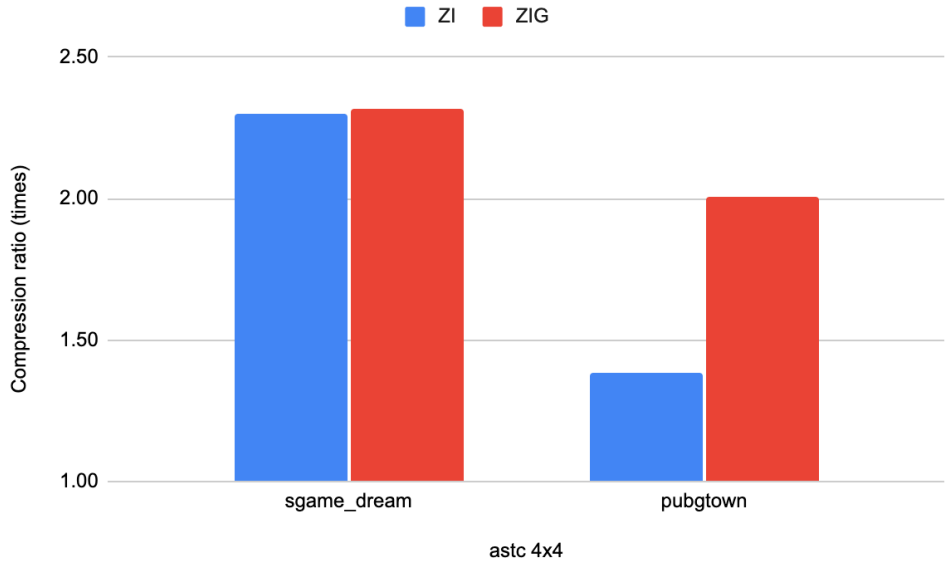


Robust compression across diverse data sets

ZeroPoint TECHNOLOGIES

Compression performance on various smart device pre-compressed graphics data-sets
(Higher is better)





ZeroPoint TECHNOLOGIES

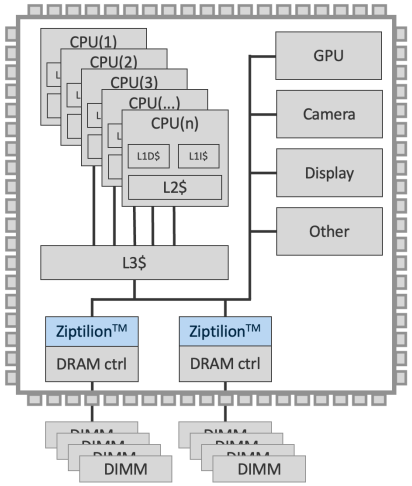
Technology availability

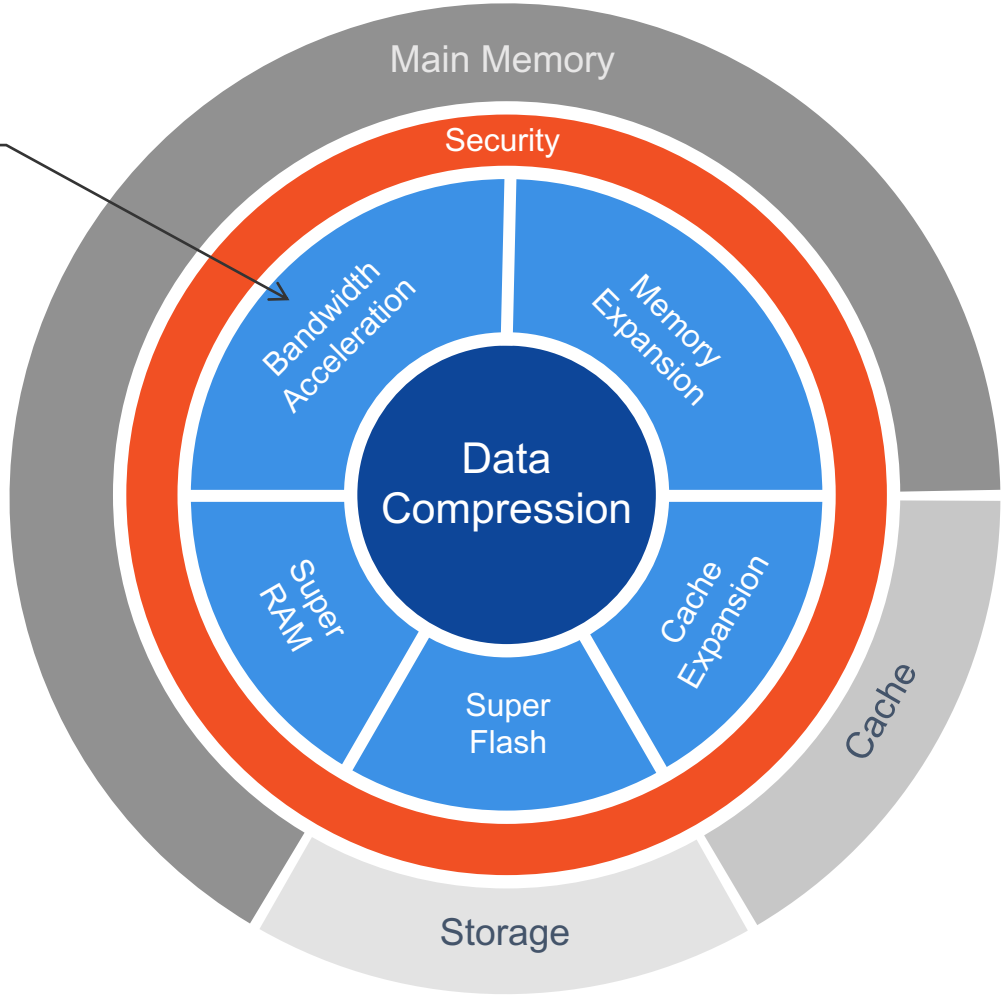
Products

Ziptilion™ Bandwidth

Up to 50% main memory bandwidth acceleration

Scheduled to be released: Q4-2022





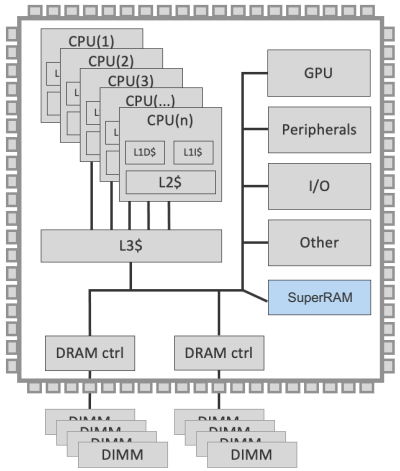
ZeroPoint TECHNOLOGIES

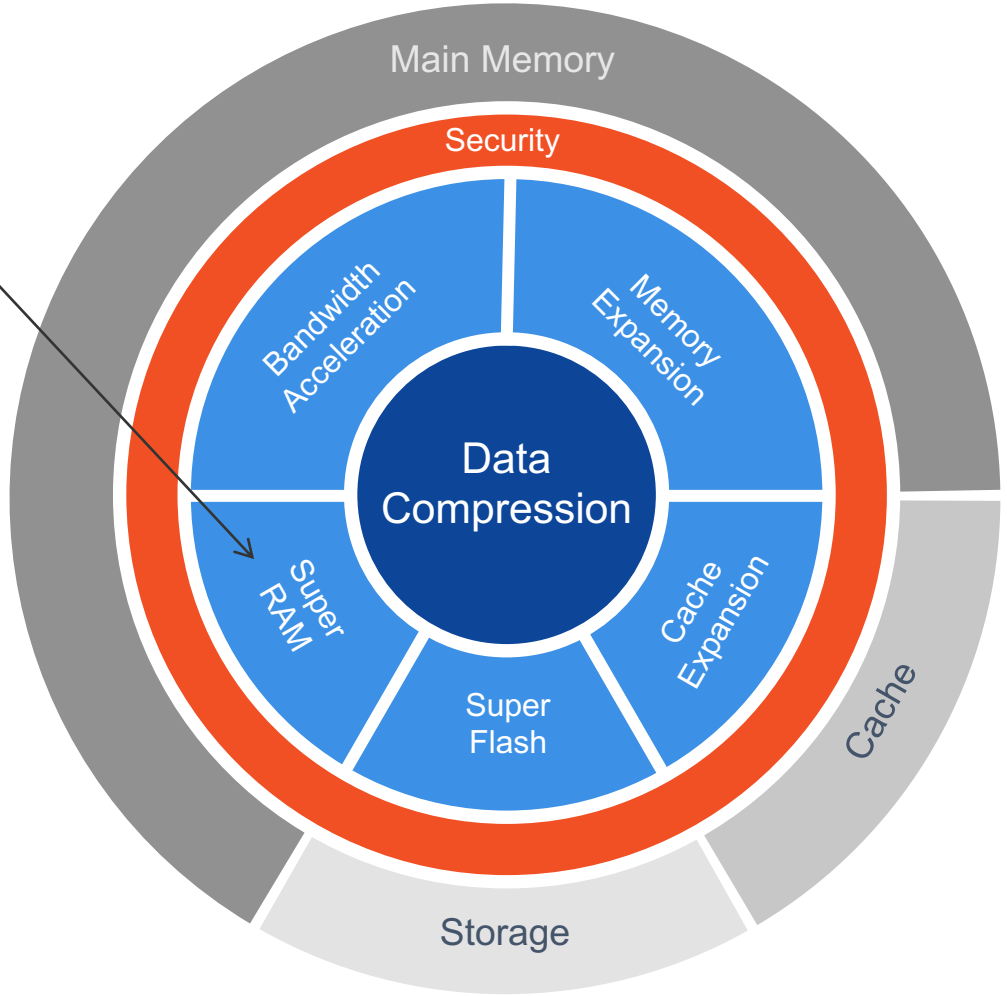
Products

SuperRAM

High performance and low latency hardware accelerated zram/zswap at unmatched power efficiency

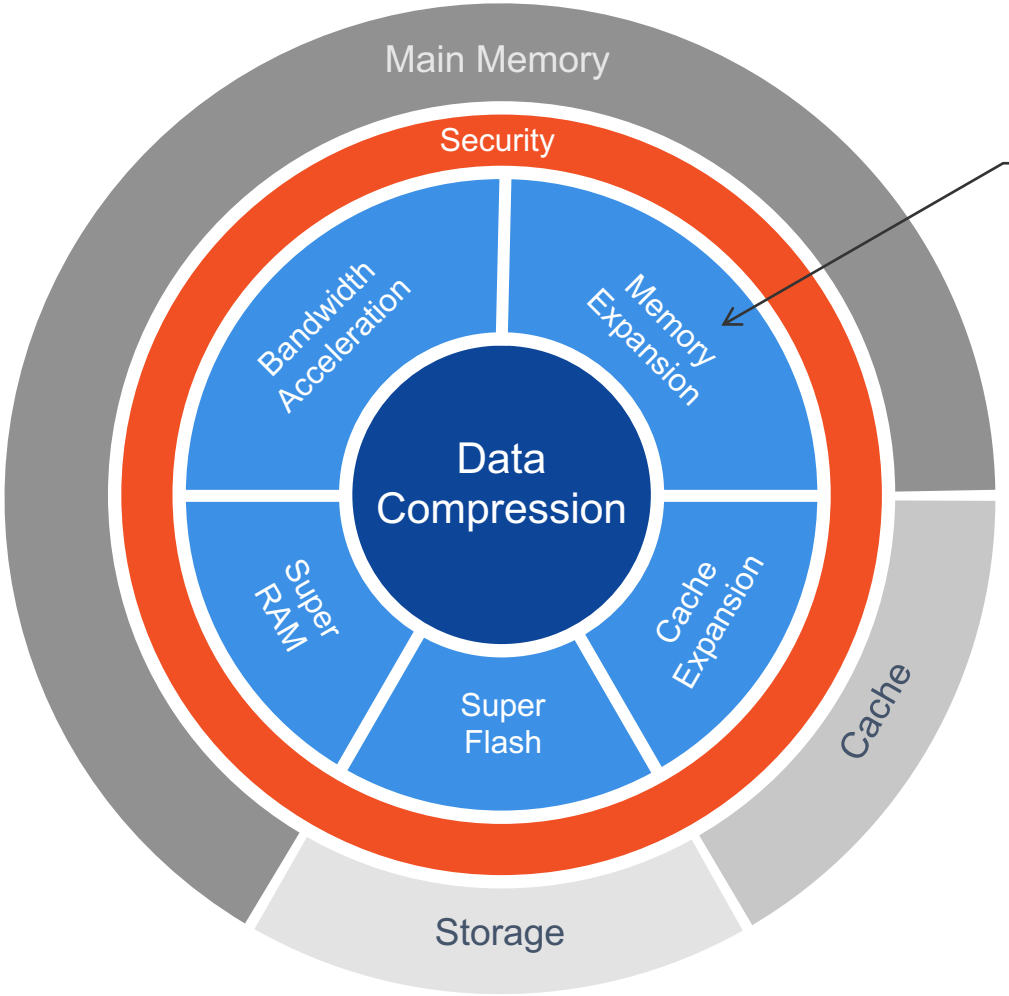
Released – Product available





ZeroPoint TECHNOLOGIES

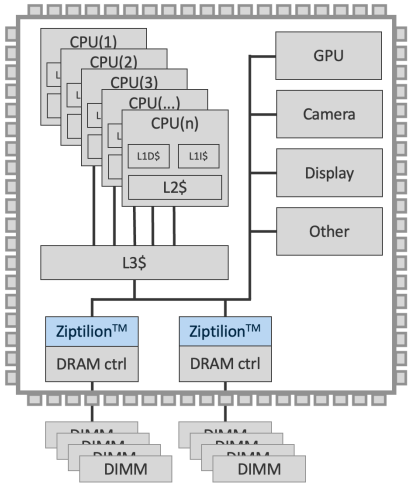
Products



Ziptilion™ Memory Expansion

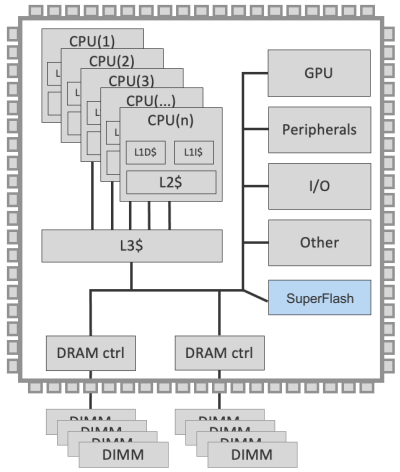
2-3x main memory expansion

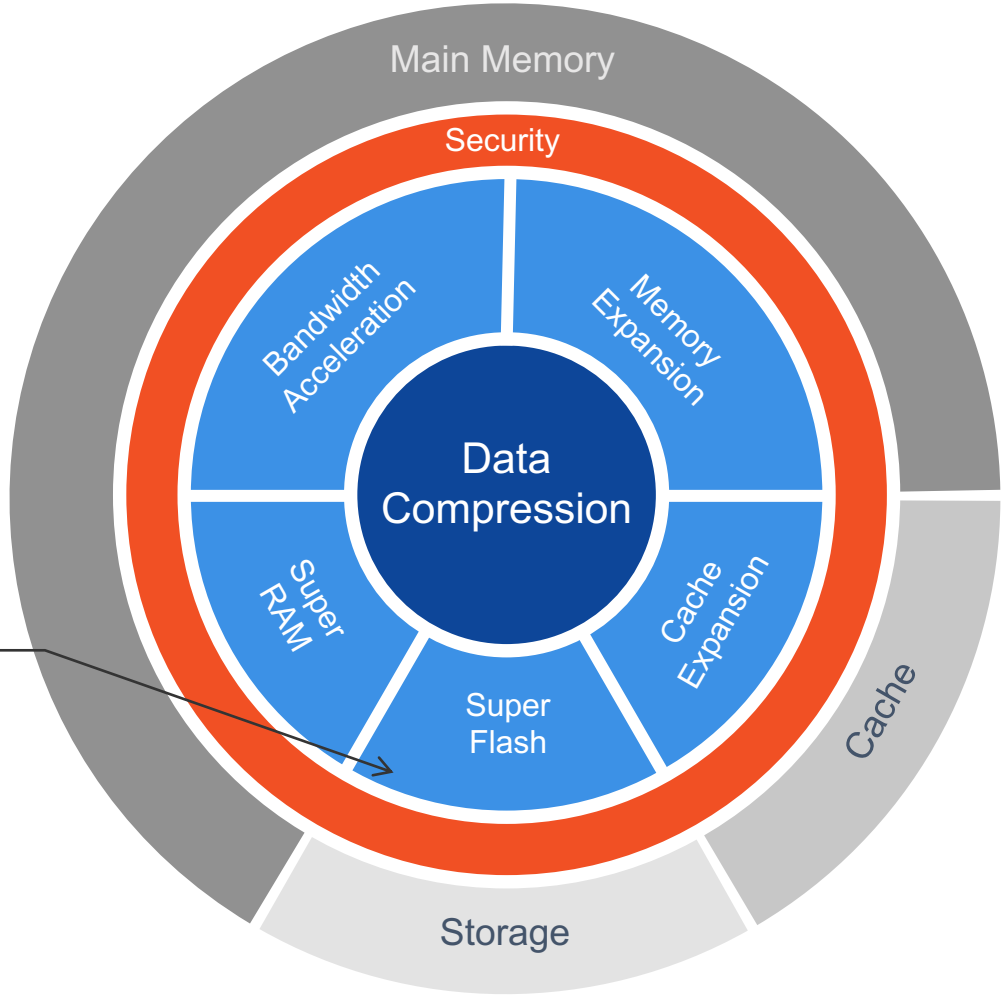
Scheduled to be released:
(contact for details)



ZeroPoint TECHNOLOGIES

Products





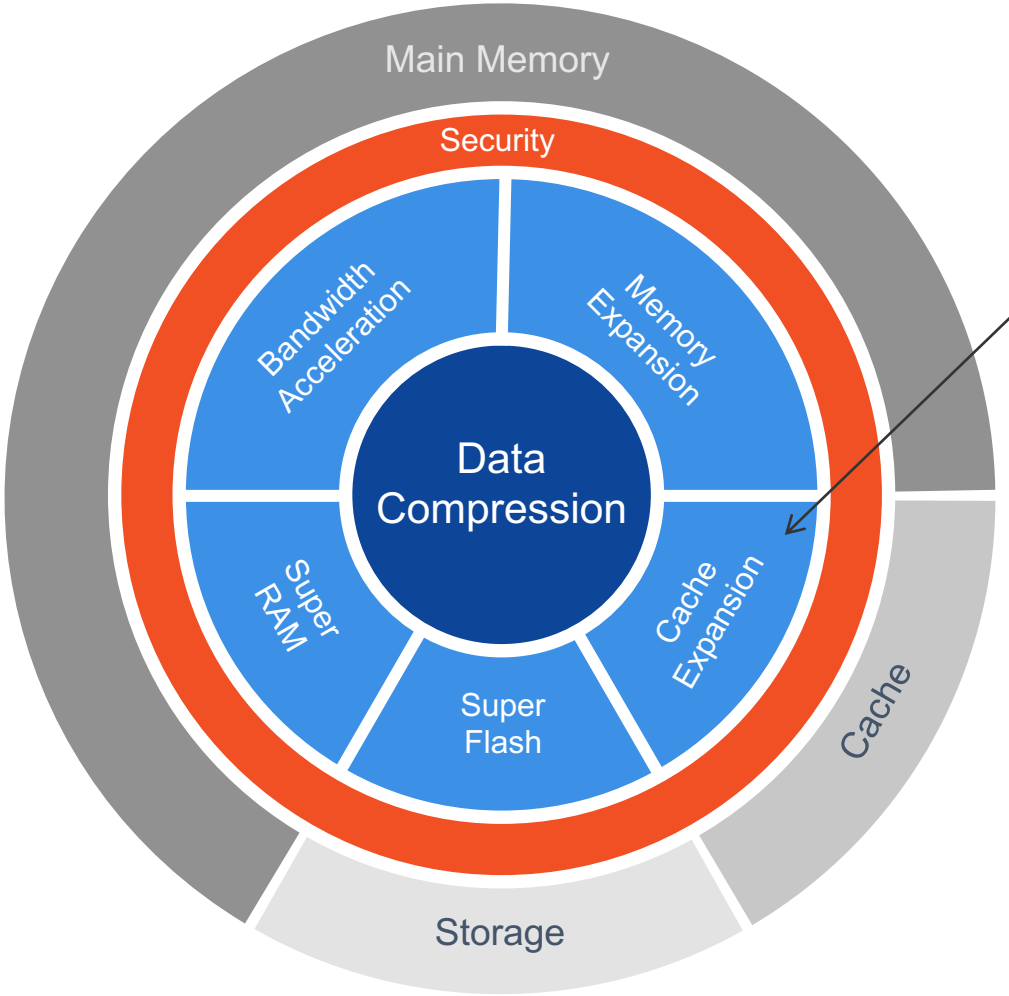
SuperFlash

High performance and low latency
2-3x hardware accelerated
flash compression at
unmatched power efficiency

Scheduled to be released:
(contact for details)

ZeroPoint TECHNOLOGIES

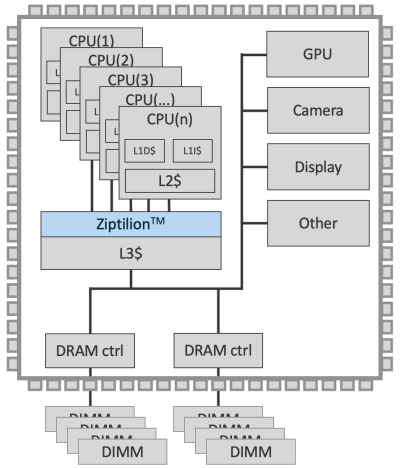
Products



Ziptilion™ Cache Expansion

2-3x last-level cache capacity expansion

Research: (contact for details)



ZeroPoint TECHNOLOGIES

ZeroPoint technology in EPI-SGA2

European Processor Initiative

- EPAC 2.0 (European Processor Accelerators) contain a memory compression module developed by ZeroPoint Technologies.
- The module offers an average of 2x compression ratio which translates into significant memory bandwidth acceleration at unmatched power efficiency.
- It is built on ZeroPoint's proprietary state of the art general purpose and lossless algorithm.

ZeroPoint TECHNOLOGIES

About ZeroPoint Technologies

Prof. Per Stenström – CSO
Co-founder/inventor

- Professor at Chalmers University of Technology.
- Invented main memory compression technique in 1990's
- Internationally renowned memory expert
- Senior industry experience at Sun Microsystems
- Wide industry network.

Dr. Angelos Arelakis – CTO
Co-founder/inventor

- Memory architecture and ultra-fast data compression expert.
- Recipient of King Carl XVI Gustaf's award for science, technology and environment.

Company founded 2016, over 50 man-years invested in R&D

20 person R&D team

- Compression Algorithm Research & Development
- Memory Architecture
- High Volume ASIC/FPGA Development and Manufacturing

arm ERICSSON FINGERPRINTS ORACLE Sun microsystems intel

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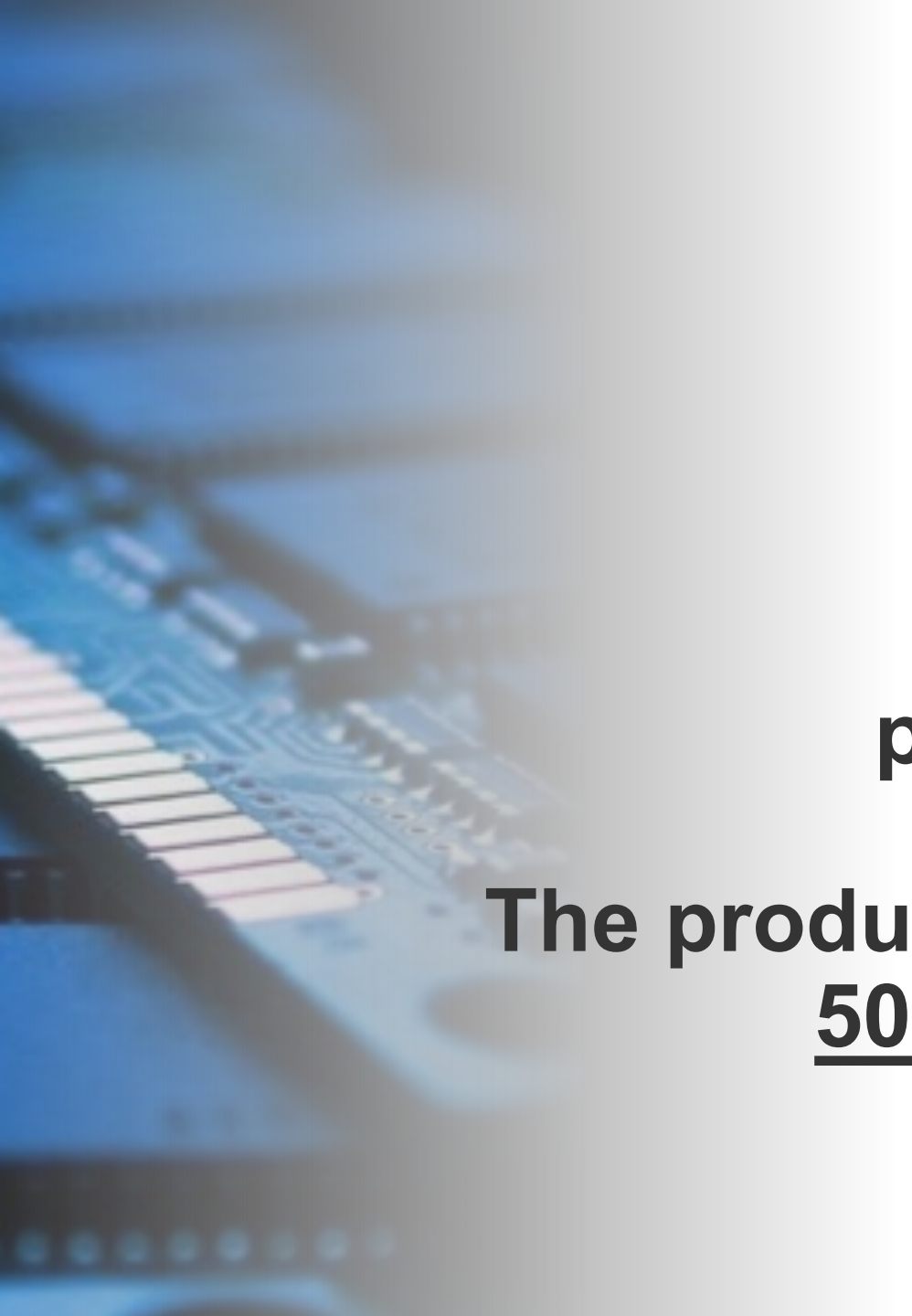
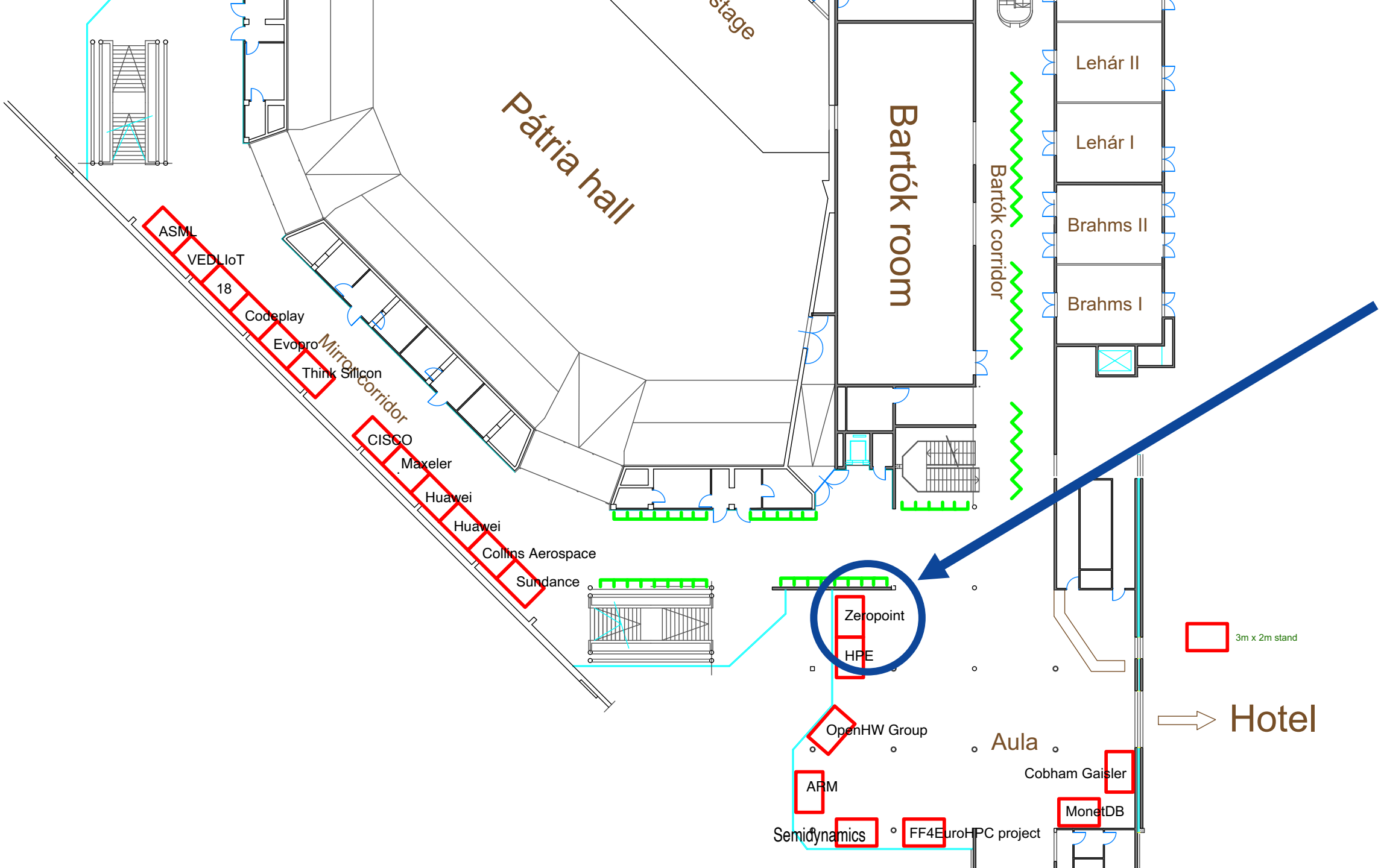
ZeroPoint TECHNOLOGIES



ZeroPoint technology puts wasted resources to work

The product and business value is up to 50% more Performance per Watt


Pátria hall
Bartók room
Bartók corridor
Lehár II
Lehár I
Brahms II
Brahms I
ASML
VEDLIoT
18
Codeplay
Evopro
Think Silicon
Mirror corridor
CISCO
Maxeler
Huawei
Huawei
Collins Aerospace
Sundance
Zeropoint
HPE
OpenHW Group
ARM
Semidynamics
FF4EuroHPC project
Aula
Cobham Gaisler
MonetDB
3m x 2m stand
Hotel
ZeroPoint
TECHNOLOGIES

Remove the waste. Release the power.

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CEO
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