

Sevarebench Measurement Results

MP-Slice Scalable Search

Various Measurements

March 30, 2023

Nodes : idex meld tinyman yieldly (Intel 6312U(2.4GHz) 512GiB 25Gbits)

Protocols: 4 5

Datatypes : 8 64 128 256 512

Inputs : 1024 10240 102400

Preprocessing: 0

SplitRoles: 0 1

Pack Bool: 0

Optimized Sharing: 1

SSL: 0 1

Summary file : resultsMP-Slice/2023-03/29_15-02-40/Eslice-run-summary.dat

Total Experiment runtime : 0h35min49sec

Experiment run status: completed

Latex built date: 23.03.30 16:45

Experiment Networking Information

Speedtest Info

measured speed between nodes 1 and 2

Threads: 1

total sender speed: 24.8 Gbits/sec

total receiver speed: 24.8 Gbits/sec

Threads: 10

total sender speed: 24.82 Gbits/sec

total receiver speed: 24.81 Gbits/sec

measured speed between nodes 1 and 3

Threads: 1

total sender speed: 24.8 Gbits/sec

total receiver speed: 24.8 Gbits/sec

Threads: 10

total sender speed: 24.80 Gbits/sec

total receiver speed: 24.79 Gbits/sec

measured speed between nodes 2 and 3

Threads: 1

total sender speed: 24.7 Gbits/sec

total receiver speed: 24.7 Gbits/sec

Threads: 10

total sender speed: 24.82 Gbits/sec

total receiver speed: 24.79 Gbits/sec

measured speed between nodes 1 and 4

Threads: 1

total sender speed: 24.8 Gbits/sec

total receiver speed: 24.8 Gbits/sec

Threads: 10

total sender speed: 24.80 Gbits/sec

total receiver speed: 24.80 Gbits/sec

measured speed between nodes 2 and 4

Threads: 1

total sender speed: 24.8 Gbits/sec

total receiver speed: 24.8 Gbits/sec

Threads: 10

total sender speed: 24.82 Gbits/sec

total receiver speed: 24.81 Gbits/sec
measured speed between nodes 3 and 4
Threads: 1
total sender speed: 24.8 Gbits/sec
total receiver speed: 24.7 Gbits/sec
Threads: 10
total sender speed: 24.80 Gbits/sec
total receiver speed: 24.75 Gbits/sec

Latency Info

Node index statistics

— 10.10.56.3 ping statistics —

rtt min/avg/max/mdev = 0.264/0.339/0.530/0.098 ms

— 10.10.56.4 ping statistics —

rtt min/avg/max/mdev = 0.199/0.310/0.518/0.109 ms

— 10.10.56.5 ping statistics —

rtt min/avg/max/mdev = 0.235/0.266/0.287/0.017 ms

Node meld statistics

— 10.10.56.4 ping statistics —

rtt min/avg/max/mdev = 0.239/0.295/0.432/0.069 ms

— 10.10.56.5 ping statistics —

rtt min/avg/max/mdev = 0.247/0.319/0.557/0.119 ms

— 10.10.56.2 ping statistics —

rtt min/avg/max/mdev = 0.259/0.290/0.316/0.020 ms

Node tinyman statistics

— 10.10.56.5 ping statistics —

rtt min/avg/max/mdev = 0.251/0.322/0.473/0.078 ms

— 10.10.56.2 ping statistics —

rtt min/avg/max/mdev = 0.262/0.280/0.300/0.015 ms

— 10.10.56.3 ping statistics —

rtt min/avg/max/mdev = 0.266/0.294/0.323/0.018 ms

Node yieldly statistics

— 10.10.56.2 ping statistics —

rtt min/avg/max/mdev = 0.202/0.279/0.497/0.112 ms

— 10.10.56.3 ping statistics —

rtt min/avg/max/mdev = 0.210/0.249/0.285/0.032 ms

— 10.10.56.4 ping statistics —

rtt min/avg/max/mdev = 0.276/0.296/0.311/0.012 ms

Outline I

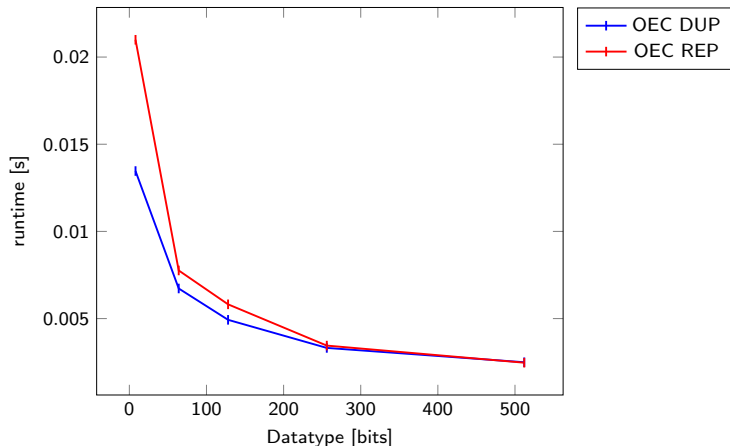
manipulations

Datatype Fixed Input: 102400 all (all) pre0split0pack0opt1ssl0
Datatype Fixed Input: 102400 all (all) pre0split0pack0opt1ssl1
Datatype Fixed Input: 102400 all (all) pre0split1pack0opt1ssl0
Datatype Fixed Input: 102400 all (all) pre0split1pack0opt1ssl1

input

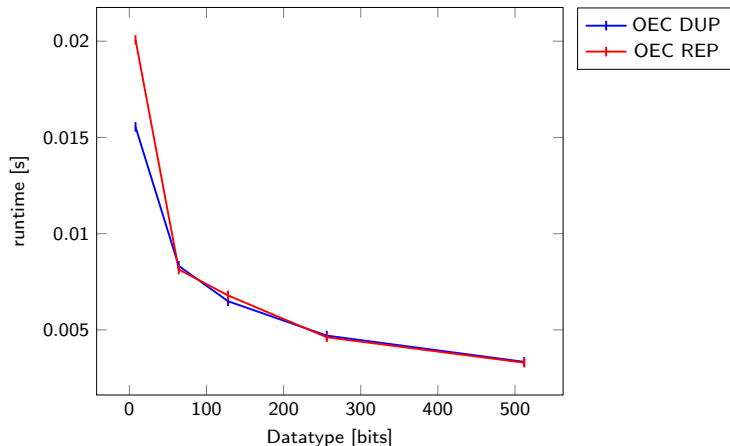
Input Size Protocol -s 4 (OEC DUP) pre0split0pack0opt1ssl0
Input Size Protocol -s 4 (OEC DUP) pre0split0pack0opt1ssl1
Input Size Protocol -s 4 (OEC DUP) pre0split1pack0opt1ssl0
Input Size Protocol -s 4 (OEC DUP) pre0split1pack0opt1ssl1
Input Size Protocol -s 5 (OEC REP) pre0split0pack0opt1ssl0
Input Size Protocol -s 5 (OEC REP) pre0split0pack0opt1ssl1
Input Size Protocol -s 5 (OEC REP) pre0split1pack0opt1ssl0
Input Size Protocol -s 5 (OEC REP) pre0split1pack0opt1ssl1
Input Size Datatype -d d8 (char) pre0split0pack0opt1ssl0
Input Size Datatype -d d8 (char) pre0split0pack0opt1ssl1
Input Size Datatype -d d8 (char) pre0split1pack0opt1ssl0
Input Size Datatype -d d8 (char) pre0split1pack0opt1ssl1
Input Size Datatype -d d64 (uint64) pre0split0pack0opt1ssl0
Input Size Datatype -d d64 (uint64) pre0split0pack0opt1ssl1
Input Size Datatype -d d64 (uint64) pre0split1pack0opt1ssl0
Input Size Datatype -d d64 (uint64) pre0split1pack0opt1ssl1
Input Size Datatype -d d128 (SSE) pre0split0pack0opt1ssl0
Input Size Datatype -d d128 (SSE) pre0split0pack0opt1ssl1
Input Size Datatype -d d128 (SSE) pre0split1pack0opt1ssl0
Input Size Datatype -d d128 (SSE) pre0split1pack0opt1ssl1
Input Size Datatype -d d256 (AVX) pre0split0pack0opt1ssl0
Input Size Datatype -d d256 (AVX) pre0split0pack0opt1ssl1
Input Size Datatype -d d256 (AVX) pre0split1pack0opt1ssl0
Input Size Datatype -d d256 (AVX) pre0split1pack0opt1ssl1
Input Size Datatype -d d512 (AVX512) pre0split0pack0opt1ssl0
Input Size Datatype -d d512 (AVX512) pre0split0pack0opt1ssl1
Input Size Datatype -d d512 (AVX512) pre0split1pack0opt1ssl0
Input Size Datatype -d d512 (AVX512) pre0split1pack0opt1ssl1

MP-Slice Runtimes Datatype Fixed Input: 102400 all (all)



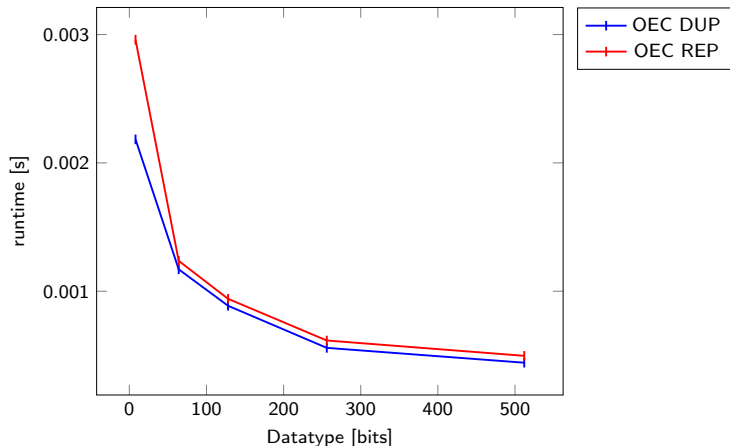
- Ref.Problem: Scalable Search
- Library: MP-Slice - Fixed Input: 102400 all (all)
- Metric: Datatype - runtime
- Switches: Preprocessing: 0, Split Roles: 0, Pack Bool: 0, Optimize Sharing: 1, SSL: 0
- Specs: idex Intel 6312U(2.4GHz) 512GiB 25Gbits

MP-Slice Runtimes Datatype Fixed Input: 102400 all (all)



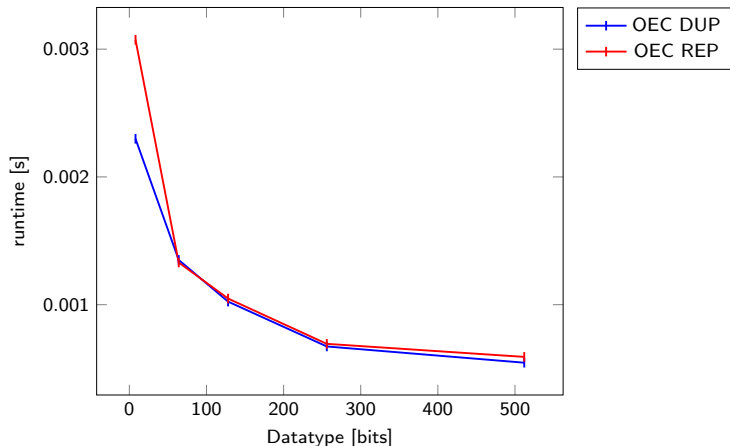
- Ref.Problem: Scalable Search
- Library: MP-Slice - Fixed Input: 102400 all (all)
- Metric: Datatype - runtime
- Switches: Preprocessing: 0, Split Roles: 0, Pack Bool: 0, Optimize Sharing: 1, SSL: 1
- Specs: idex Intel 6312U(2.4GHz) 512GiB 25Gbits

MP-Slice Runtimes Datatype Fixed Input: 102400 all (all)



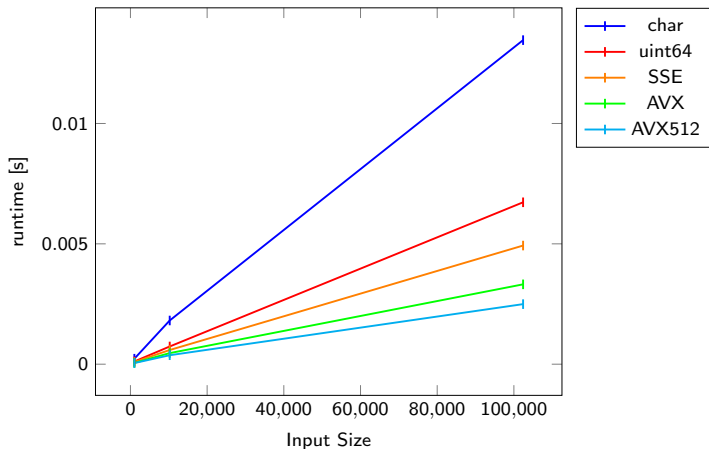
- Ref.Problem: Scalable Search
- Library: MP-Slice - Fixed Input: 102400 all (all)
- Metric: Datatype - runtime
- Switches: Preprocessing: 0, Split Roles: 1, Pack Bool: 0, Optimize Sharing: 1, SSL: 0
- Specs: idex Intel 6312U(2.4GHz) 512GiB 25Gbits

MP-Slice Runtimes Datatype Fixed Input: 102400 all (all)



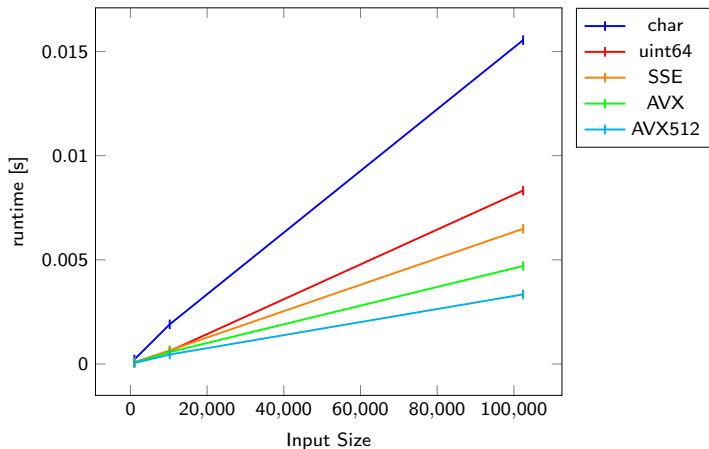
- Ref.Problem: Scalable Search
- Library: MP-Slice - Fixed Input: 102400 all (all)
- Metric: Datatype - runtime
- Switches: Preprocessing: 0, Split Roles: 1, Pack Bool: 0, Optimize Sharing: 1, SSL: 1
- Specs: idex Intel 6312U(2.4GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Protocol -s 4 (OEC DUP)



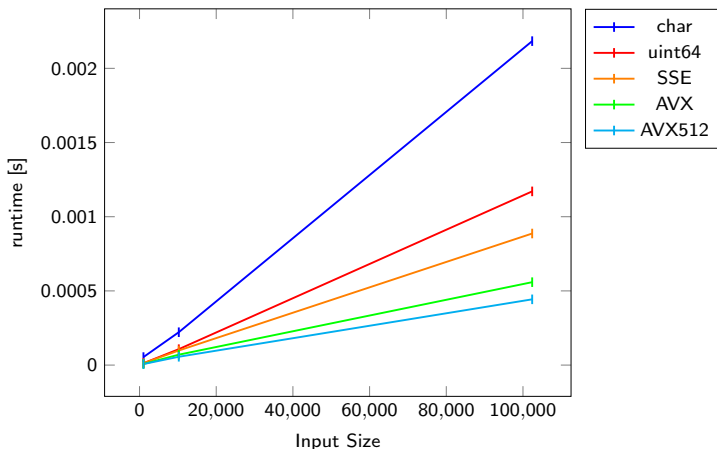
- Ref.Problem: Scalable Search
- Library: MP-Slice - Protocol -s 4 (OEC DUP)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 0, Pack Bool: 0, Optimize Sharing: 1, SSL: 0
- Specs: idex Intel 6312U(2.4GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Protocol -s 4 (OEC DUP)



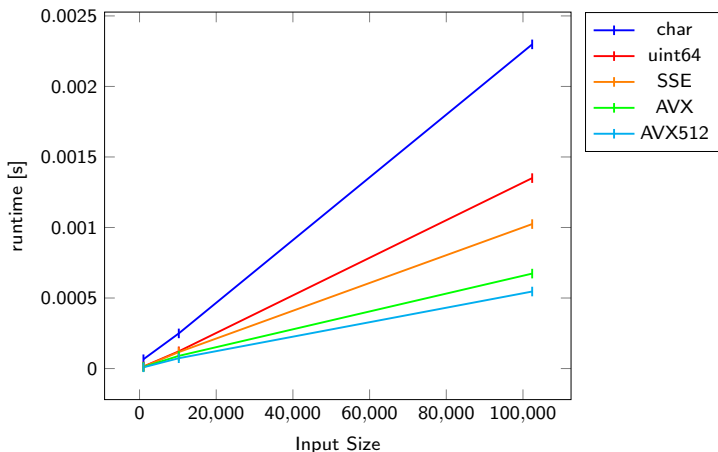
- Ref.Problem: Scalable Search
- Library: MP-Slice - Protocol -s 4 (OEC DUP)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 0, Pack Bool: 0, Optimize Sharing: 1, SSL: 1
- Specs: idex Intel 6312U(2.4GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Protocol -s 4 (OEC DUP)



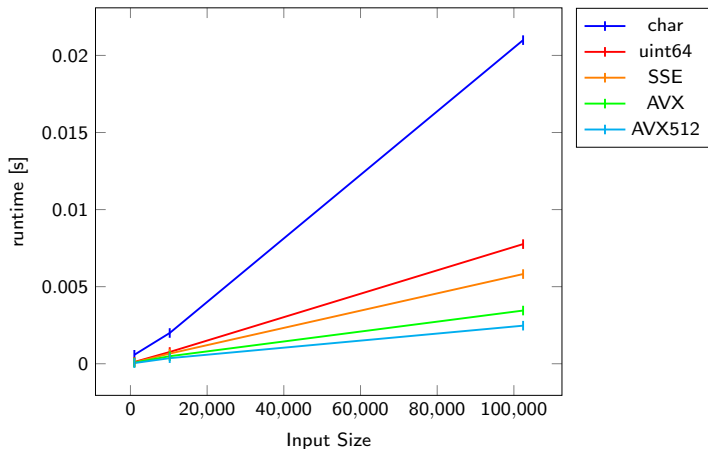
- Ref.Problem: Scalable Search
- Library: MP-Slice - Protocol -s 4 (OEC DUP)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 1, Pack Bool: 0, Optimize Sharing: 1, SSL: 0
- Specs: idex Intel 6312U(2.4GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Protocol -s 4 (OEC DUP)



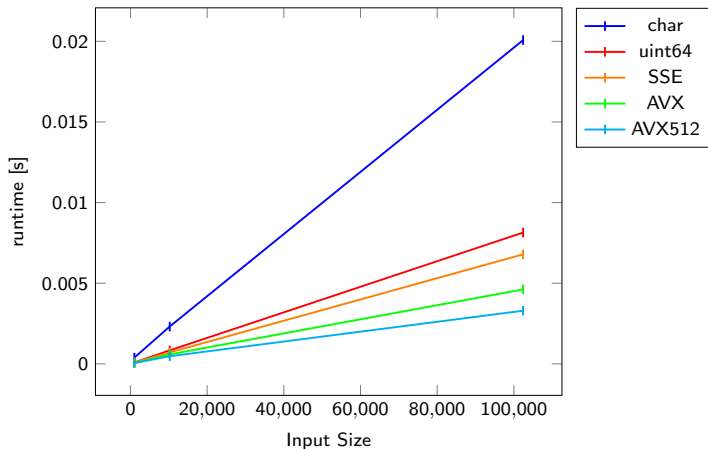
- Ref.Problem: Scalable Search
- Library: MP-Slice - Protocol -s 4 (OEC DUP)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 1, Pack Bool: 0, Optimize Sharing: 1, SSL: 1
- Specs: idex Intel 6312U(2.4GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Protocol -s 5 (OEC REP)



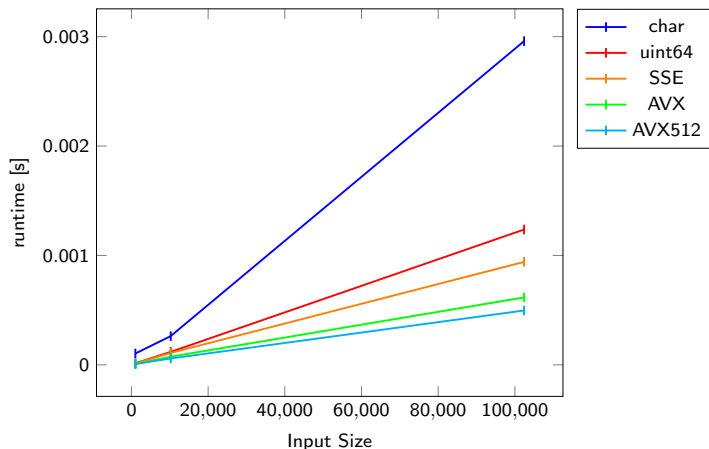
- Ref.Problem: Scalable Search
- Library: MP-Slice - Protocol -s 5 (OEC REP)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 0, Pack Bool: 0, Optimize Sharing: 1, SSL: 0
- Specs: idex Intel 6312U(2.4GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Protocol -s 5 (OEC REP)



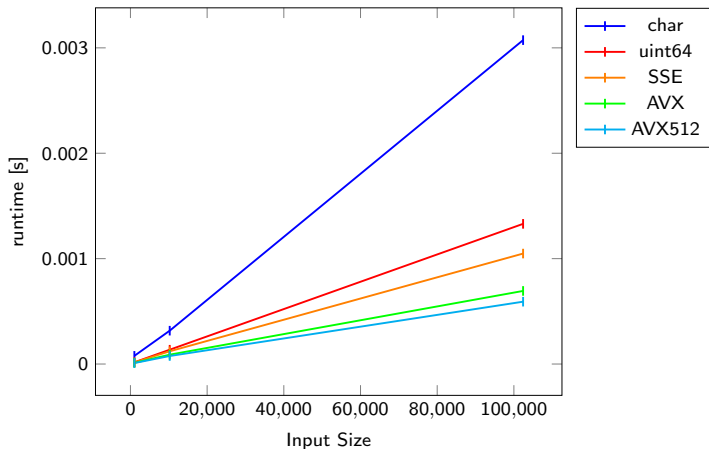
- Ref.Problem: Scalable Search
- Library: MP-Slice - Protocol -s 5 (OEC REP)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 0, Pack Bool: 0, Optimize Sharing: 1, SSL: 1
- Specs: idex Intel 6312U(2.4GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Protocol -s 5 (OEC REP)



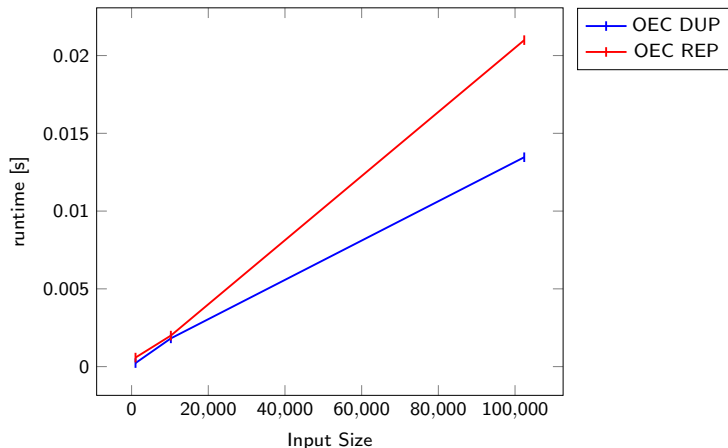
- Ref.Problem: Scalable Search
- Library: MP-Slice - Protocol -s 5 (OEC REP)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 1, Pack Bool: 0, Optimize Sharing: 1, SSL: 0
- Specs: idex Intel 6312U(2.4GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Protocol -s 5 (OEC REP)



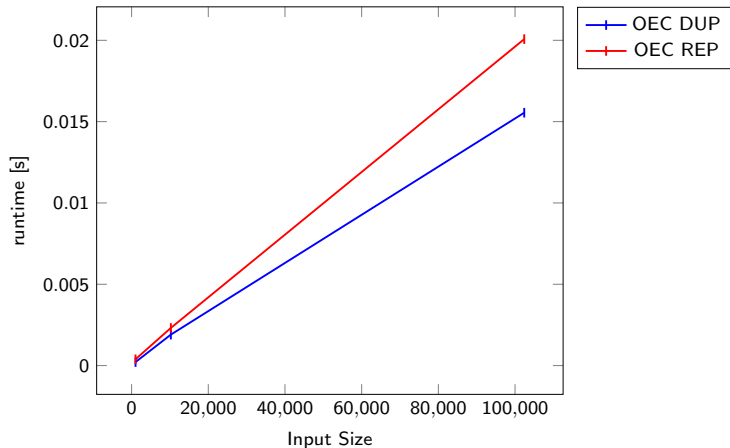
- Ref.Problem: Scalable Search
- Library: MP-Slice - Protocol -s 5 (OEC REP)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 1, Pack Bool: 0, Optimize Sharing: 1, SSL: 1
- Specs: idex Intel 6312U(2.4GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Datatype -d d8 (char)



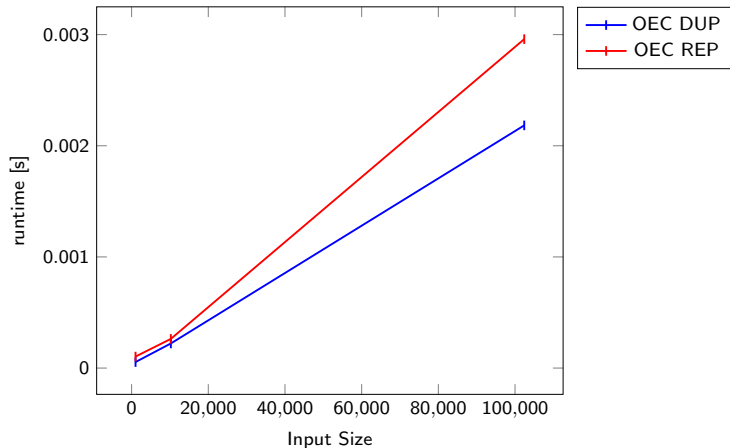
- Ref.Problem: Scalable Search
- Library: MP-Slice - Datatype -d d8 (char)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 0, Pack Bool: 0, Optimize Sharing: 1, SSL: 0
- Specs: idex Intel 6312U(2.4GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Datatype -d d8 (char)



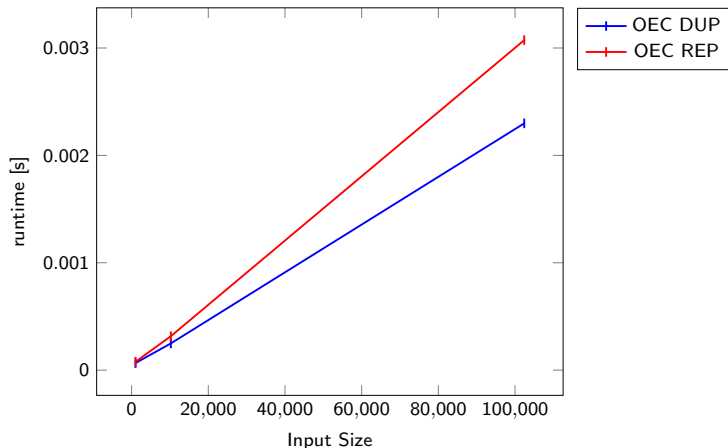
- Ref.Problem: Scalable Search
- Library: MP-Slice - Datatype -d d8 (char)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 0, Pack Bool: 0, Optimize Sharing: 1, SSL: 1
- Specs: idex Intel 6312U(2.4GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Datatype -d d8 (char)



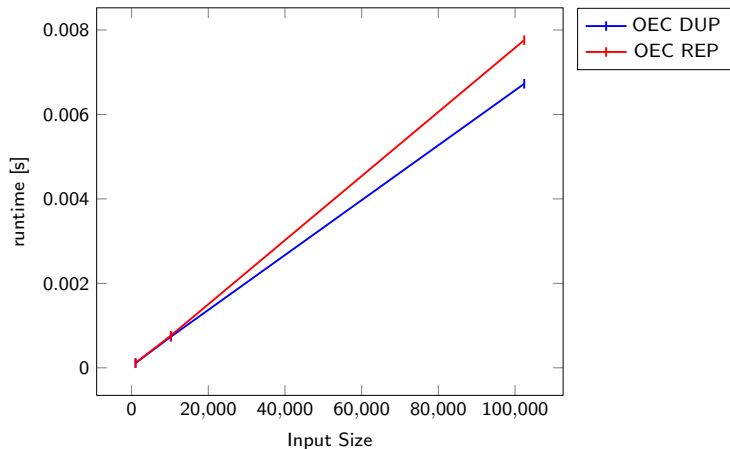
- Ref.Problem: Scalable Search
- Library: MP-Slice - Datatype -d d8 (char)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 1, Pack Bool: 0, Optimize Sharing: 1, SSL: 0
- Specs: idex Intel 6312U(2.4GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Datatype -d d8 (char)



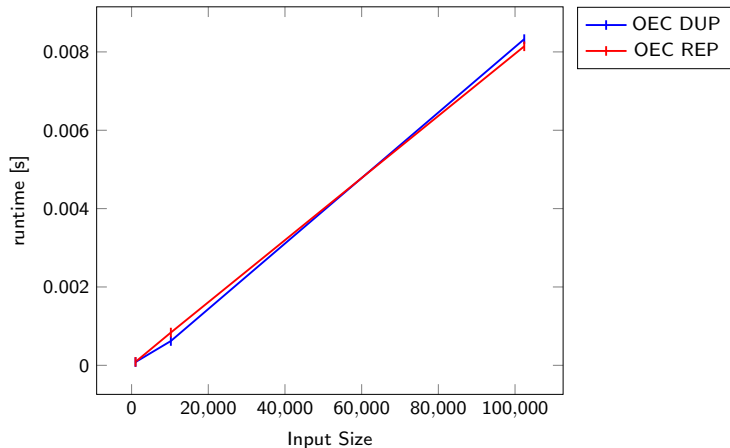
- Ref.Problem: Scalable Search
- Library: MP-Slice - Datatype -d d8 (char)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 1, Pack Bool: 0, Optimize Sharing: 1, SSL: 1
- Specs: idex Intel 6312U(2.4GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Datatype -d d64 (uint64)



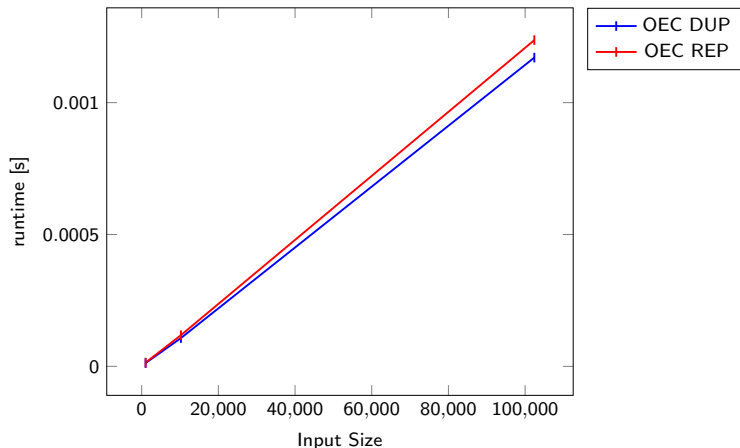
- Ref.Problem: Scalable Search
- Library: MP-Slice - Datatype -d d64 (uint64)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 0, Pack Bool: 0, Optimize Sharing: 1, SSL: 0
- Specs: idex Intel 6312U(2.4GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Datatype -d d64 (uint64)



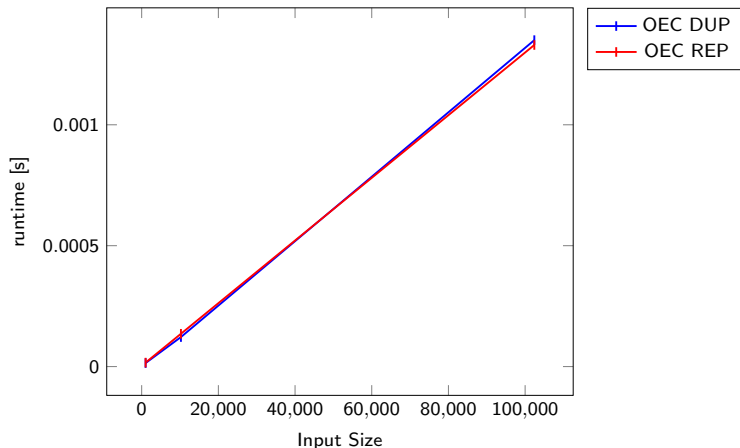
- Ref.Problem: Scalable Search
- Library: MP-Slice - Datatype -d d64 (uint64)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 0, Pack Bool: 0, Optimize Sharing: 1, SSL: 1
- Specs: idex Intel 6312U(2.4GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Datatype -d d64 (uint64)



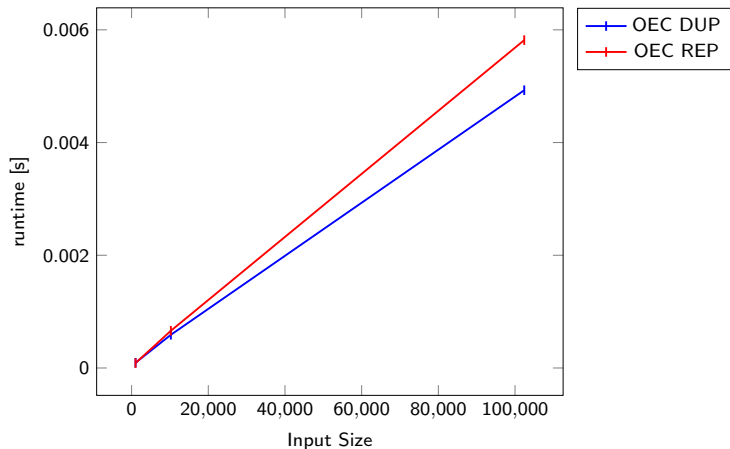
- Ref.Problem: Scalable Search
- Library: MP-Slice - Datatype -d d64 (uint64)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 1, Pack Bool: 0, Optimize Sharing: 1, SSL: 0
- Specs: idex Intel 6312U(2.4GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Datatype -d d64 (uint64)



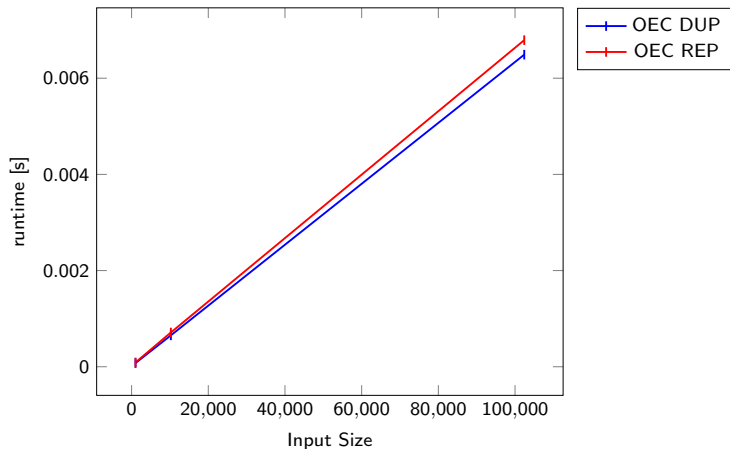
- Ref.Problem: Scalable Search
- Library: MP-Slice - Datatype -d d64 (uint64)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 1, Pack Bool: 0, Optimize Sharing: 1, SSL: 1
- Specs: idex Intel 6312U(2.4GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Datatype -d d128 (SSE)



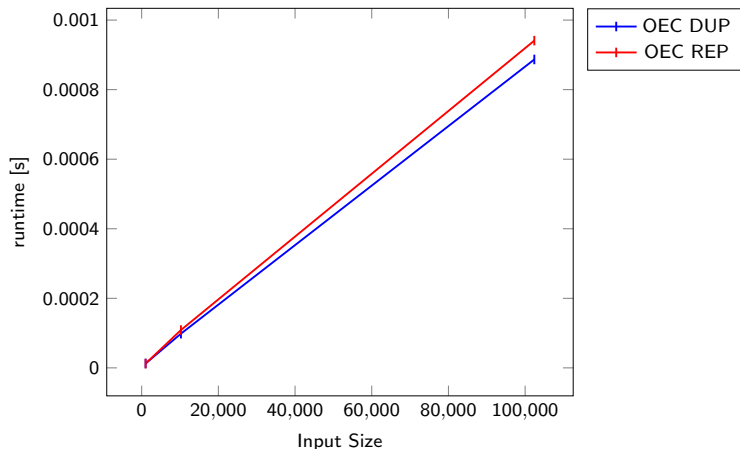
- Ref.Problem: Scalable Search
- Library: MP-Slice - Datatype -d d128 (SSE)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 0, Pack Bool: 0, Optimize Sharing: 1, SSL: 0
- Specs: idex Intel 6312U(2.4GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Datatype -d d128 (SSE)



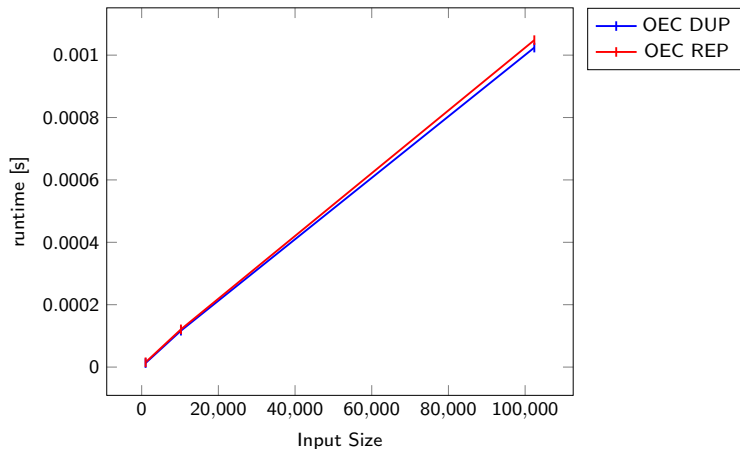
- Ref.Problem: Scalable Search
- Library: MP-Slice - Datatype -d d128 (SSE)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 0, Pack Bool: 0, Optimize Sharing: 1, SSL: 1
- Specs: idex Intel 6312U(2.4GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Datatype -d d128 (SSE)



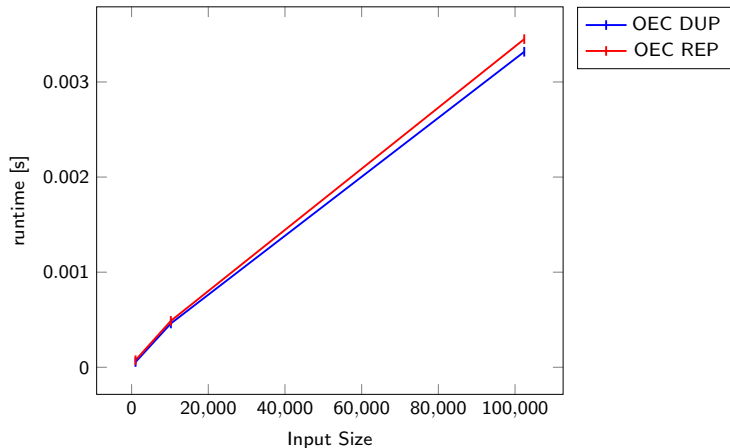
- Ref.Problem: Scalable Search
- Library: MP-Slice - Datatype -d d128 (SSE)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 1, Pack Bool: 0, Optimize Sharing: 1, SSL: 0
- Specs: idex Intel 6312U(2.4GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Datatype -d d128 (SSE)



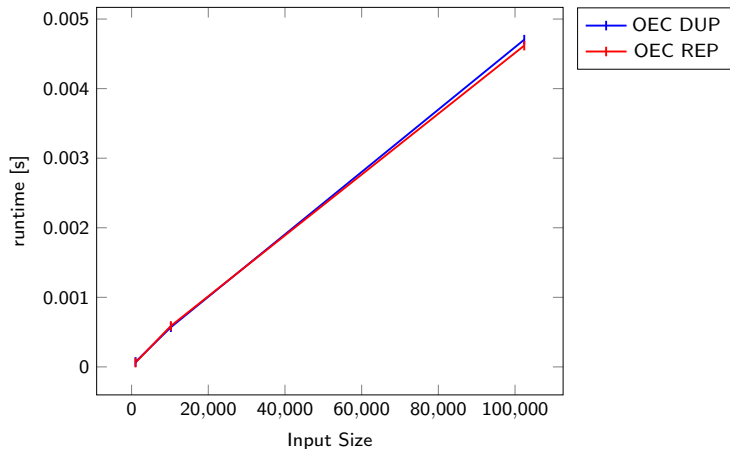
- Ref.Problem: Scalable Search
- Library: MP-Slice - Datatype -d d128 (SSE)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 1, Pack Bool: 0, Optimize Sharing: 1, SSL: 1
- Specs: idex Intel 6312U(2.4GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Datatype -d d256 (AVX)



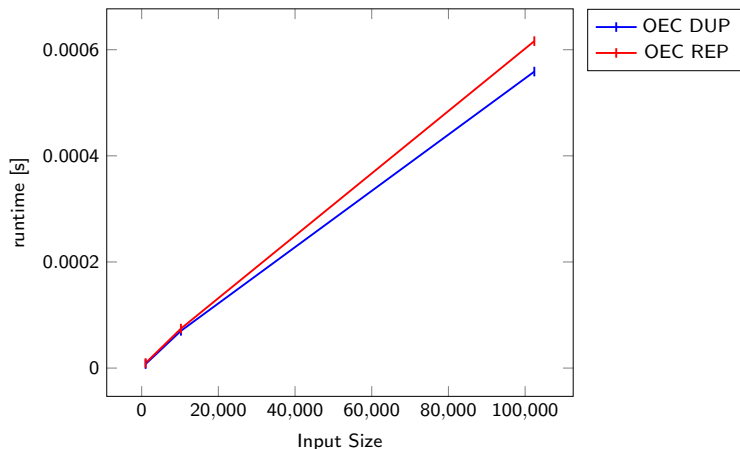
- Ref.Problem: Scalable Search
- Library: MP-Slice - Datatype -d d256 (AVX)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 0, Pack Bool: 0, Optimize Sharing: 1, SSL: 0
- Specs: idex Intel 6312U(2.4GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Datatype -d d256 (AVX)



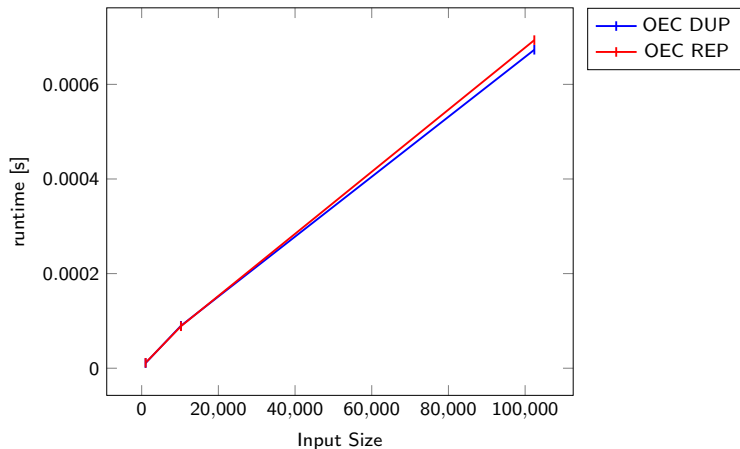
- Ref.Problem: Scalable Search
- Library: MP-Slice - Datatype -d d256 (AVX)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 0, Pack Bool: 0, Optimize Sharing: 1, SSL: 1
- Specs: idex Intel 6312U(2.4GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Datatype -d d256 (AVX)



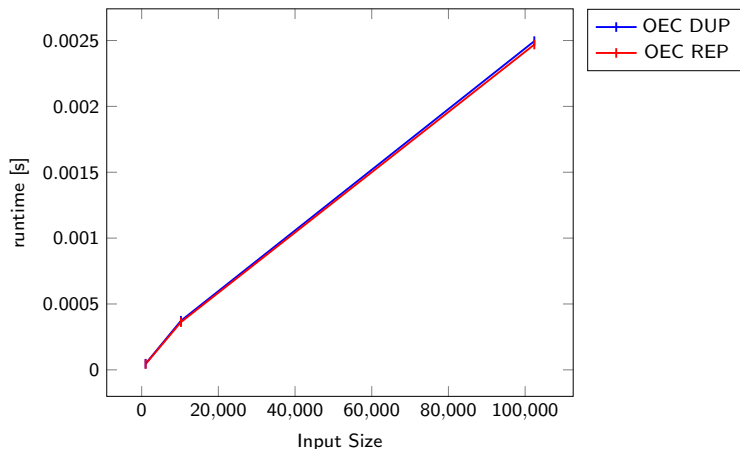
- Ref.Problem: Scalable Search
- Library: MP-Slice - Datatype -d d256 (AVX)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 1, Pack Bool: 0, Optimize Sharing: 1, SSL: 0
- Specs: idex Intel 6312U(2.4GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Datatype -d d256 (AVX)



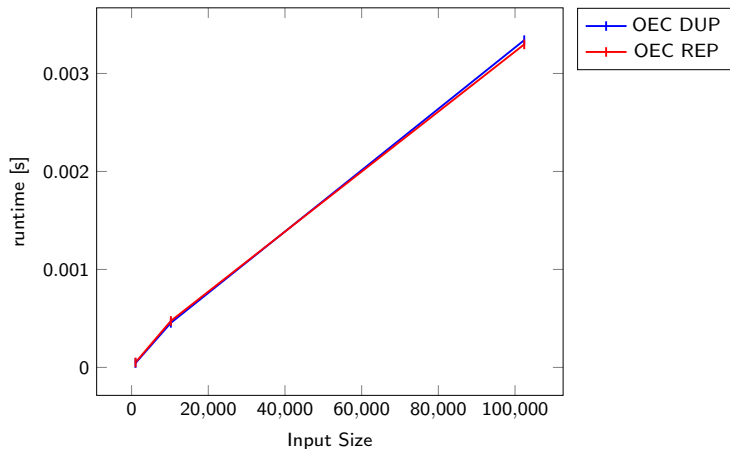
- Ref.Problem: Scalable Search
- Library: MP-Slice - Datatype -d d256 (AVX)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 1, Pack Bool: 0, Optimize Sharing: 1, SSL: 1
- Specs: idex Intel 6312U(2.4GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Datatype -d d512 (AVX512)



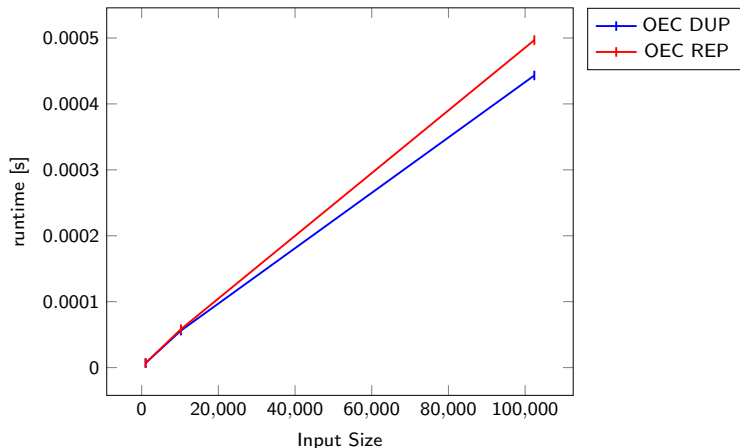
- Ref.Problem: Scalable Search
- Library: MP-Slice - Datatype -d d512 (AVX512)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 0, Pack Bool: 0, Optimize Sharing: 1, SSL: 0
- Specs: idex Intel 6312U(2.4GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Datatype -d d512 (AVX512)



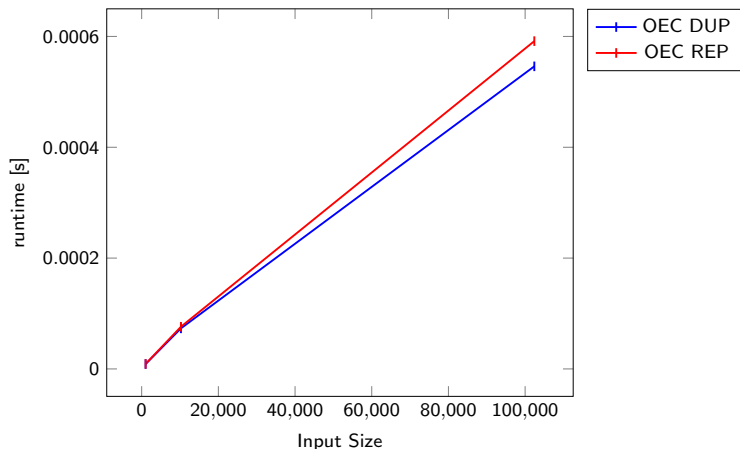
- Ref.Problem: Scalable Search
- Library: MP-Slice - Datatype -d d512 (AVX512)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 0, Pack Bool: 0, Optimize Sharing: 1, SSL: 1
- Specs: idex Intel 6312U(2.4GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Datatype -d d512 (AVX512)



- Ref.Problem: Scalable Search
- Library: MP-Slice - Datatype -d d512 (AVX512)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 1, Pack Bool: 0, Optimize Sharing: 1, SSL: 0
- Specs: idex Intel 6312U(2.4GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Datatype -d d512 (AVX512)



- Ref.Problem: Scalable Search
- Library: MP-Slice - Datatype -d d512 (AVX512)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 1, Pack Bool: 0, Optimize Sharing: 1, SSL: 1
- Specs: idex Intel 6312U(2.4GHz) 512GiB 25Gbits