

Rethinking chip(let) design for next generation ADAS applications

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Martin Zeller
Senior Director SoC

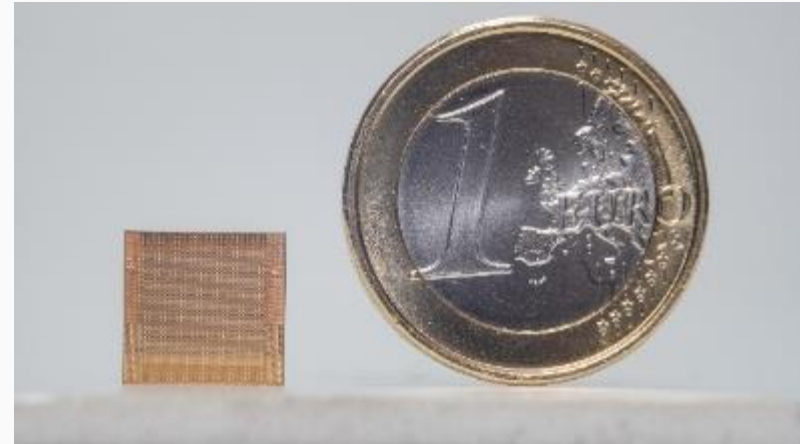


- Complexity



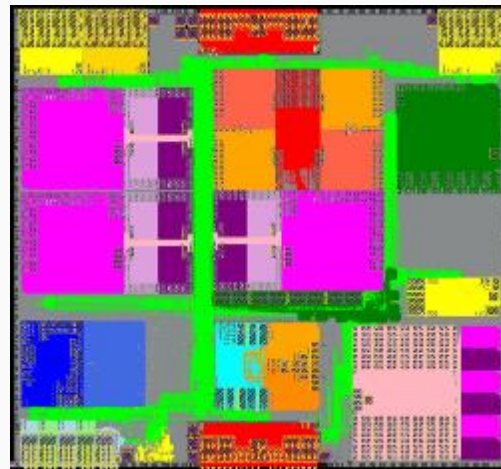
2022

- DCT's automotive platform concept



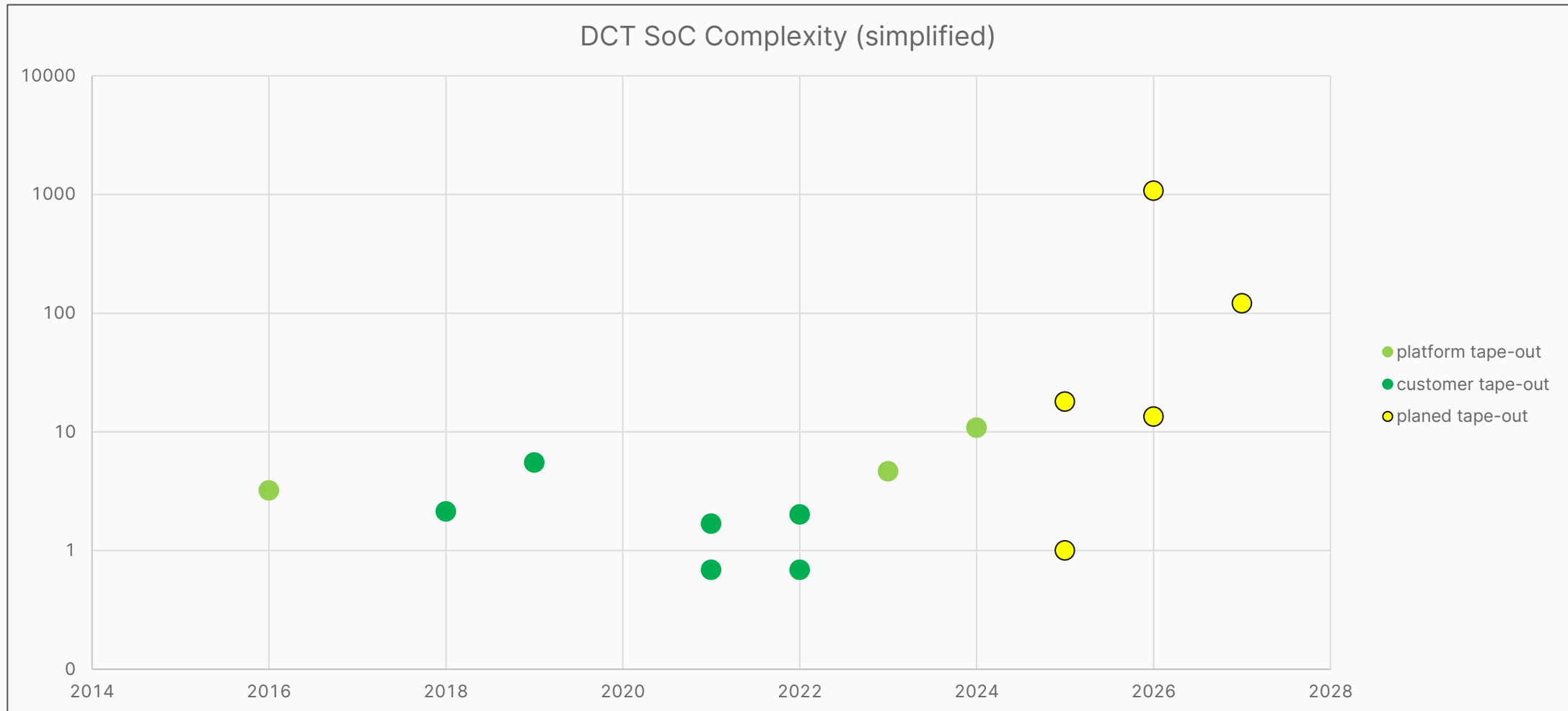
2023

- success stories

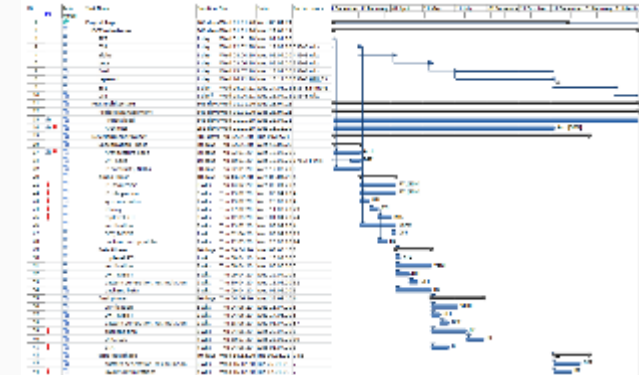
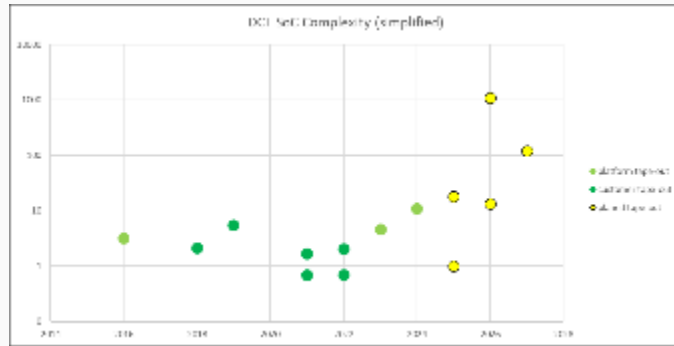


2024

Life is getting more Complex



Contradicting Targets



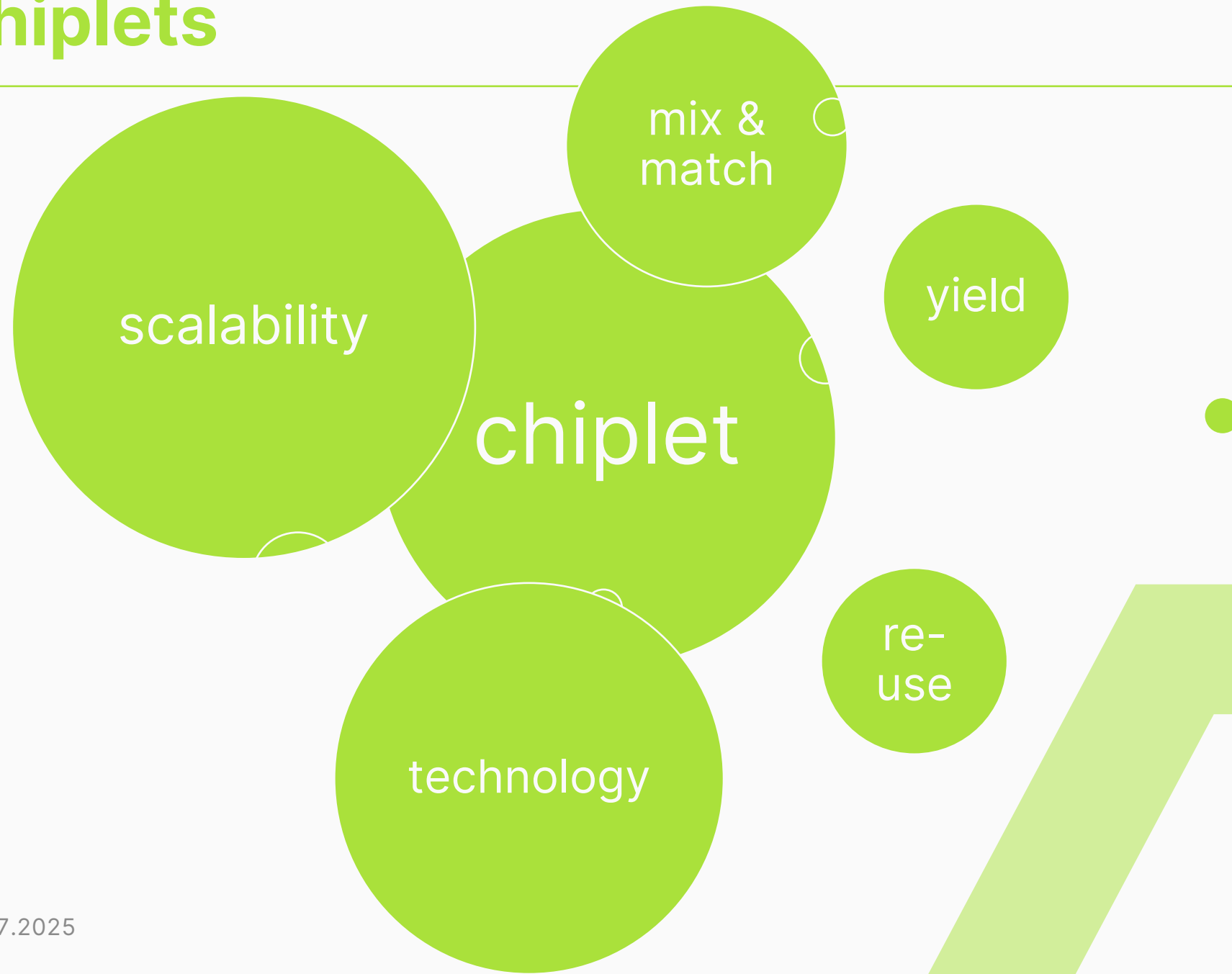
➤ increase the complexity by x1000

➤ keep the schedule

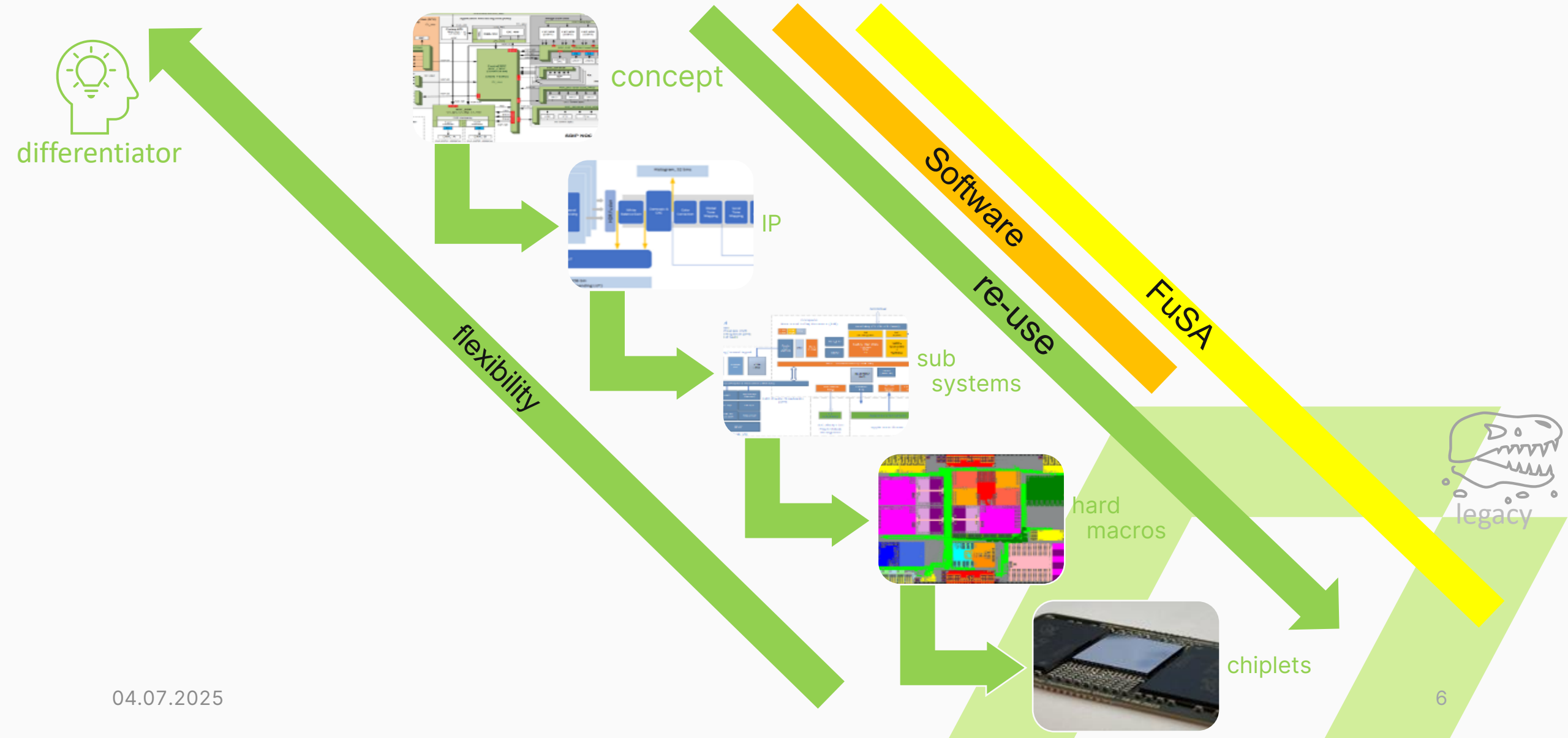
chiplets
x10

technology
& tools
x10

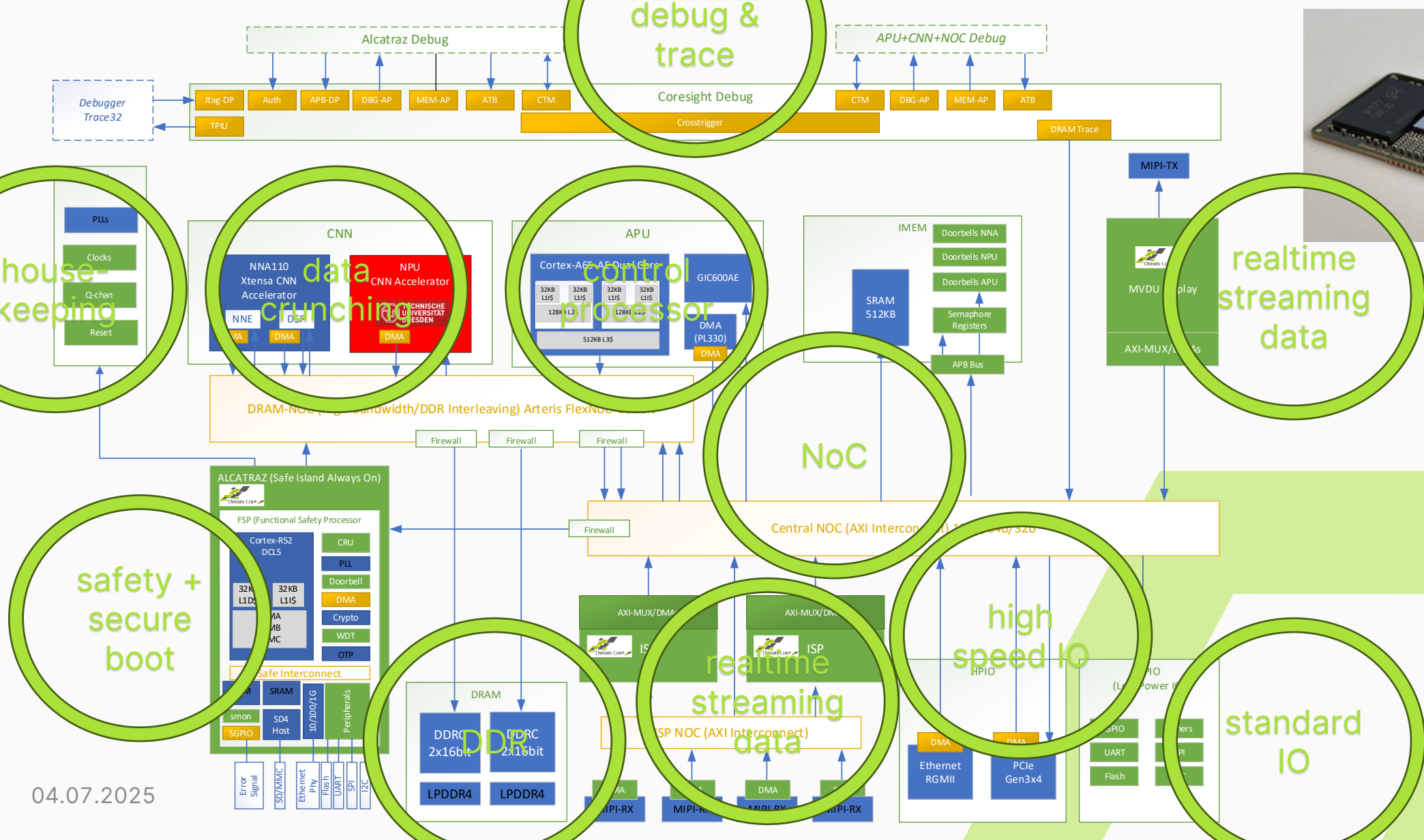
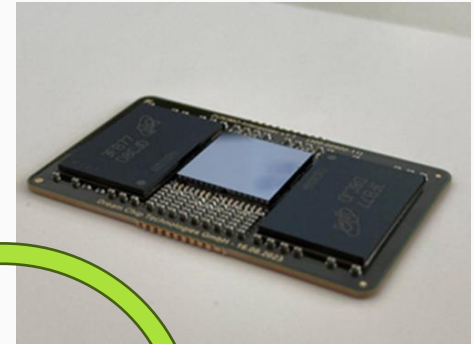
platform
x10



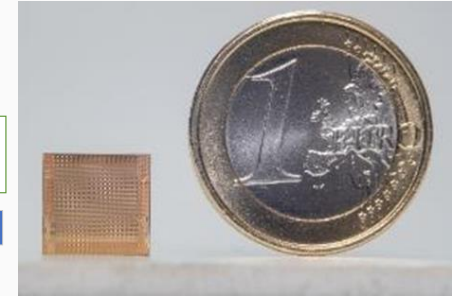
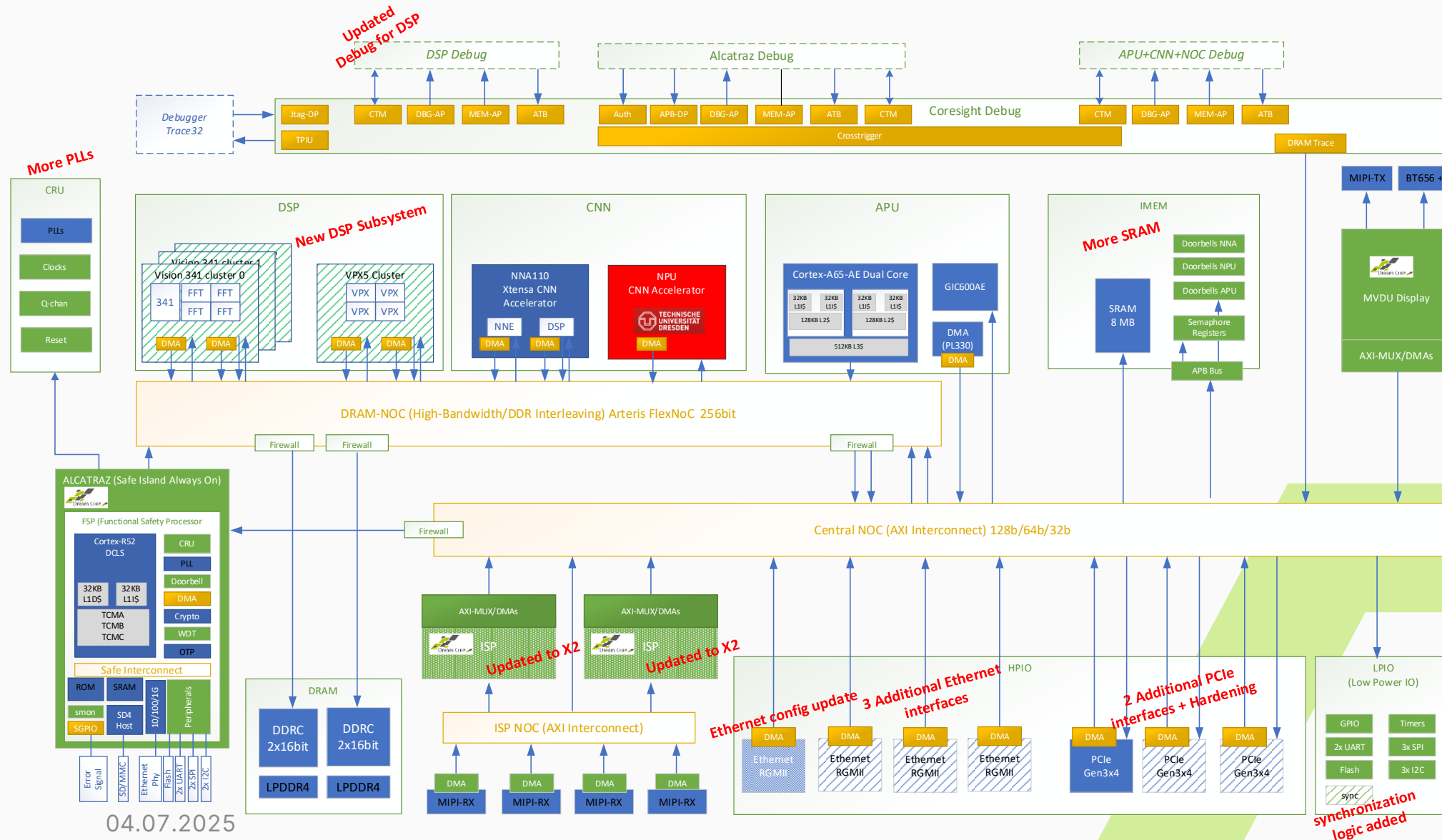
What's the Platform ?



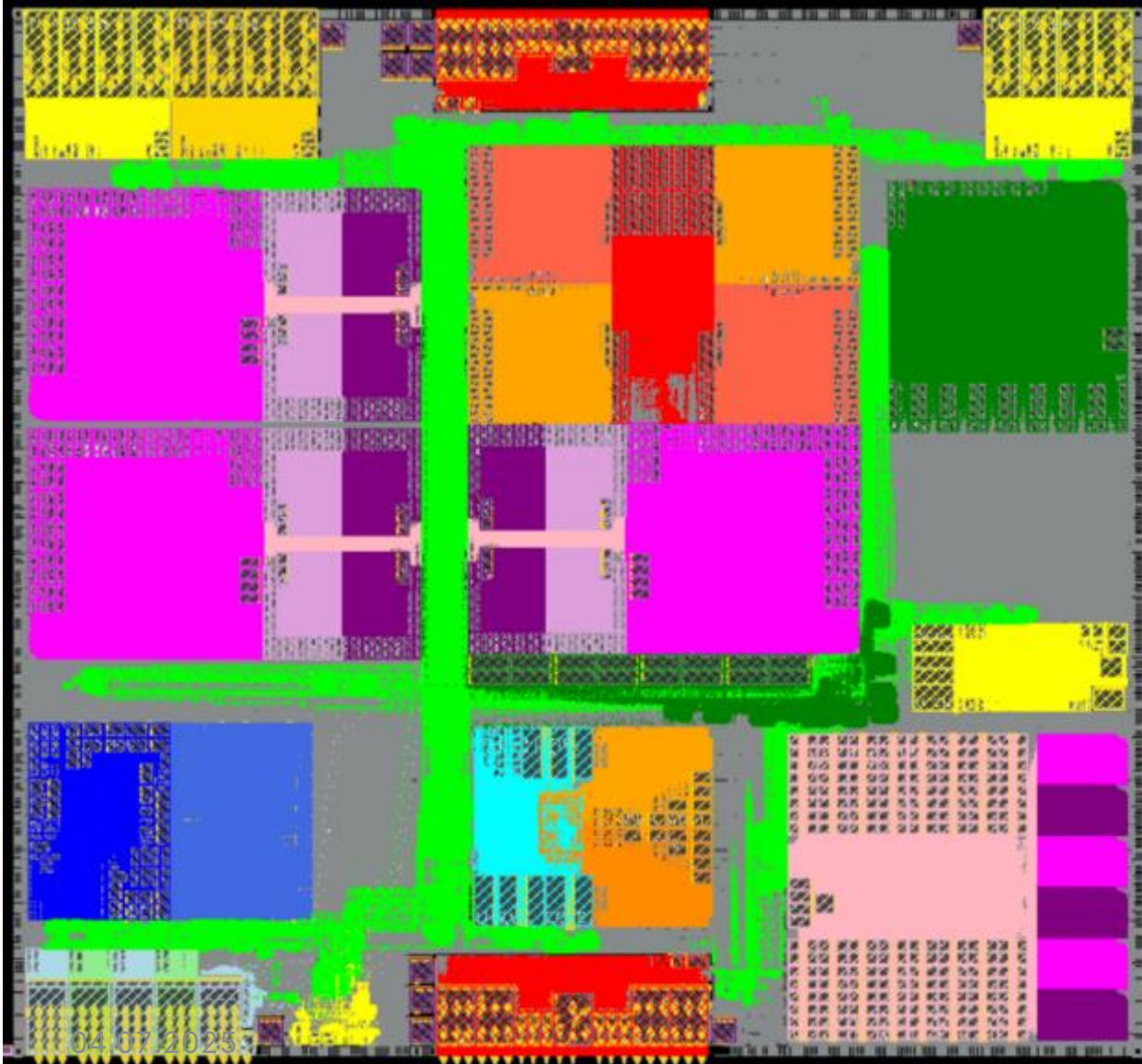
Platform



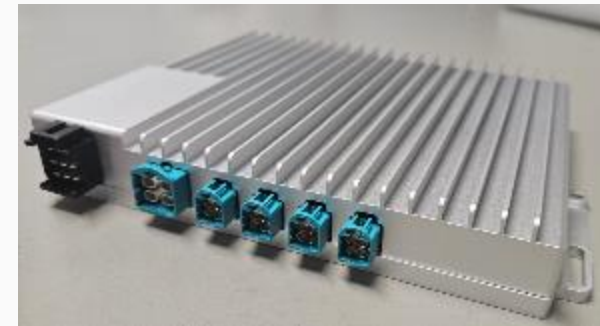
The Power of the Platform



The Power of the Platform



- ** info: there are 337,511 modules.
- ** info: there are 57,950,106 stdCell insts.
- ** info: there are 39 Pad insts.
- ** info: there are 2,418 macros.
- ** info: there are 2,404,435 multi-height stdCell insts



- 7 months idea to test chip tape-out
- tape-out done July 2024
- 217 mm²

Summary

- need to keep schedule (and budget) under control with increasing complexity
- various methods to cope with complexity
 - chiplets
 - tools / technology
 - platform
- 200 mm² in 7 months
 - platform proven again
- ready for the future's challenges





Martin Zeller

Senior Director SoC Engineering

martin.zeller@dreamchip.de

+49 170 5700 419

Dream Chip Technologies GmbH

Steinriede 10, 30827 Garbsen, Germany





DREAM CHIP