

Sevarebench Measurement Results

MP-Slice Scalable Search

Various Measurements

April 1, 2023

Nodes : algo fi gard goracle zone (AMD 7543(2.8GHz) 512GiB 25Gbits)
Protocols: 1 2 ... 6
Datatypes : 128 256
Inputs : 4096 40960 409600
Preprocessing: 0
SplitRoles: 0 1 2
Pack Bool: 0
Optimized Sharing: 1
SSL: 1
Summary file : resultsMP-Slice/2023-03/31_13-23-27/Eslice-run-summary.dat
Total Experiment runtime : 2h31min36sec
Experiment run status: incomplete
Latex built date: 23.03.31 23:26

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: 24.83 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: 24.81 Gbits/sec

total receiver speed: 24.81 Gbits/sec

measured speed between nodes 2 and 3

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: 24.76 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: 24.79 Gbits/sec

total receiver speed: 24.77 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: 24.81 Gbits/sec

total receiver speed: 24.76 Gbits/sec
measured speed between nodes 3 and 4
Threads: 1
total sender speed: 24.8 Gbits/sec
total receiver speed: 24.8 Gbits/sec
Threads: 10
total sender speed: 24.81 Gbits/sec
total receiver speed: 24.76 Gbits/sec

Latency Info

Node algofi statistics

— 10.10.171.3 ping statistics —

rtt min/avg/max/mdev = 0.247/0.292/0.308/0.023 ms

— 10.10.171.4 ping statistics —

rtt min/avg/max/mdev = 0.296/0.375/0.659/0.141 ms

— 10.10.171.5 ping statistics —

rtt min/avg/max/mdev = 0.300/0.303/0.305/0.002 ms

Node gard statistics

— 10.10.171.4 ping statistics —

rtt min/avg/max/mdev = 0.203/0.351/0.640/0.149 ms

— 10.10.171.5 ping statistics —

rtt min/avg/max/mdev = 0.305/0.325/0.397/0.035 ms

— 10.10.171.2 ping statistics —

rtt min/avg/max/mdev = 0.305/0.308/0.313/0.003 ms

Node goracle statistics

— 10.10.171.5 ping statistics —

rtt min/avg/max/mdev = 0.102/0.297/0.434/0.107 ms

— 10.10.171.2 ping statistics —

rtt min/avg/max/mdev = 0.206/0.288/0.318/0.041 ms

— 10.10.171.3 ping statistics —

rtt min/avg/max/mdev = 0.306/0.310/0.315/0.003 ms

Node zone statistics

— 10.10.171.2 ping statistics —

rtt min/avg/max/mdev = 0.299/0.374/0.664/0.144 ms

— 10.10.171.3 ping statistics —

rtt min/avg/max/mdev = 0.204/0.286/0.312/0.041 ms

— 10.10.171.4 ping statistics —

rtt min/avg/max/mdev = 0.306/0.310/0.315/0.003 ms

Outline I

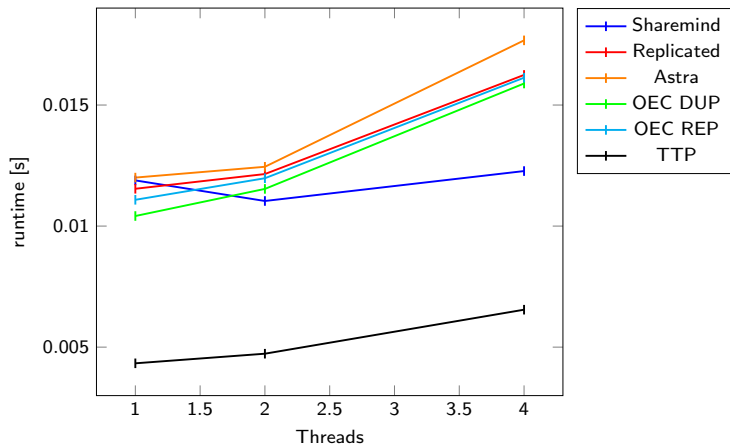
manipulations

ThreadsFixed Input: 409600 -d d256 (AVX) pre0split0pack0opt1ssl1fun0
ThreadsFixed Input: 409600 -d d256 (AVX) pre0split1pack0opt1ssl1fun0
ThreadsFixed Input: 409600 -d d256 (AVX) pre0split2pack0opt1ssl1fun0
Datatype Fixed Input: 409600 all (all) pre0split0pack0opt1ssl1fun0
Datatype Fixed Input: 409600 all (all) pre0split1pack0opt1ssl1fun0
Datatype Fixed Input: 409600 all (all) pre0split2pack0opt1ssl1fun0

input

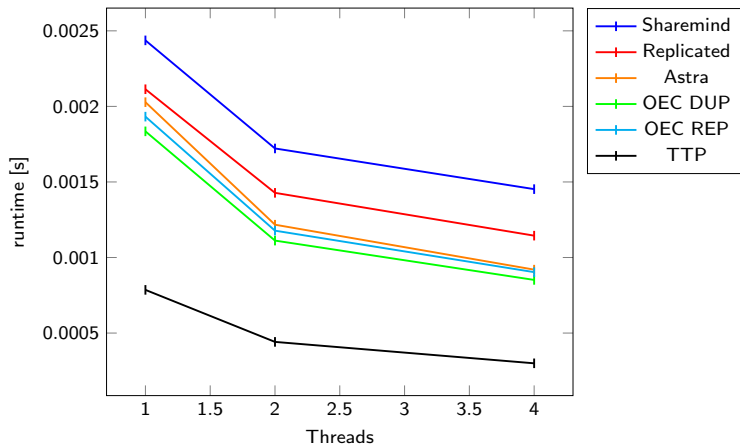
Input Size Protocol -s 1 (Sharemind) pre0split0pack0opt1ssl1fun0
Input Size Protocol -s 1 (Sharemind) pre0split1pack0opt1ssl1fun0
Input Size Protocol -s 1 (Sharemind) pre0split2pack0opt1ssl1fun0
Input Size Protocol -s 2 (Replicated) pre0split0pack0opt1ssl1fun0
Input Size Protocol -s 2 (Replicated) pre0split1pack0opt1ssl1fun0
Input Size Protocol -s 2 (Replicated) pre0split2pack0opt1ssl1fun0
Input Size Protocol -s 3 (Astra) pre0split0pack0opt1ssl1fun0
Input Size Protocol -s 3 (Astra) pre0split1pack0opt1ssl1fun0
Input Size Protocol -s 3 (Astra) pre0split2pack0opt1ssl1fun0
Input Size Protocol -s 4 (OEC DUP) pre0split0pack0opt1ssl1fun0
Input Size Protocol -s 4 (OEC DUP) pre0split1pack0opt1ssl1fun0
Input Size Protocol -s 4 (OEC DUP) pre0split2pack0opt1ssl1fun0
Input Size Protocol -s 5 (OEC REP) pre0split0pack0opt1ssl1fun0
Input Size Protocol -s 5 (OEC REP) pre0split1pack0opt1ssl1fun0
Input Size Protocol -s 5 (OEC REP) pre0split2pack0opt1ssl1fun0
Input Size Protocol -s 6 (TTP) pre0split0pack0opt1ssl1fun0
Input Size Protocol -s 6 (TTP) pre0split1pack0opt1ssl1fun0
Input Size Protocol -s 6 (TTP) pre0split2pack0opt1ssl1fun0
Input Size Datatype -d d128 (SSE) pre0split0pack0opt1ssl1fun0
Input Size Datatype -d d128 (SSE) pre0split1pack0opt1ssl1fun0
Input Size Datatype -d d128 (SSE) pre0split2pack0opt1ssl1fun0
Input Size Datatype -d d256 (AVX) pre0split0pack0opt1ssl1fun0
Input Size Datatype -d d256 (AVX) pre0split1pack0opt1ssl1fun0
Input Size Datatype -d d256 (AVX) pre0split2pack0opt1ssl1fun0

MP-Slice Runtimes ThreadsFixed Input: 409600 -d d256 (AVX)



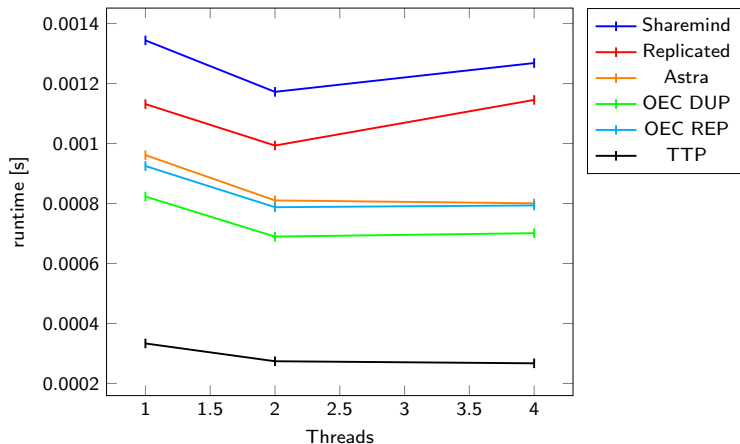
- Ref.Problem: Scalable Search
- Library: MP-Slice - Fixed Input: 409600 -d d256 (AVX)
- Metric: Threads - runtime
- Switches: Preprocessing: 0, Split Roles: 0, Pack Bool: 0, Optimize Sharing: 1, SSL: 1, Function: 0
- Specs: algofi AMD 7543(2.8GHz) 512GiB 25Gbits

MP-Slice Runtimes ThreadsFixed Input: 409600 -d d256 (AVX)



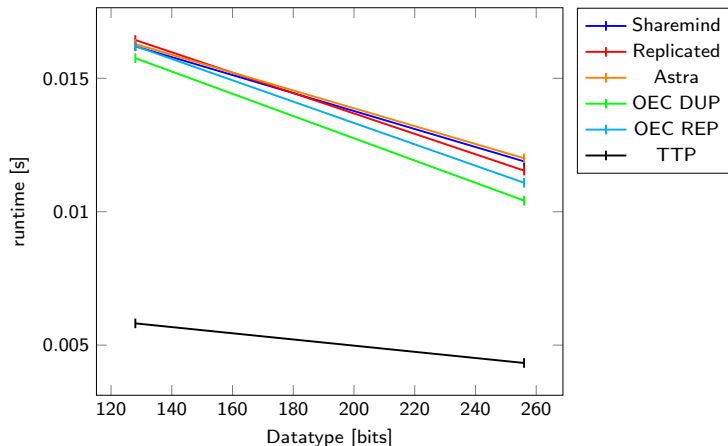
- Ref.Problem: Scalable Search
- Library: MP-Slice - Fixed Input: 409600 -d d256 (AVX)
- Metric: Threads - runtime
- Switches: Preprocessing: 0, Split Roles: 1, Pack Bool: 0, Optimize Sharing: 1, SSL: 1, Function: 0
- Specs: algofi AMD 7543(2.8GHz) 512GiB 25Gbits

MP-Slice Runtimes ThreadsFixed Input: 409600 -d d256 (AVX)



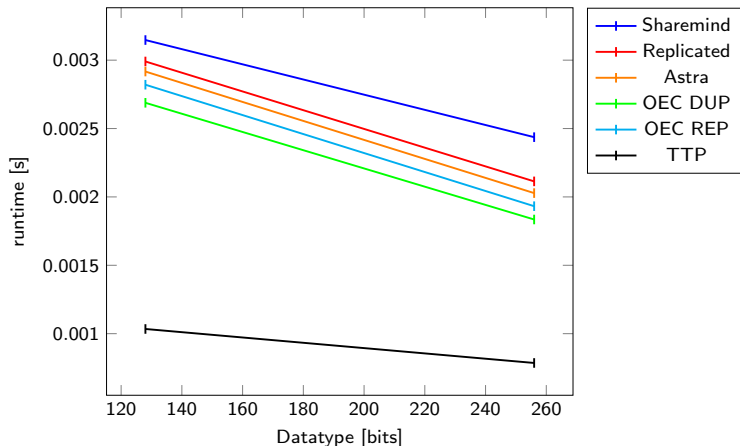
- Ref.Problem: Scalable Search
- Library: MP-Slice - Fixed Input: 409600 -d d256 (AVX)
- Metric: Threads - runtime
- Switches: Preprocessing: 0, Split Roles: 2, Pack Bool: 0, Optimize Sharing: 1, SSL: 1, Function: 0
- Specs: algofi AMD 7543(2.8GHz) 512GiB 25Gbits

MP-Slice Runtimes Datatype Fixed Input: 409600 all (all)



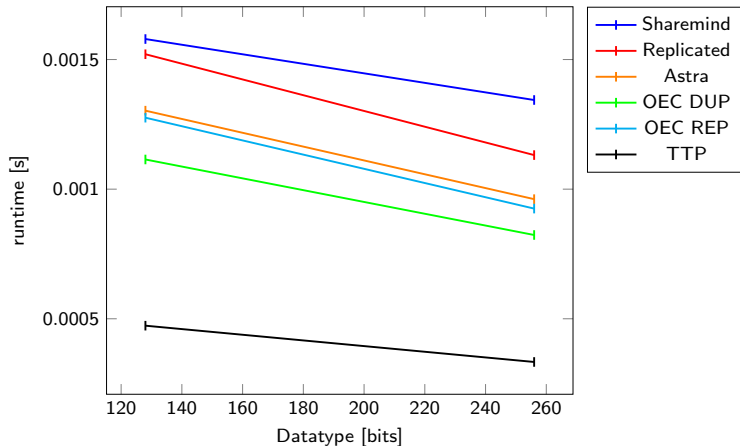
- Ref.Problem: Scalable Search
- Library: MP-Slice - Fixed Input: 409600 all (all)
- Metric: Datatype - runtime
- Switches: Preprocessing: 0, Split Roles: 0, Pack Bool: 0, Optimize Sharing: 1, SSL: 1, Function: 0
- Specs: algofi AMD 7543(2.8GHz) 512GiB 25Gbits

MP-Slice Runtimes Datatype Fixed Input: 409600 all (all)



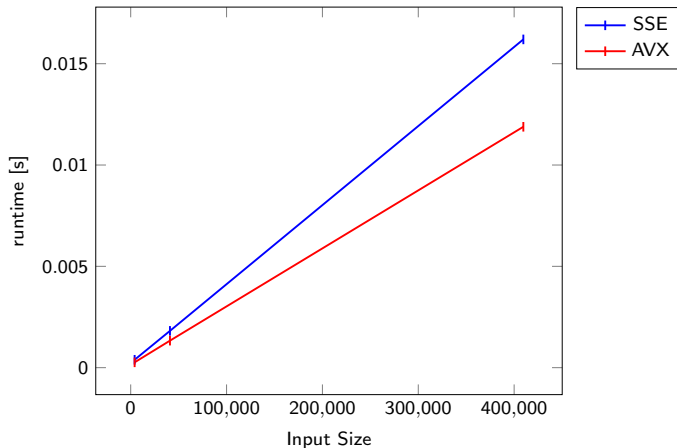
- Ref.Problem: Scalable Search
- Library: MP-Slice - Fixed Input: 409600 all (all)
- Metric: Datatype - runtime
- Switches: Preprocessing: 0, Split Roles: 1, Pack Bool: 0, Optimize Sharing: 1, SSL: 1, Function: 0
- Specs: algofi AMD 7543(2.8GHz) 512GiB 25Gbits

MP-Slice Runtimes Datatype Fixed Input: 409600 all (all)



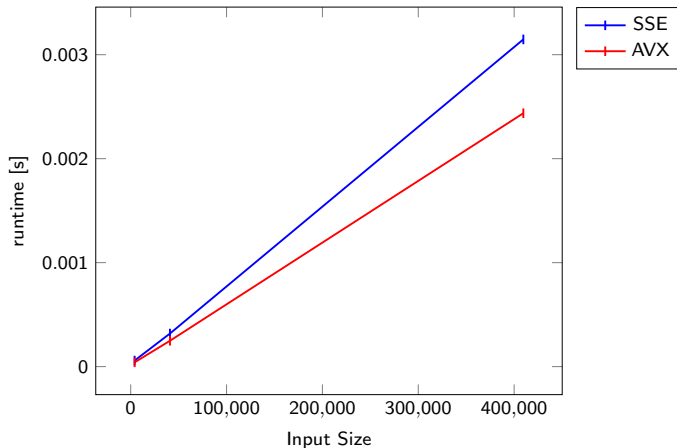
- Ref.Problem: Scalable Search
- Library: MP-Slice - Fixed Input: 409600 all (all)
- Metric: Datatype - runtime
- Switches: Preprocessing: 0, Split Roles: 2, Pack Bool: 0, Optimize Sharing: 1, SSL: 1, Function: 0
- Specs: algofi AMD 7543(2.8GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Protocol -s 1 (Sharemind)



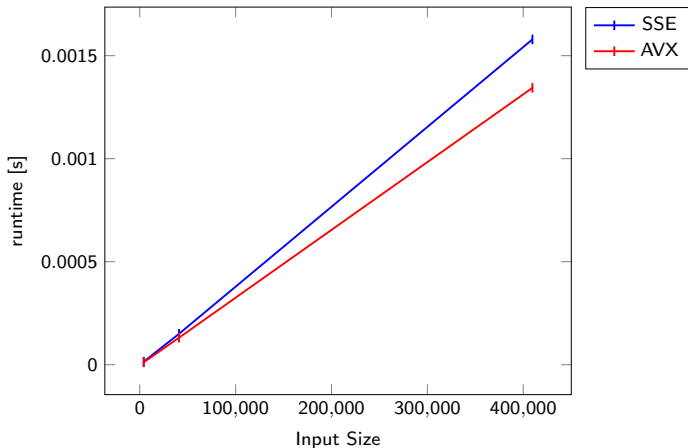
- Ref.Problem: Scalable Search
- Library: MP-Slice - Protocol -s 1 (Sharemind)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 0, Pack Bool: 0, Optimize Sharing: 1, SSL: 1, Function: 0
- Specs: algofi AMD 7543(2.8GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Protocol -s 1 (Sharemind)



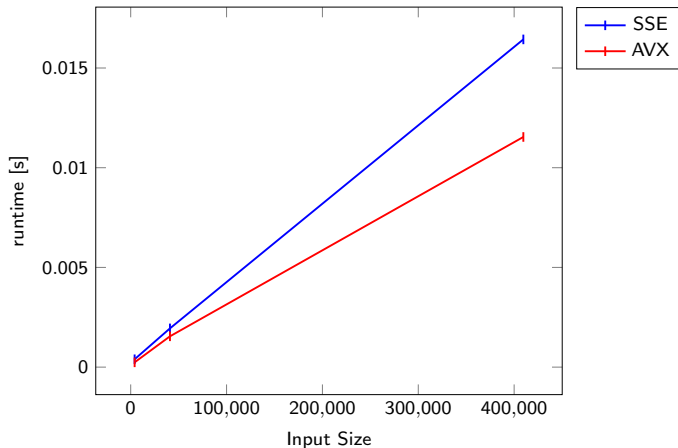
- Ref.Problem: Scalable Search
- Library: MP-Slice - Protocol -s 1 (Sharemind)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 1, Pack Bool: 0, Optimize Sharing: 1, SSL: 1, Function: 0
- Specs: algofi AMD 7543(2.8GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Protocol -s 1 (Sharemind)



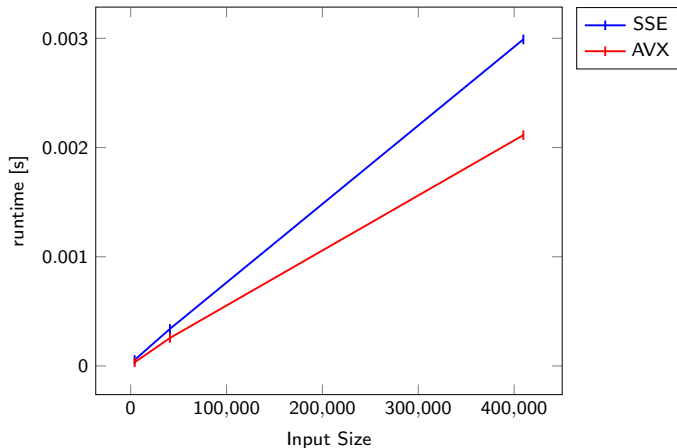
- Ref.Problem: Scalable Search
- Library: MP-Slice - Protocol -s 1 (Sharemind)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 2, Pack Bool: 0, Optimize Sharing: 1, SSL: 1, Function: 0
- Specs: algofi AMD 7543(2.8GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Protocol -s 2 (Replicated)



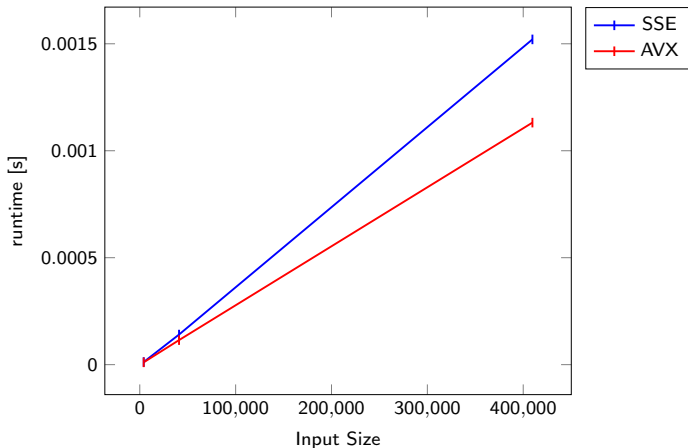
- Ref.Problem: Scalable Search
- Library: MP-Slice - Protocol -s 2 (Replicated)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 0, Pack Bool: 0, Optimize Sharing: 1, SSL: 1, Function: 0
- Specs: algofi AMD 7543(2.8GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Protocol -s 2 (Replicated)



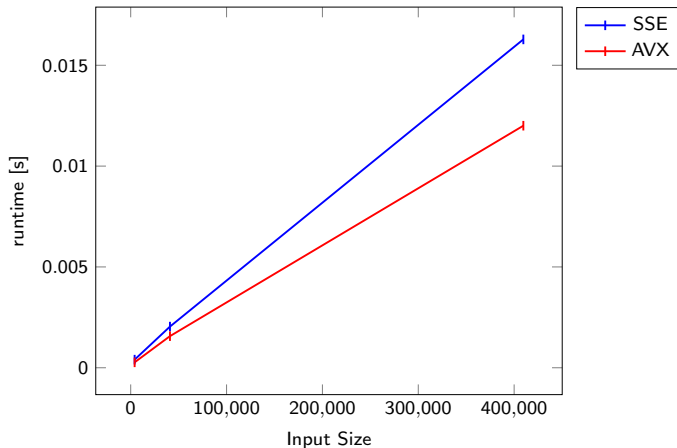
- Ref.Problem: Scalable Search
- Library: MP-Slice - Protocol -s 2 (Replicated)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 1, Pack Bool: 0, Optimize Sharing: 1, SSL: 1, Function: 0
- Specs: algofi AMD 7543(2.8GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Protocol -s 2 (Replicated)



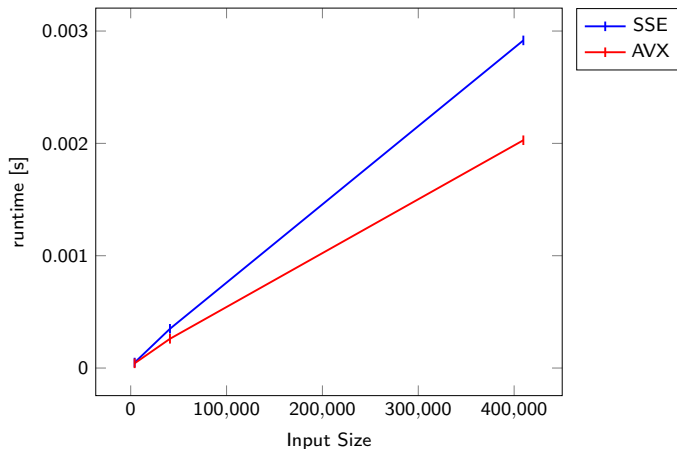
- Ref.Problem: Scalable Search
- Library: MP-Slice - Protocol -s 2 (Replicated)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 2, Pack Bool: 0, Optimize Sharing: 1, SSL: 1, Function: 0
- Specs: algofi AMD 7543(2.8GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Protocol -s 3 (Astra)



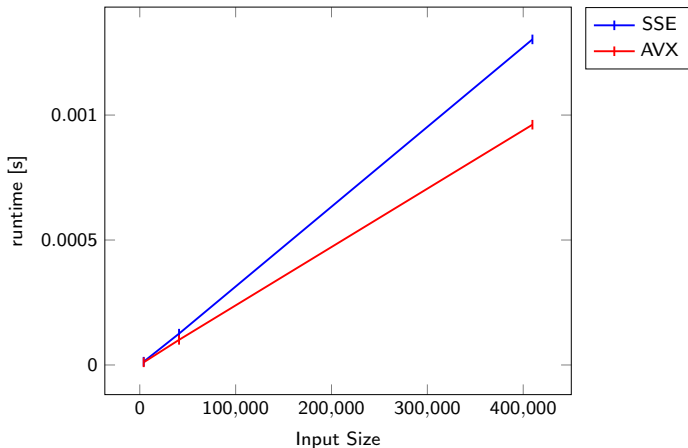
- Ref.Problem: Scalable Search
- Library: MP-Slice - Protocol -s 3 (Astra)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 0, Pack Bool: 0, Optimize Sharing: 1, SSL: 1, Function: 0
- Specs: algofi AMD 7543(2.8GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Protocol -s 3 (Astra)



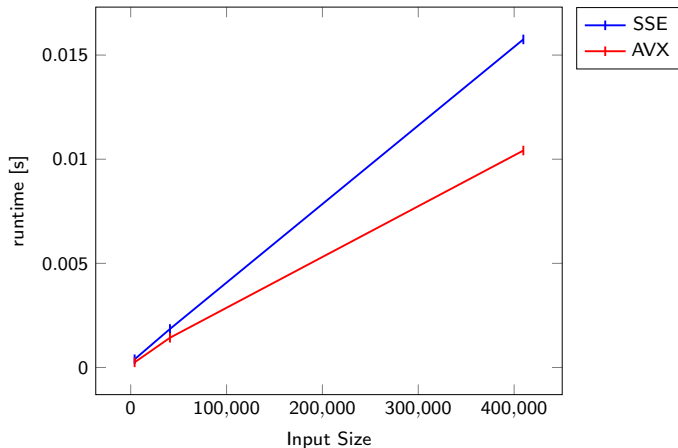
- Ref.Problem: Scalable Search
- Library: MP-Slice - Protocol -s 3 (Astra)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 1, Pack Bool: 0, Optimize Sharing: 1, SSL: 1, Function: 0
- Specs: algofi AMD 7543(2.8GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Protocol -s 3 (Astra)



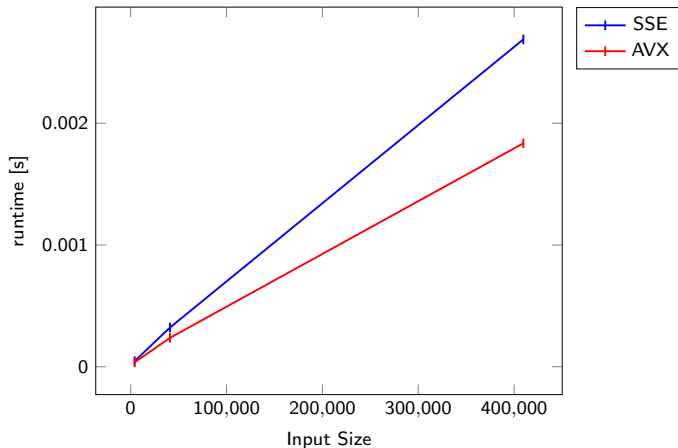
- Ref.Problem: Scalable Search
- Library: MP-Slice - Protocol -s 3 (Astra)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 2, Pack Bool: 0, Optimize Sharing: 1, SSL: 1, Function: 0
- Specs: algofi AMD 7543(2.8GHz) 512GiB 25Gbits

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



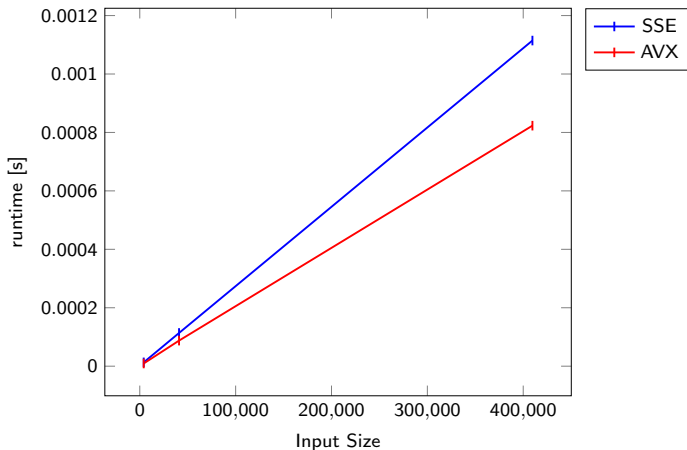
- Ref.Problem: Scalable Search
- Library: MP-Slice - Protocol -s 4 (OEC DUP)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 0, Pack Bool: 0, Optimize Sharing: 1, SSL: 1, Function: 0
- Specs: algofi AMD 7543(2.8GHz) 512GiB 25Gbits

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



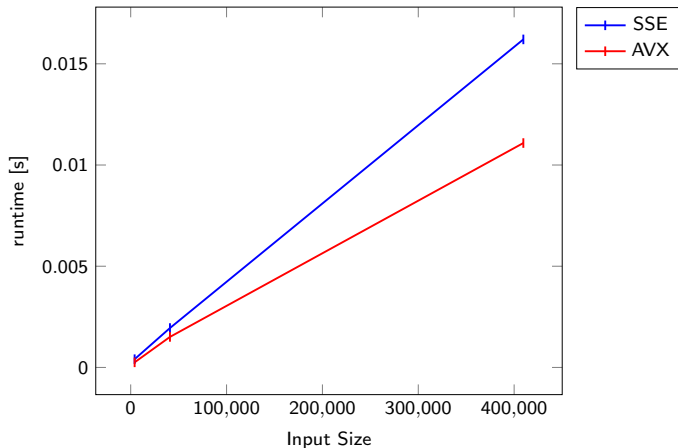
- Ref.Problem: Scalable Search
- Library: MP-Slice - Protocol -s 4 (OEC DUP)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 1, Pack Bool: 0, Optimize Sharing: 1, SSL: 1, Function: 0
- Specs: algofi AMD 7543(2.8GHz) 512GiB 25Gbits

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



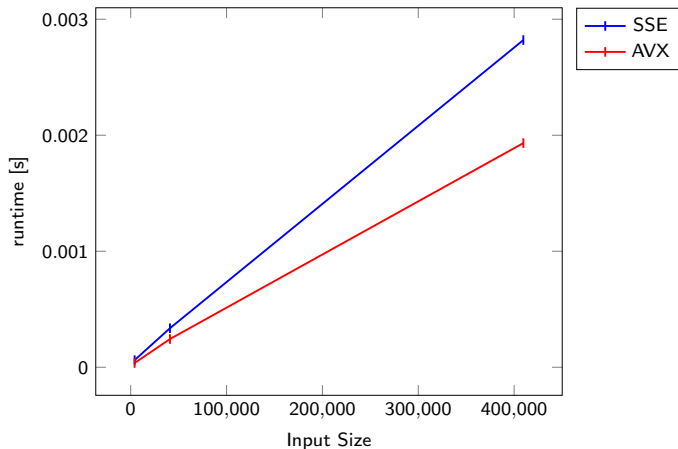
- Ref.Problem: Scalable Search
- Library: MP-Slice - Protocol -s 4 (OEC DUP)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 2, Pack Bool: 0, Optimize Sharing: 1, SSL: 1, Function: 0
- Specs: algofi AMD 7543(2.8GHz) 512GiB 25Gbits

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



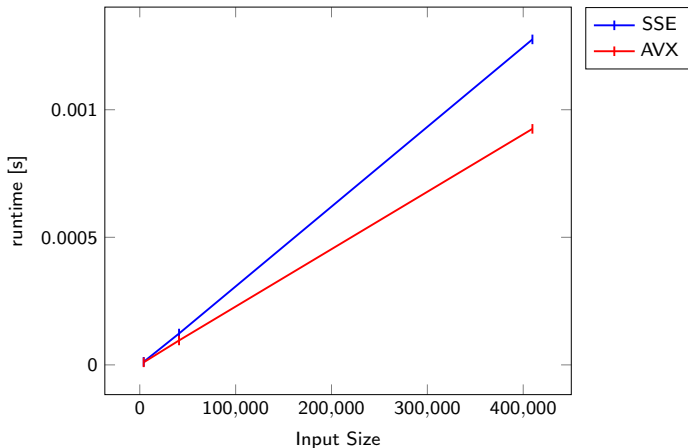
- Ref.Problem: Scalable Search
- Library: MP-Slice - Protocol -s 5 (OEC REP)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 0, Pack Bool: 0, Optimize Sharing: 1, SSL: 1, Function: 0
- Specs: algofi AMD 7543(2.8GHz) 512GiB 25Gbits

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



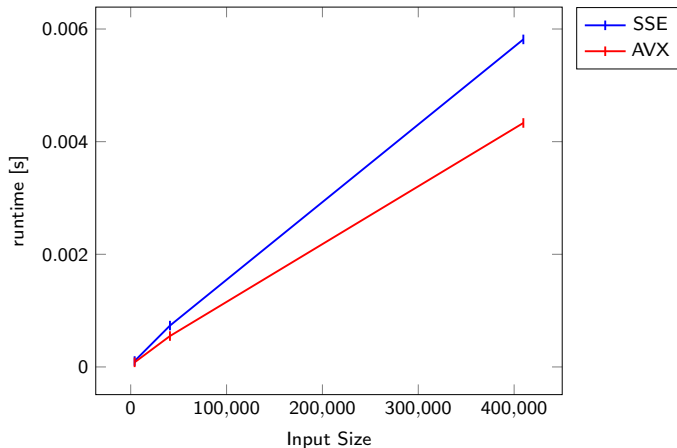
- Ref.Problem: Scalable Search
- Library: MP-Slice - Protocol -s 5 (OEC REP)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 1, Pack Bool: 0, Optimize Sharing: 1, SSL: 1, Function: 0
- Specs: algofi AMD 7543(2.8GHz) 512GiB 25Gbits

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



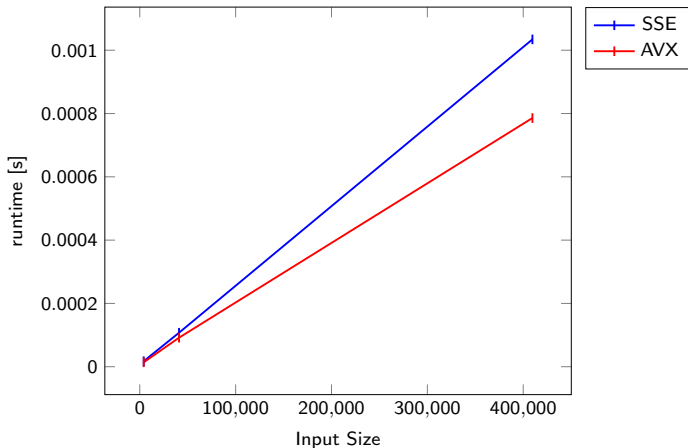
- Ref.Problem: Scalable Search
- Library: MP-Slice - Protocol -s 5 (OEC REP)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 2, Pack Bool: 0, Optimize Sharing: 1, SSL: 1, Function: 0
- Specs: algofi AMD 7543(2.8GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Protocol -s 6 (TTP)



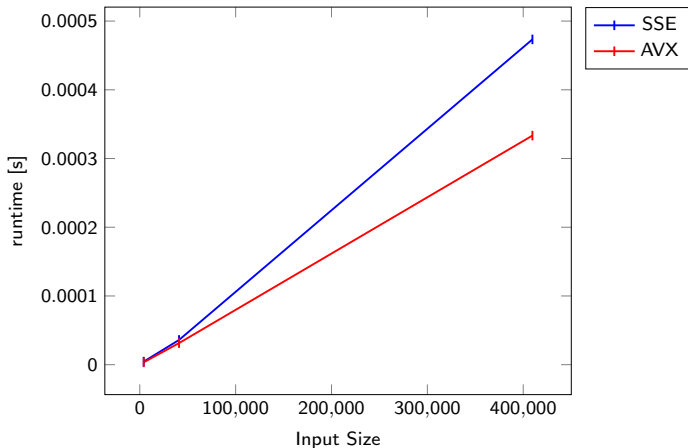
- Ref.Problem: Scalable Search
- Library: MP-Slice - Protocol -s 6 (TTP)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 0, Pack Bool: 0, Optimize Sharing: 1, SSL: 1, Function: 0
- Specs: algofi AMD 7543(2.8GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Protocol -s 6 (TTP)



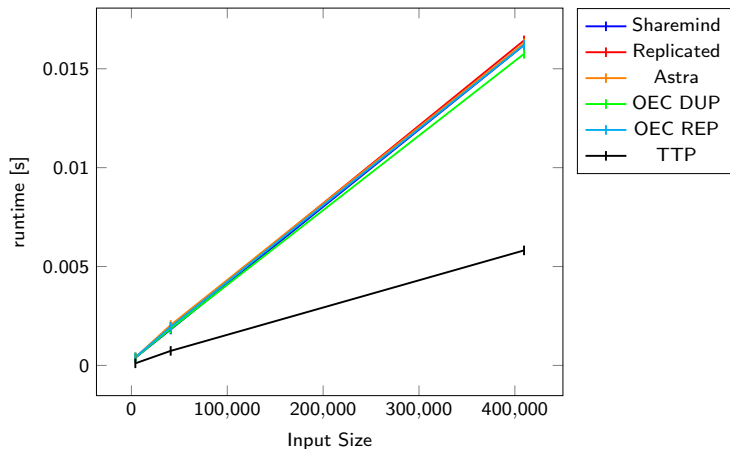
- Ref.Problem: Scalable Search
- Library: MP-Slice - Protocol -s 6 (TTP)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 1, Pack Bool: 0, Optimize Sharing: 1, SSL: 1, Function: 0
- Specs: algofi AMD 7543(2.8GHz) 512GiB 25Gbits

MP-Slice Runtimes Input Size Protocol -s 6 (TTP)



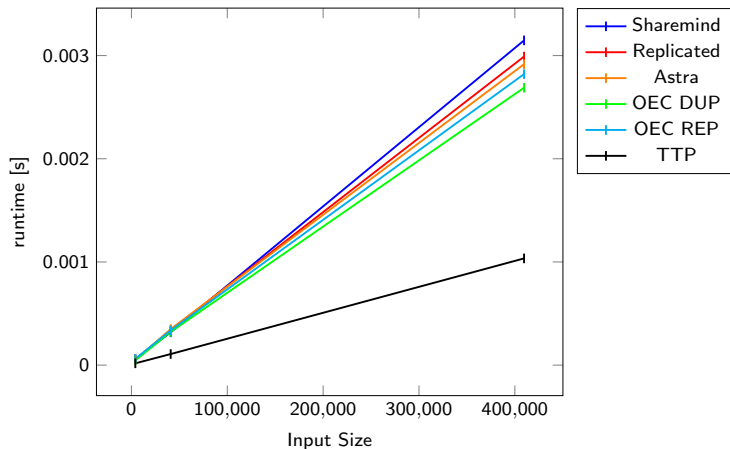
- Ref.Problem: Scalable Search
- Library: MP-Slice - Protocol -s 6 (TTP)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 2, Pack Bool: 0, Optimize Sharing: 1, SSL: 1, Function: 0
- Specs: algofi AMD 7543(2.8GHz) 512GiB 25Gbits

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



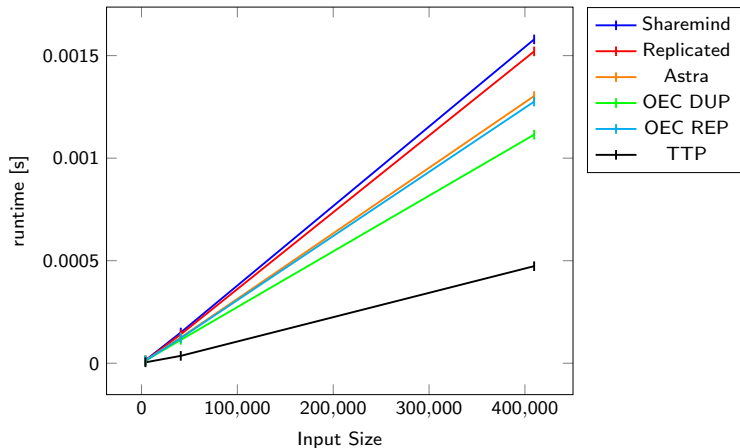
- Ref.Problem: Scalable Search
- Library: MP-Slice - Datatype -d d128 (SSE)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 0, Pack Bool: 0, Optimize Sharing: 1, SSL: 1, Function: 0
- Specs: algofi AMD 7543(2.8GHz) 512GiB 25Gbits

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



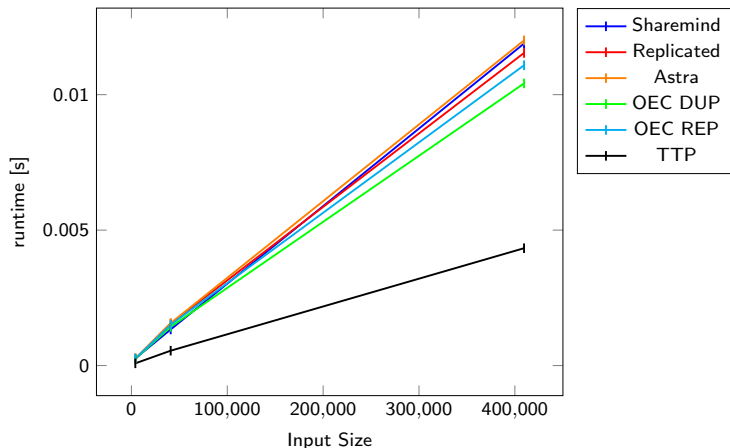
- Ref.Problem: Scalable Search
- Library: MP-Slice - Datatype -d d128 (SSE)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 1, Pack Bool: 0, Optimize Sharing: 1, SSL: 1, Function: 0
- Specs: algofi AMD 7543(2.8GHz) 512GiB 25Gbits

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



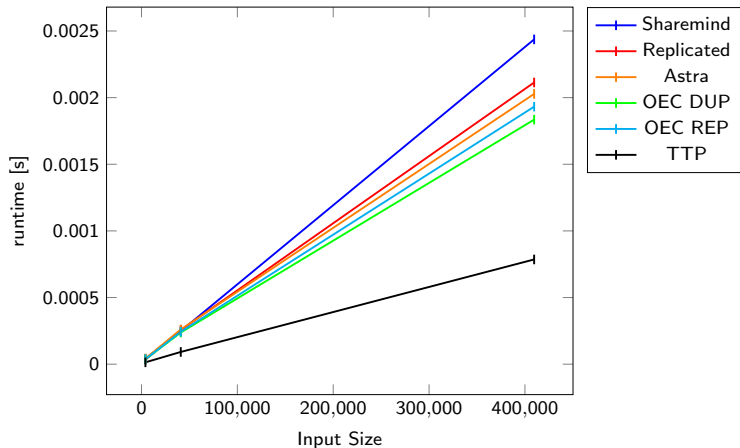
- Ref.Problem: Scalable Search
- Library: MP-Slice - Datatype -d d128 (SSE)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 2, Pack Bool: 0, Optimize Sharing: 1, SSL: 1, Function: 0
- Specs: algofi AMD 7543(2.8GHz) 512GiB 25Gbits

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



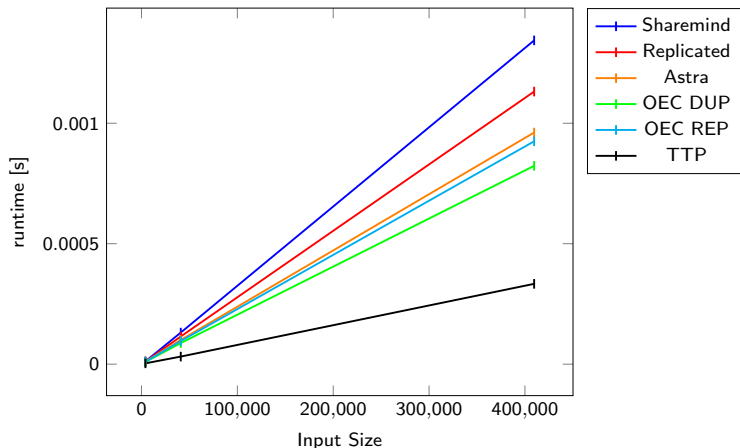
- Ref.Problem: Scalable Search
- Library: MP-Slice - Datatype -d d256 (AVX)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 0, Pack Bool: 0, Optimize Sharing: 1, SSL: 1, Function: 0
- Specs: algofi AMD 7543(2.8GHz) 512GiB 25Gbits

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, Function: 0
- Specs: algofi AMD 7543(2.8GHz) 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: 2, Pack Bool: 0, Optimize Sharing: 1, SSL: 1, Function: 0
- Specs: algofi AMD 7543(2.8GHz) 512GiB 25Gbits