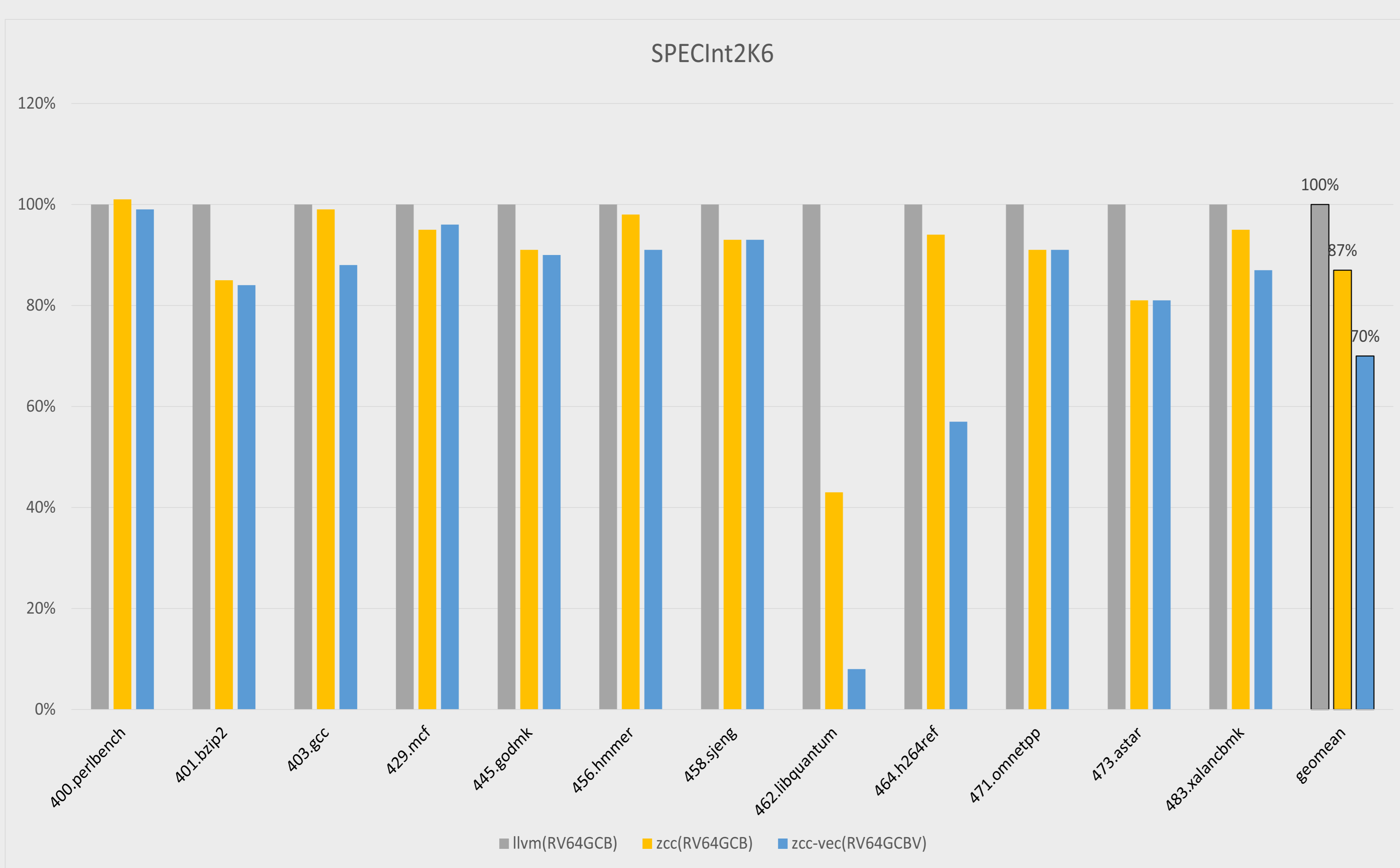


Accelerate HPC and AI applications with RVV auto vectorization

Hualin Wu, Terapines Ltd



Relative dynamic inst. count, lower is better, data path: 512 bits

ABOUT TERAPINES

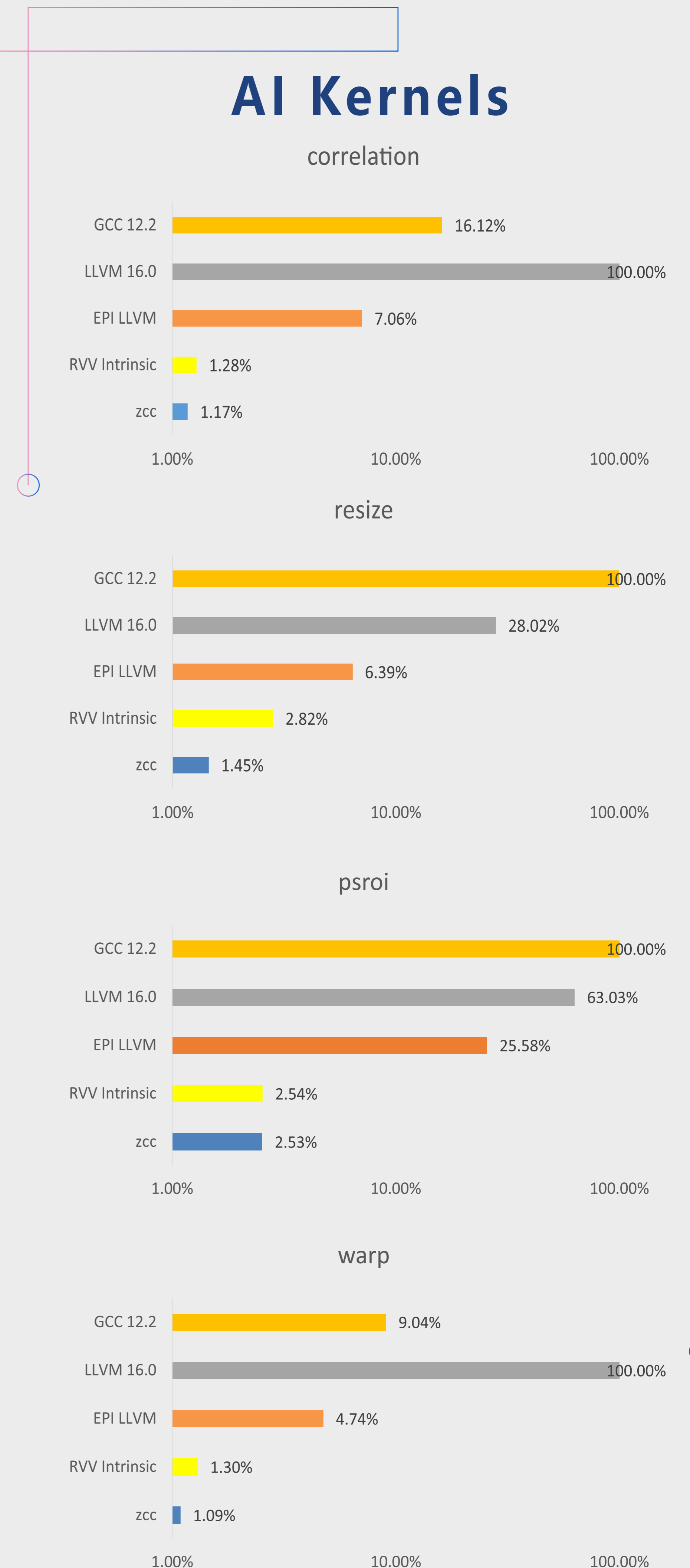


Terapines is a hardware software co-design solution provider for RISC-V since 2019.

Our SDK includes:

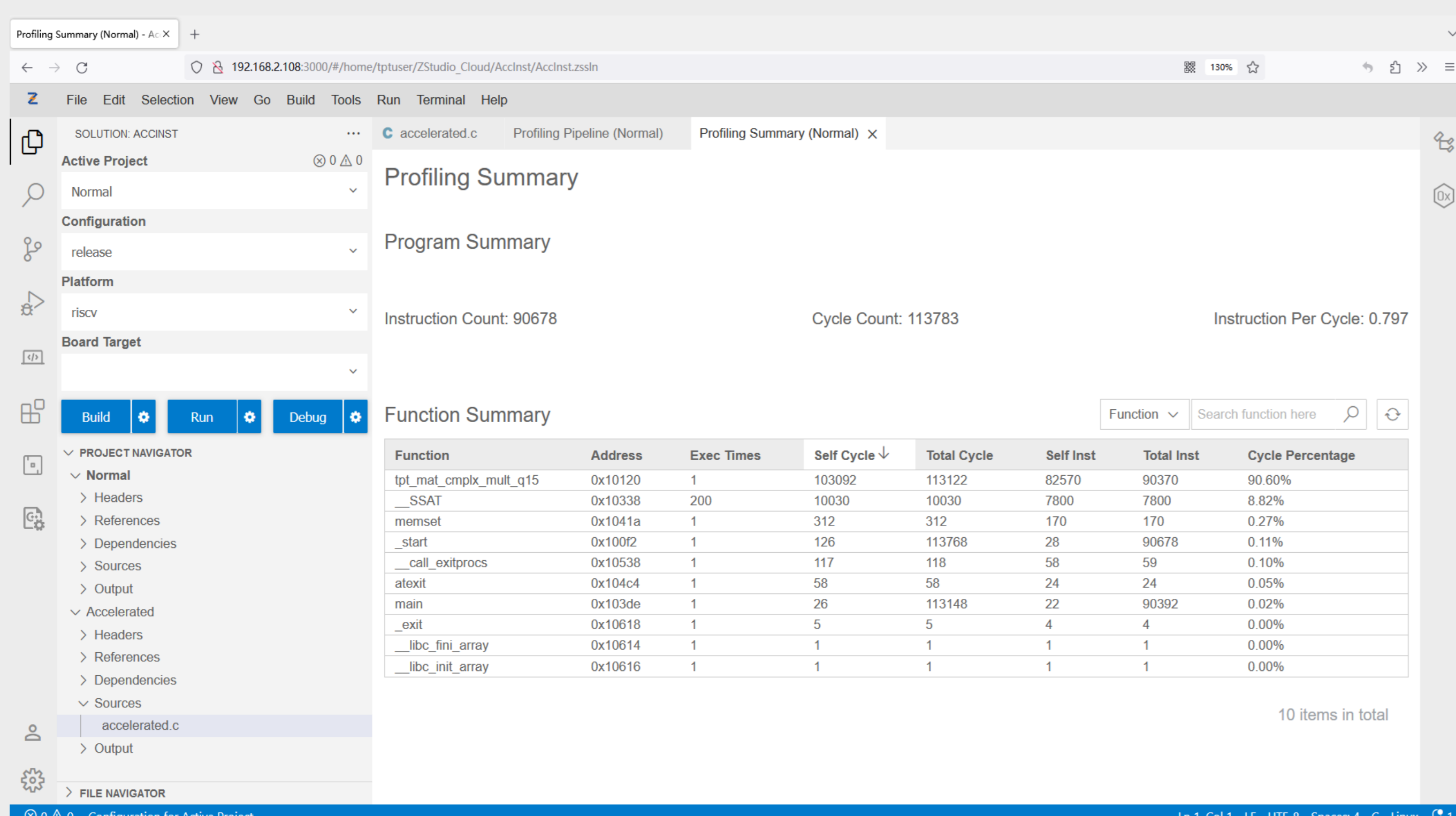
- cloud and cross platform IDE **ZStudio** (not yet another Eclipse based IDE)
- high performance C/C++/Fortran compiler **ZCC**
- cycle accurate and instruction set simulator **zemu**
- software debugger **zdb**
- ISO26262-6 functional safety rule checker **zchecker** etc

We also provide tools and services for rapid architecture exploration and instruction customization, with Terapines' ESL virtual board builder **zvboard** and SDK auto generator **zigen**.

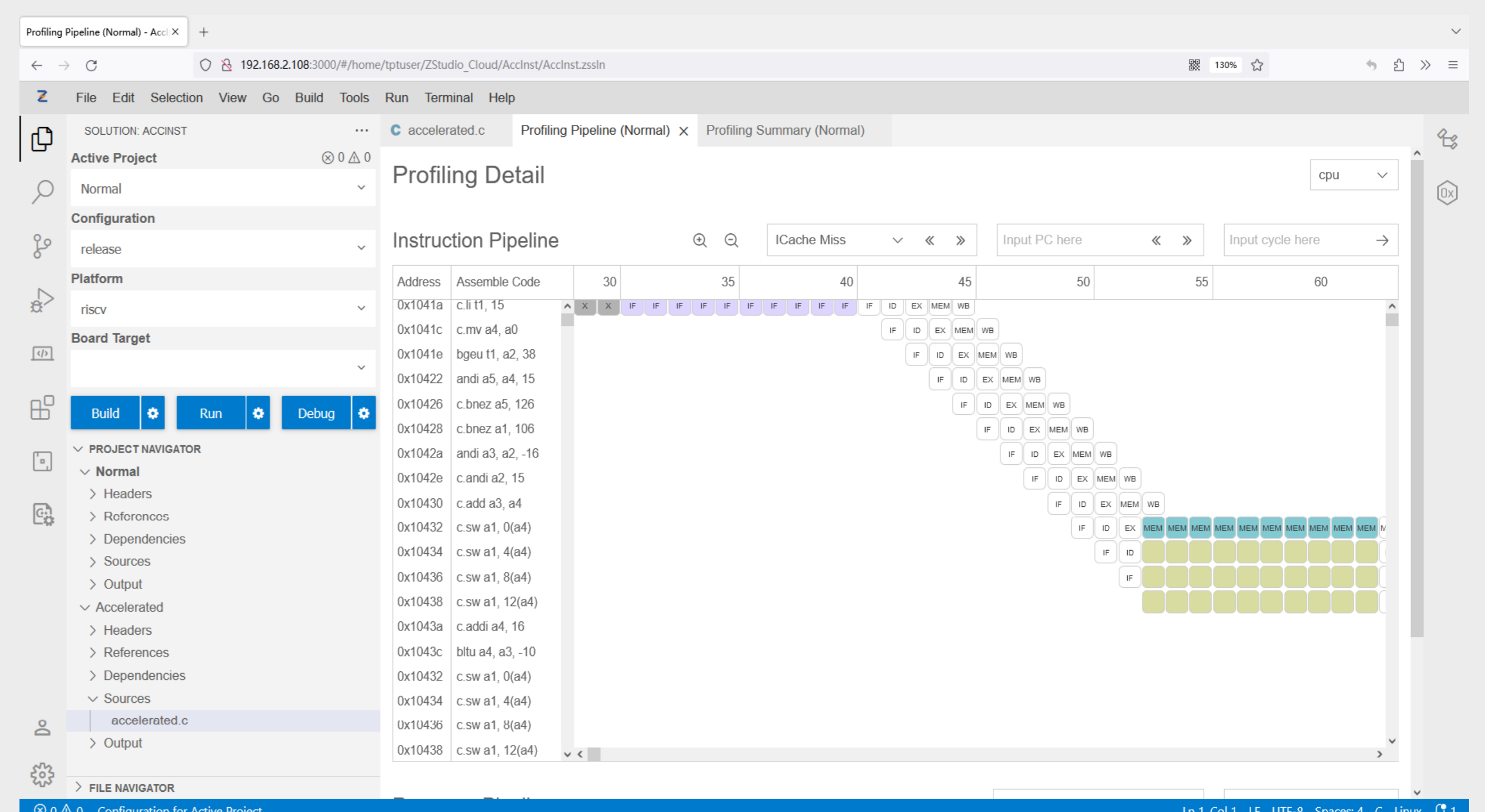


Relative dynamic inst. count, lower is better, data path: 512 bits

Source code: https://github.com/dodohack/rv_lib



Profiling with zemu simulator on cloud IDE ZStudio



Pipeline stage performance analysis on cloud IDE ZStudio



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