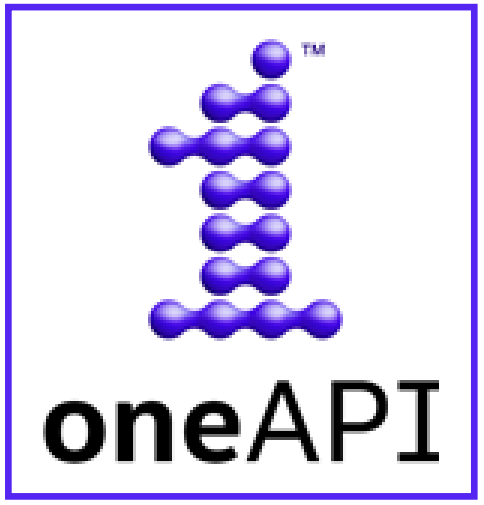


oneAPI Level Zero Overview

What Is Level Zero?

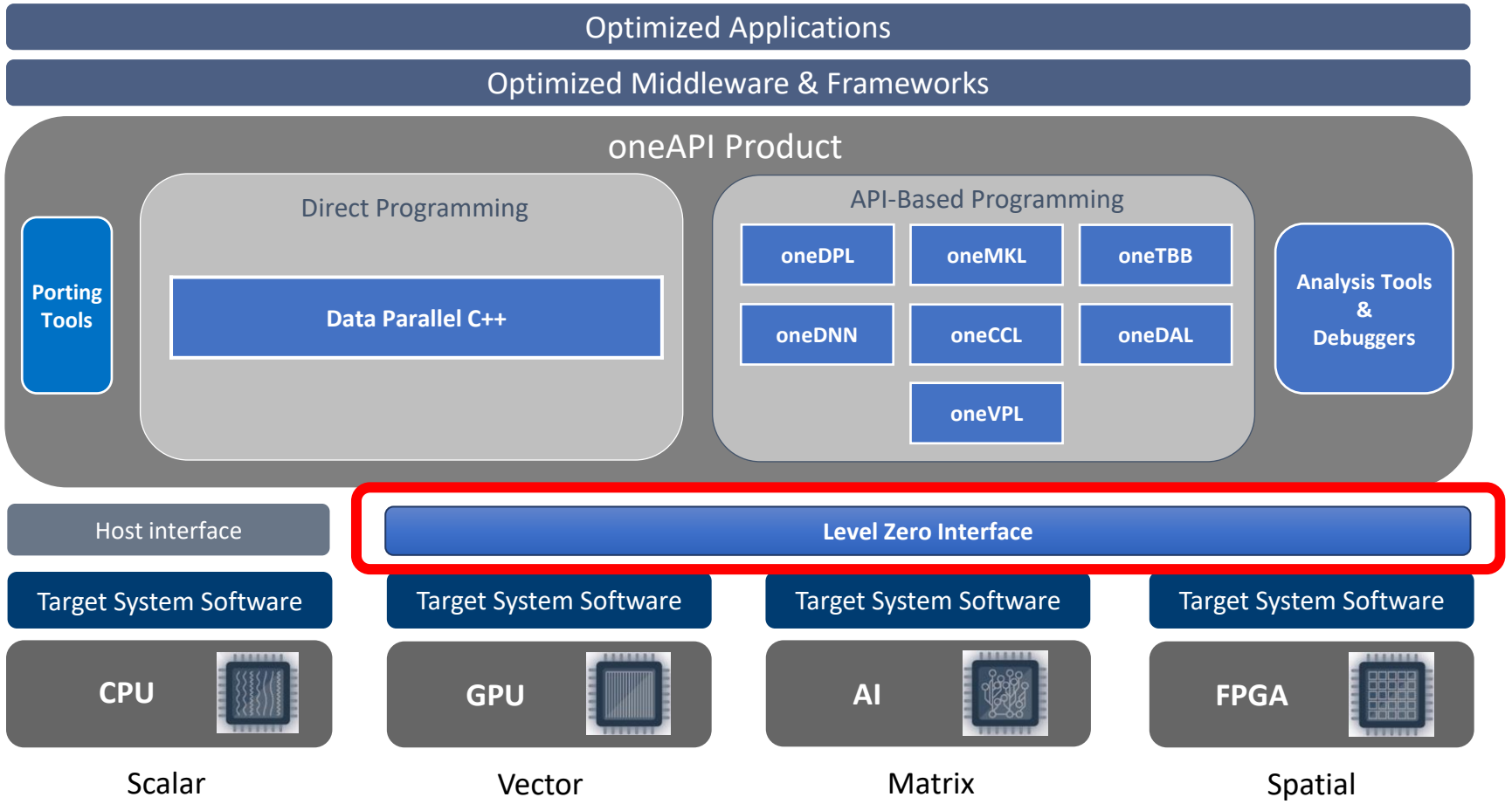
- Level Zero provides foundational support for oneAPI accelerators
- Level Zero is an Open Standard
  - Adds features and scalability not available in other industry standards
  - 3rd parties are encouraged to contribute and implement
- Includes Core, Tool, and System Management APIs

Core APIs:
- Device Discovery
- Memory Allocation
- Kernel Execution

Tool APIs:
- Profiling
- Kernel Debugging

Sysman APIs:
- Query Resources
- Maintenance
- Administration

oneAPI Software Stack



oneAPI

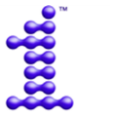
Level Zero Goals:

- Level Zero is designed to support diverse accelerators
  - CPU, GPU, FPGA, VPU, and more
  - Including custom accelerators
- Level Zero is low level
  - Explicit, close-to-the-metal APIs
  - Provides lowest latency to accelerator hardware
- Level Zero is extendable
  - Provide paths for the API to evolve
  - Supports accelerator specific extensions

Call to Action

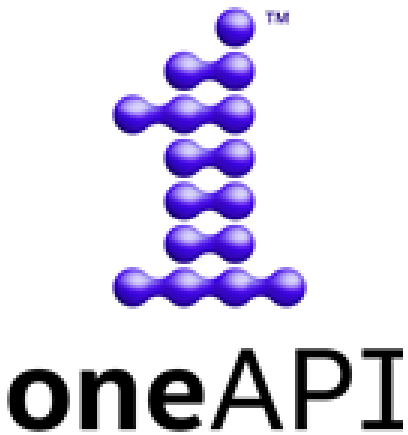
- Evaluate Level Zero:
  - Get Level Zero and give it a try
  - Feedback on the Level Zero specification is welcomed and encouraged
  - You can influence the Level Zero roadmap!
- Adopt Level Zero:
  - Use Level Zero to enable oneAPI Accelerators
  - Use Level Zero to build oneAPI Tools

Help us Expand and Optimize Level Zero Support!



Level Zero Specification and Repositories

- Level Zero Specification
  - https://spec.oneapi.com/versions/latest/elements/l0/source/index.html
- Level Zero Loader (Device/Vendor independent)
  - https://github.com/oneapi-src/level-zero
- Level Zero Tests (Conformance and Performance)
  - https://github.com/oneapi-src/level-zero-tests
- Level Zero Intel GPU Driver
  - https://github.com/intel/compute-runtime



Thank You!

http://oneapi.com