

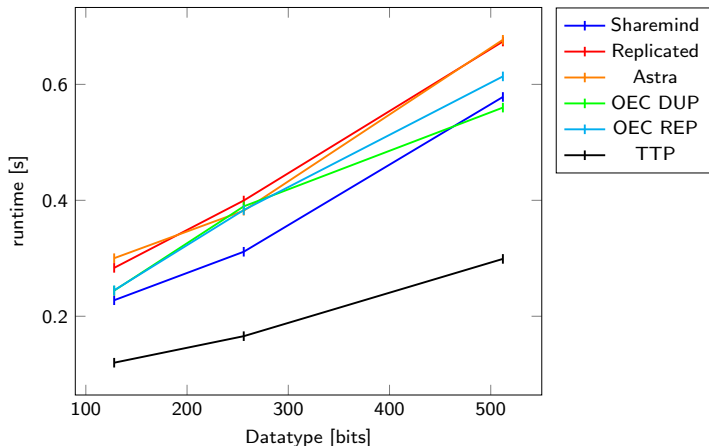
# Sevarebench Measurement Results

MP-Slice Scalable Search

Various Measurements

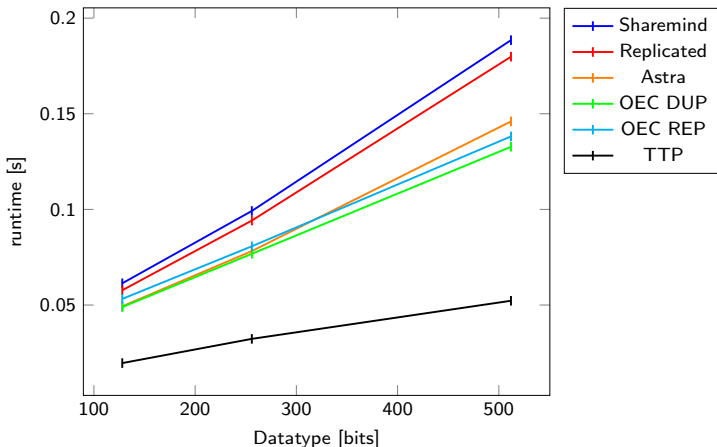
January 29, 2023

## MP-Slice Runtimes Datatype Fixed Input: 40960 -d d512 (AVX512)



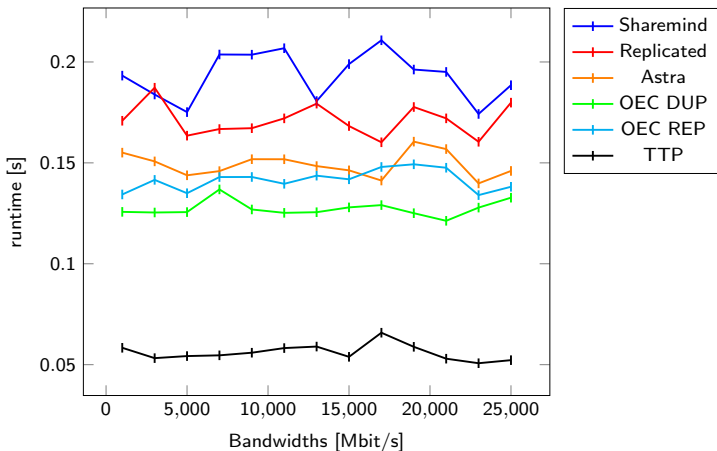
- Ref.Problem: Scalable Search
- Library: MP-Slice - Fixed Input: 40960 -d d512 (AVX512)
- Metric: Datatype - runtime
- Switches: Preprocessing: 0, Split Roles: 0, Pack Bool: 0, Optimize Sharing: 1
- Specs: 6312U(2.4GHz) 512GiB 25Gbits

## MP-Slice Runtimes Datatype Fixed Input: 40960 -d d512 (AVX512)



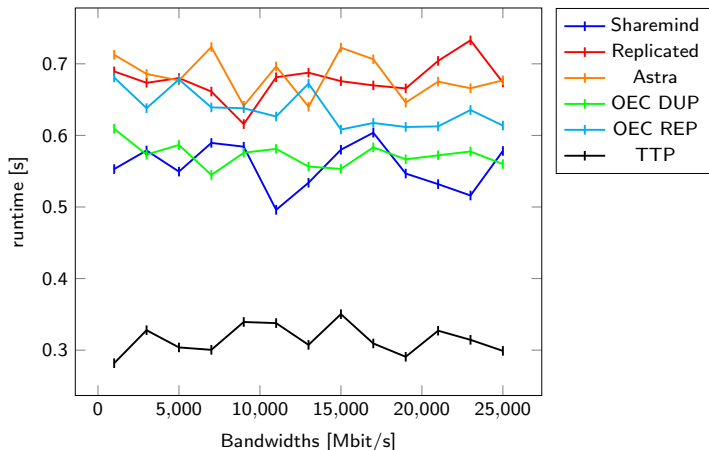
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## MP-Slice Runtimes Bandwidths Fixed Input: 40960 -d d512 (AVX512)



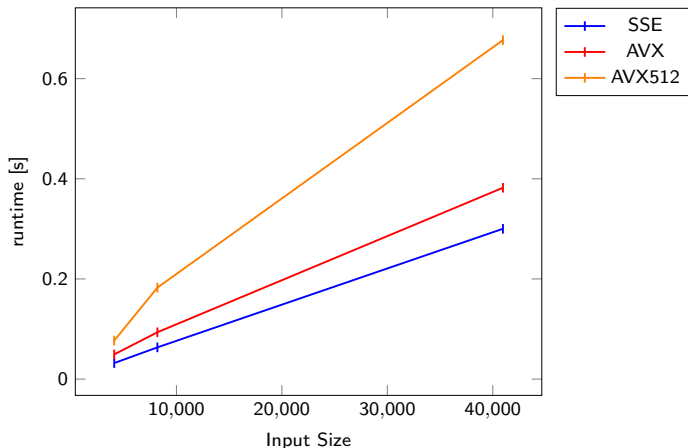
- Ref.Problem: Scalable Search
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- Metric: Bandwidths - runtime
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## MP-Slice Runtimes Bandwidths Fixed Input: 40960 -d d512 (AVX512)



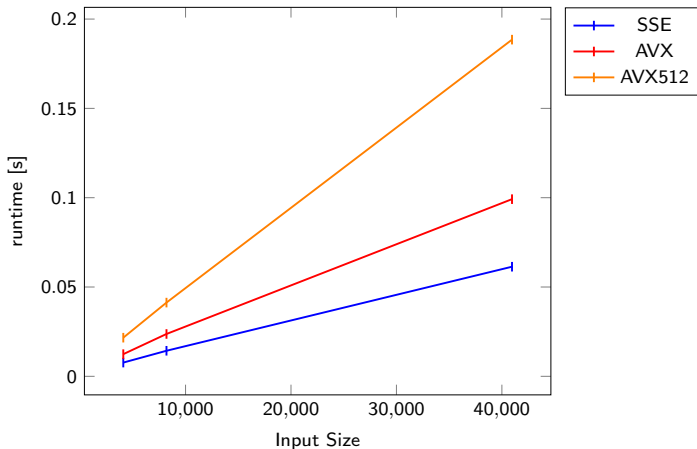
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## MP-Slice Runtimes Input Size Protocol -s 3 (Astra)



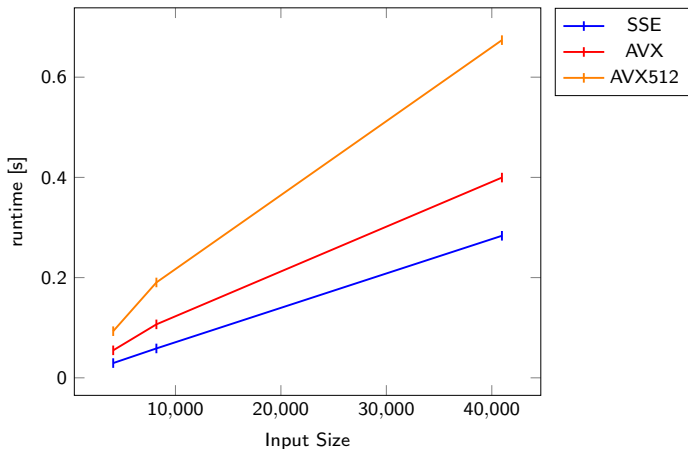
- Ref.Problem: Scalable Search
- Library: MP-Slice - Protocol -s 3 (Astra)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 0, Pack Bool: 0, Optimize Sharing: 1
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## MP-Slice Runtimes Input Size Protocol -s 1 (Sharemind)



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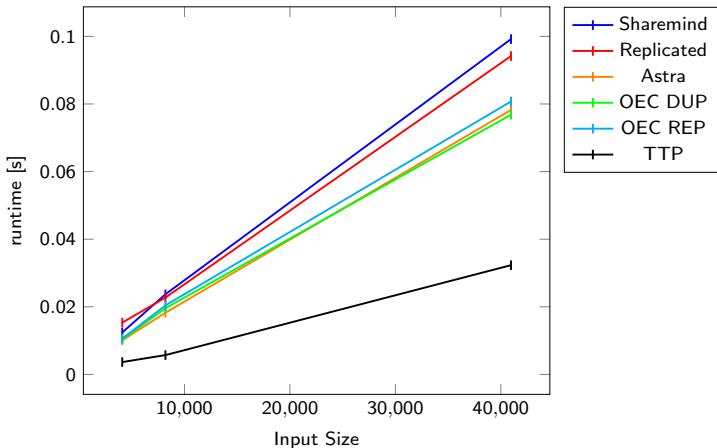
## MP-Slice Runtimes Input Size Protocol -s 2 (Replicated)



- 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
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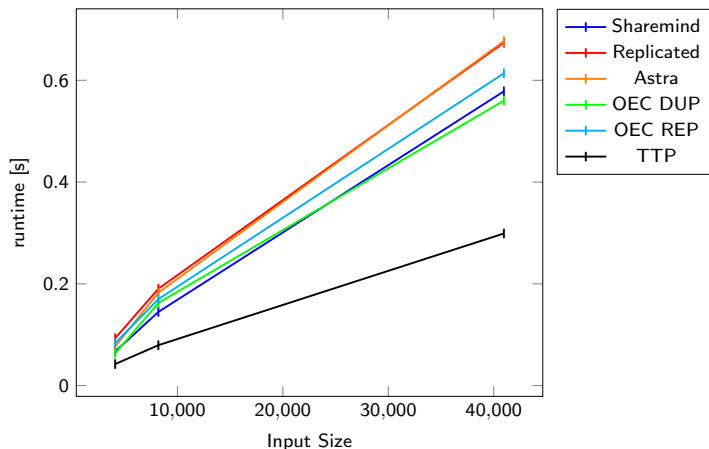


## MP-Slice Runtimes Input Size Datatype -d d256 (AVX)



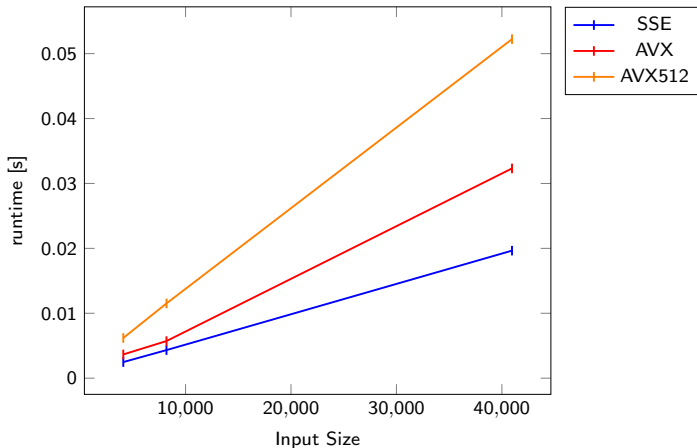
- Ref.Problem: Scalable Search
- Library: MP-Slice - Datatype -d d256 (AVX)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 1, Pack Bool: 0, Optimize Sharing: 1
- Specs: 6312U(2.4GHz) 512GiB 25Gbits

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



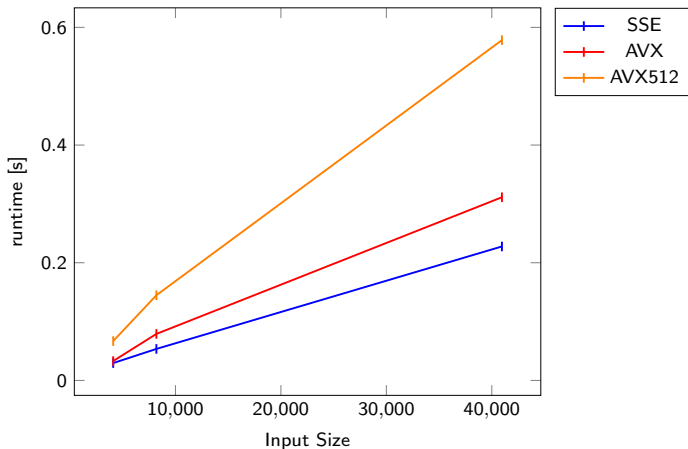
- Ref.Problem: Scalable Search
- Library: MP-Slice - Datatype -d d512 (AVX512)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 0, Pack Bool: 0, Optimize Sharing: 1
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## MP-Slice Runtimes Input Size Protocol -s 6 (TTP)



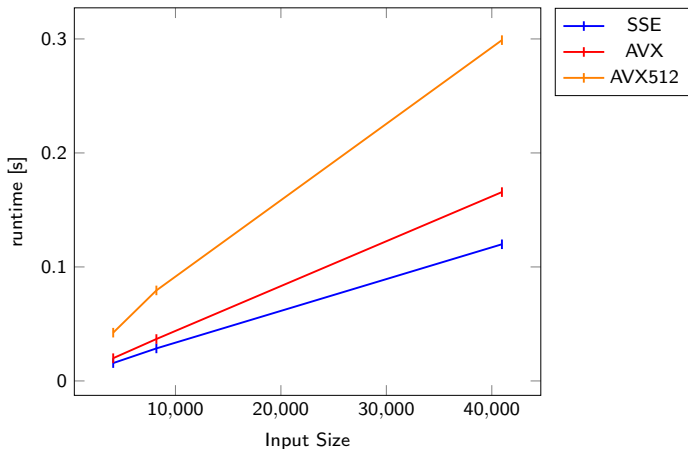
- Ref.Problem: Scalable Search
- Library: MP-Slice - Protocol -s 6 (TTP)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 1, Pack Bool: 0, Optimize Sharing: 1
- Specs: 6312U(2.4GHz) 512GiB 25Gbits

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



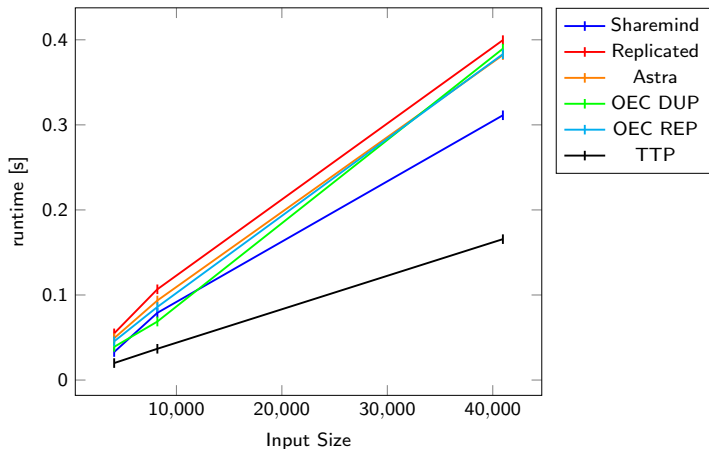
- Ref.Problem: Scalable Search
- Library: MP-Slice - Protocol -s 1 (Sharemind)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 0, Pack Bool: 0, Optimize Sharing: 1
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## MP-Slice Runtimes Input Size Protocol -s 6 (TTP)



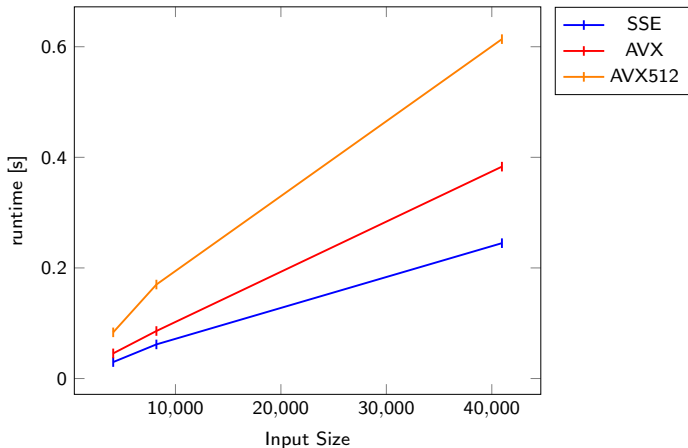
- Ref.Problem: Scalable Search
- Library: MP-Slice - Protocol -s 6 (TTP)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 0, Pack Bool: 0, Optimize Sharing: 1
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## MP-Slice Runtimes Input Size Datatype -d d256 (AVX)



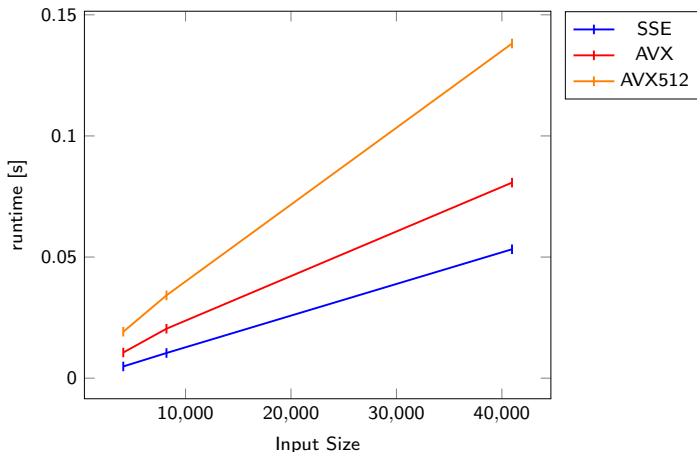
- Ref.Problem: Scalable Search
- Library: MP-Slice - Datatype -d d256 (AVX)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 0, Pack Bool: 0, Optimize Sharing: 1
- Specs: 6312U(2.4GHz) 512GiB 25Gbits

## 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
- Specs: 6312U(2.4GHz) 512GiB 25Gbits

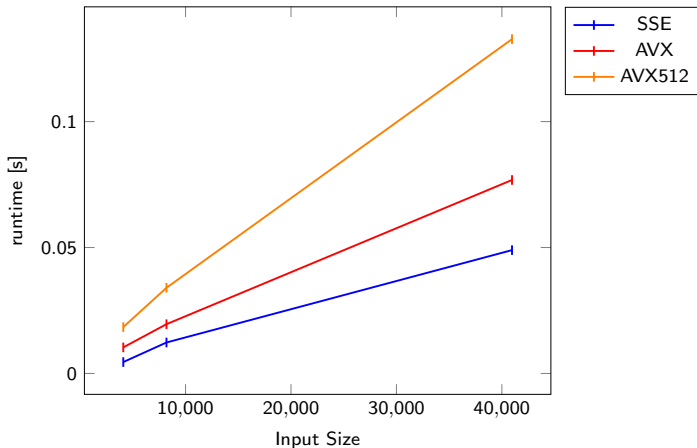
## MP-Slice Runtimes Input Size Protocol -s 5 (OEC REP)



- 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
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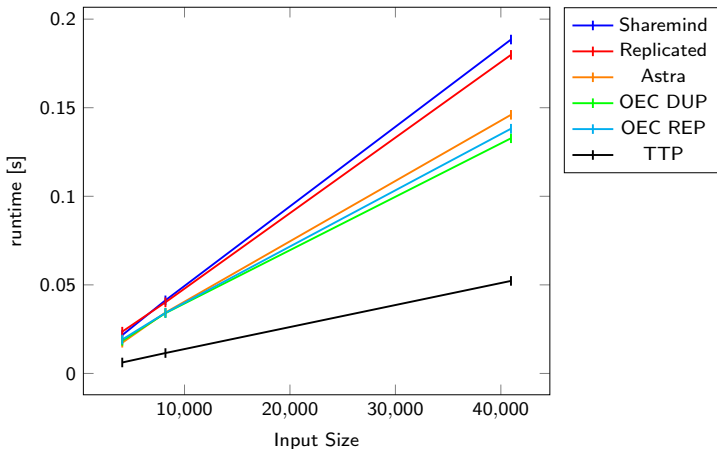


## MP-Slice Runtimes Input Size Protocol -s 4 (OEC DUP)



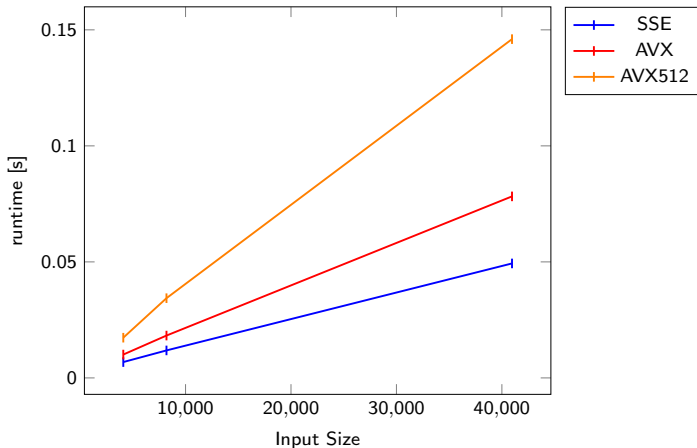
- Ref.Problem: Scalable Search
- Library: MP-Slice - Protocol -s 4 (OEC DUP)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 1, Pack Bool: 0, Optimize Sharing: 1
- Specs: 6312U(2.4GHz) 512GiB 25Gbits

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



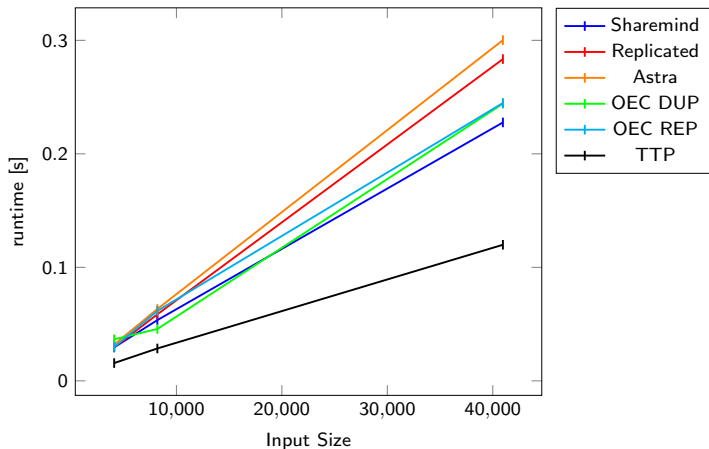
- Ref.Problem: Scalable Search
- Library: MP-Slice - Datatype -d d512 (AVX512)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 1, Pack Bool: 0, Optimize Sharing: 1
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## MP-Slice Runtimes Input Size Protocol -s 3 (Astra)



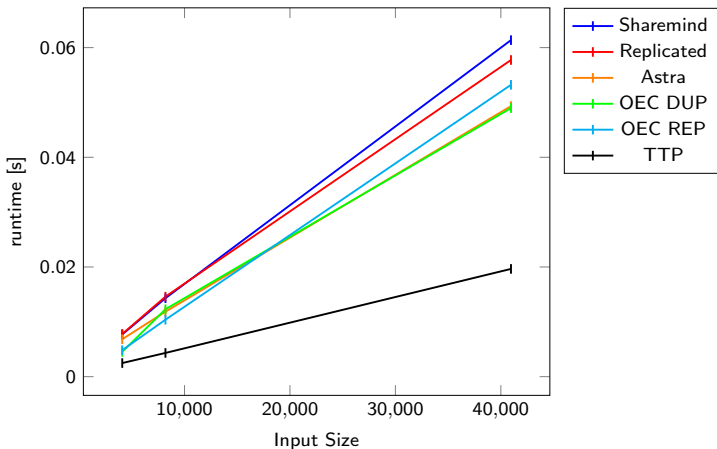
- Ref.Problem: Scalable Search
- Library: MP-Slice - Protocol -s 3 (Astra)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 1, Pack Bool: 0, Optimize Sharing: 1
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## MP-Slice Runtimes Input Size Datatype -d d128 (SSE)



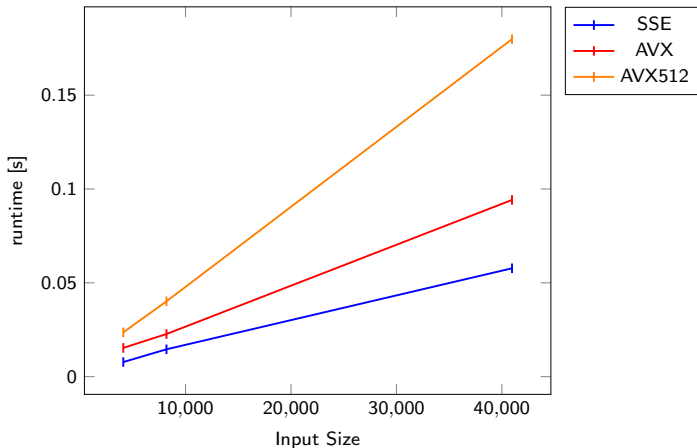
- Ref.Problem: Scalable Search
- Library: MP-Slice - Datatype -d d128 (SSE)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 0, Pack Bool: 0, Optimize Sharing: 1
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## MP-Slice Runtimes Input Size Datatype -d d128 (SSE)



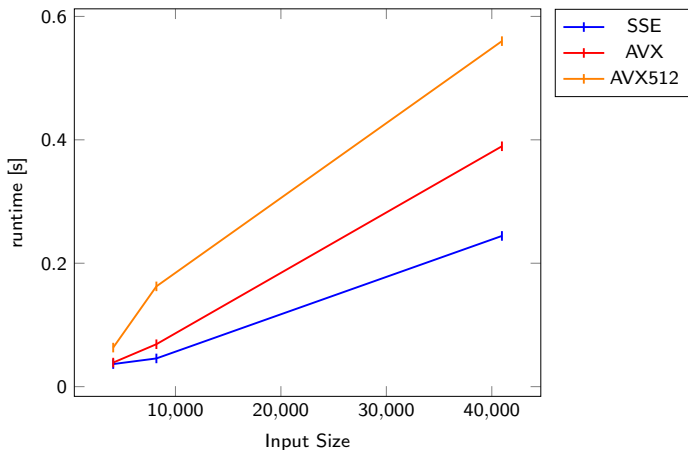
- Ref.Problem: Scalable Search
- Library: MP-Slice - Datatype -d d128 (SSE)
- Metric: Input Size - runtime
- Switches: Preprocessing: 0, Split Roles: 1, Pack Bool: 0, Optimize Sharing: 1
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## MP-Slice Runtimes Input Size Protocol -s 2 (Replicated)



- 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
- Specs: 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
- Specs: 6312U(2.4GHz) 512GiB 25Gbits