Trip down the compute pipeline

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Goals

1. Show how Intel® GPU OpenCL™ stack is built and how components interact with each other when running a simple OpenCL application.

2. Highlight differences in driver’s activities when operating on different API concepts like command lists from oneAPI Level Zero and command buffers from Vulkan.
Components
Components
Driver’s workflow
clGetPlatformIDs

OpenCL Runtime

- Perform parameter and API validation
- Search for devices in the system
- Filter supported devices
- Get device details
- Get device details based on device ID
- Get device details loaded during driver initialization
- Create GEM context
- Initialize OpenCL Runtime internals
- Create internal platform representation
- Return cl_platform_id handle

i915

- Create GEM context handle
clBuildProgram
clEnqueue* - command creation
clEnqueue* - command submission
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