Intel® oneAPI VTune™ Profiler 2021.1.1 Gold

Recommendations:
  Increase execution time:

> Application execution time is too short. Metrics data may be unreliable. Consider reducing the sampling interval or increasing your application execution time.

Elapsed Time: 0.067s

> Application execution time is too short. Metrics data may be unreliable. Consider reducing the sampling interval or increasing your application execution time.

CPU Time:	0.089s
Memory Bound:	11.1% of Pipeline Slots
L1 Bound:	13.9% of Clockticks
L2 Bound:	0.0% of Clockticks
L3 Bound:	7.6% of Clockticks
DRAM Bound:	0.0% of Clockticks
DRAM Bandwidth Bound:	0.0% of Elapsed Time
Store Bound:	0.0% of Clockticks
Loads:	40,080,000
Stores:	19,440,000
LLC Miss Count:	0
Average Latency (cycles):	11
Total Thread Count:	9
Paused Time:	0s

Bandwidth Utilization:

Bandwidth Domain	Platform Maximum	Observed Maximum	Average	% of Elapsed Time with High BW Utilization(%)
DRAM, GB/sec	10	1.400	0.890	0.0%

Collection and Platform Info:
  Application Command Line: ./codecs/HHI-VVC/decoder/vvdecapp "-b" "./bin/HHI-VVC/randomaccess_fast.cfg/CLASS_C/ RaceHorses_416x240_30_QP_22_HHI-VVC.bin"

  User Name: root

Operating System: 5.4.0-72-generic DISTRIB_ID=Ubuntu DISTRIB_RELEASE=18.04 DISTRIB_CODENAME=bionic DISTRIB_DESCRIPTION="Ubuntu 18.04.5 LTS"

Computer Name: eimon

Result Size: 15.2 MB

Collection start time: 22:28:52 18/04/2021 UTC

Collection stop time: 22:28:53 18/04/2021 UTC

Collector Type: Event-based sampling driver

CPU:
   Name: Intel(R) Processor code named Kabylake ULX

   Frequency: 1.992 GHz

   Logical CPU Count: 8

   Max DRAM Single-Package Bandwidth: 10.000 GB/s

   Cache Allocation Technology:
      Level 2 capability: not detected

      Level 3 capability: not detected

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Recommendations:
  Increase execution time:

> Application execution time is too short. Metrics data may be unreliable. Consider reducing the sampling interval or increasing your application execution time.

Elapsed Time: 0.054s

> Application execution time is too short. Metrics data may be unreliable. Consider reducing the sampling interval or increasing your application execution time.

CPU Time: 0.115s
Memory Bound: 21.0% of Pipeline Slots

> The metric value is high. This may indicate that a significant fraction of execution pipeline slots could be stalled due to demand memory load and stores. Explore the metric breakdown by memory hierarchy, memory bandwidth information, and correlation by memory objects.

L1 Bound: 17.1% of Clockticks

> This metric shows how often machine was stalled without missing the L1 data cache. The L1 cache typically has the shortest latency. However, in certain cases like loads blocked on older stores, a load might suffer a high latency even though it is being satisfied by the L1.

L2 Bound: 0.0% of Clockticks
L3 Bound: 4.9% of Clockticks
DRAM Bound: 0.0% of Clockticks
    DRAM Bandwidth Bound: 0.0% of Elapsed Time
Store Bound: 0.0% of Clockticks
Loads: 36,360,000
Stores: 19,200,000
LLC Miss Count: 0
Average Latency (cycles): 14
Total Thread Count: 9
Paused Time: 0s

Bandwidth Utilization:

Bandwidth Domain	Platform Maximum	Observed Maximum	Average	% of Elapsed Time with High BW Utilization(%)
DRAM, GB/sec	10	1.100	0.925	0.0%

Collection and Platform Info:
    Application Command Line: ./codecs/HHI-VVC/decoder/vvdecapp "-b" "./bin/HHI-VVC/randomaccess_fast.cfg/CLASS_C/RaceHorses_416x240_30_QP_22_HHI-VVC.bin"

    User Name: root

Operating System: 5.4.0-72-generic DISTRIB_ID=Ubuntu DISTRIB_RELEASE=18.04 DISTRIB_CODENAME=bionic DISTRIB_DESCRIPTION="Ubuntu 18.04.5 LTS"

Computer Name: eimon

Result Size: 14.9 MB

Collection start time: 07:47:57 19/04/2021 UTC

Collection stop time: 07:47:58 19/04/2021 UTC

Collector Type: Event-based sampling driver

CPU:
  Name: Intel(R) Processor code named Kabylake ULX

  Frequency: 1.992 GHz

  Logical CPU Count: 8

  Max DRAM Single-Package Bandwidth: 10.000 GB/s

  Cache Allocation Technology:
    Level 2 capability: not detected

    Level 3 capability: not detected