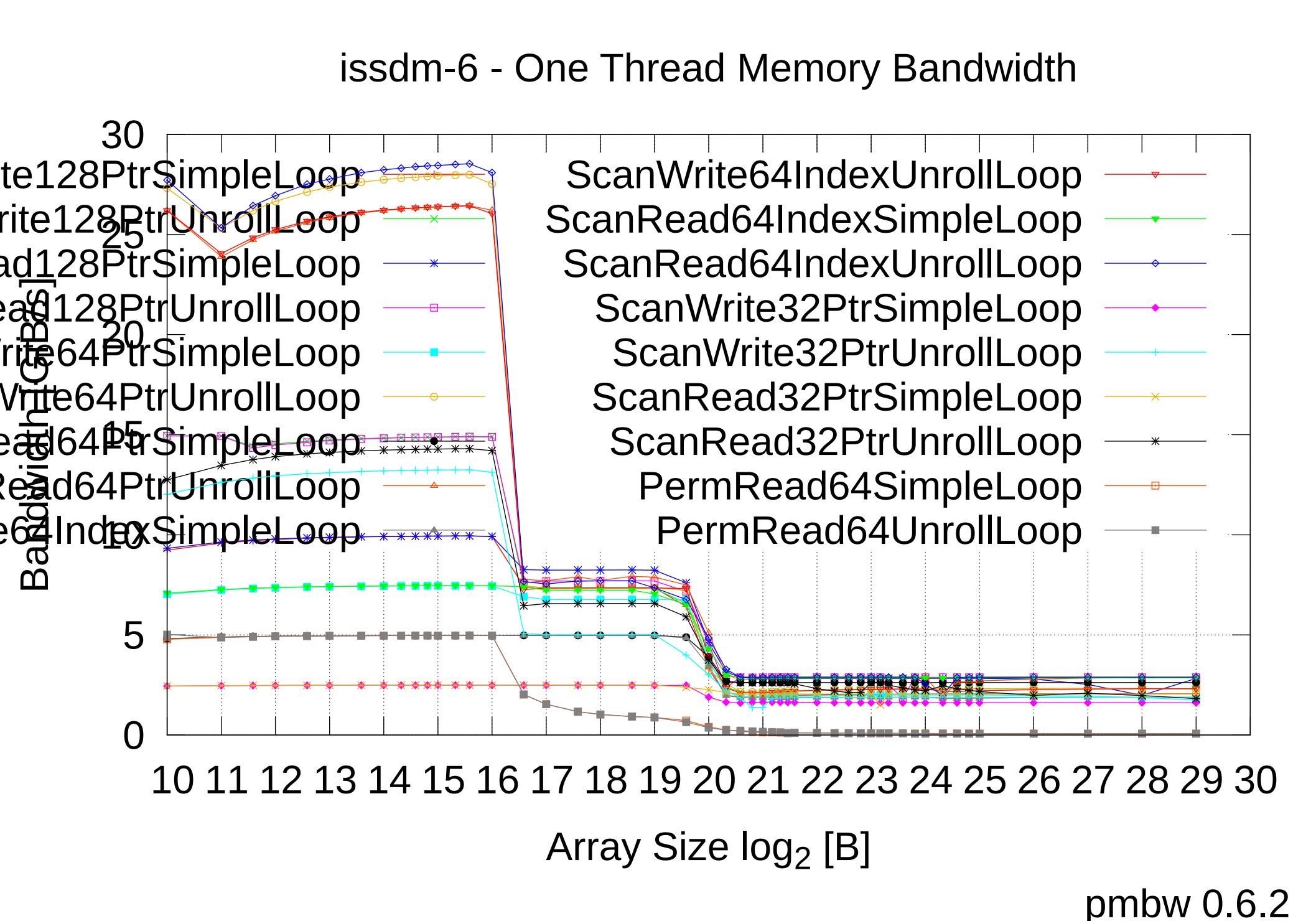
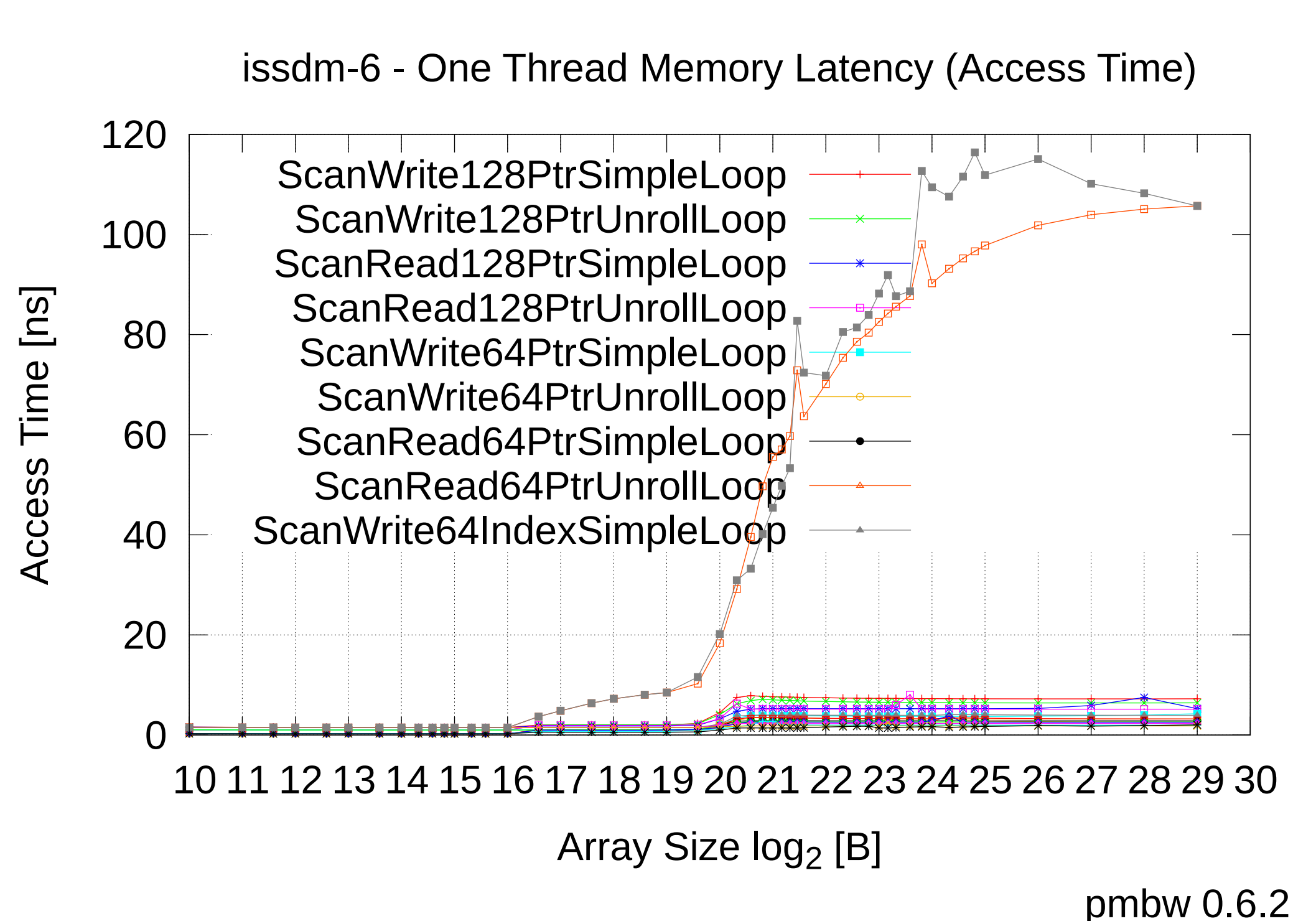
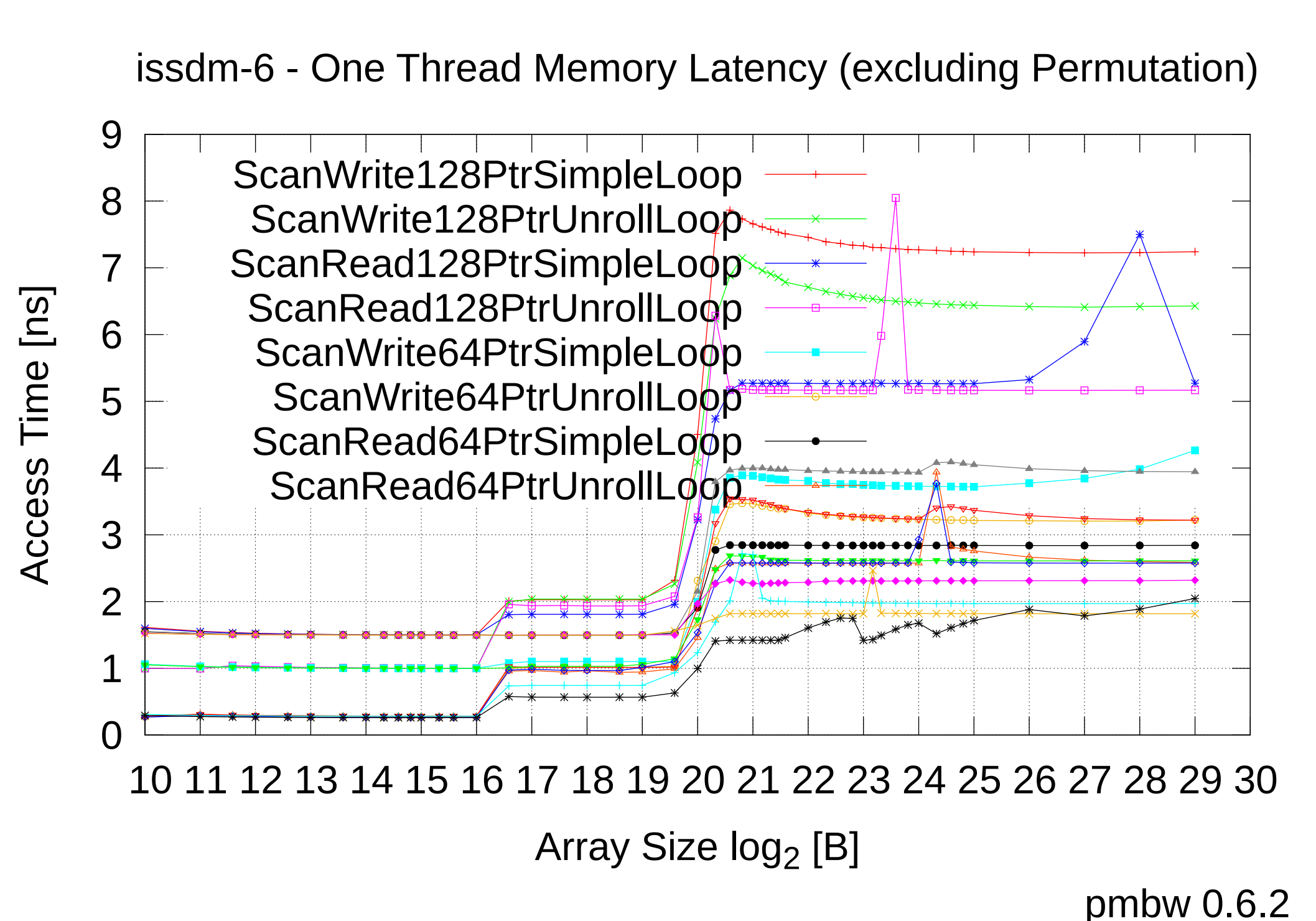
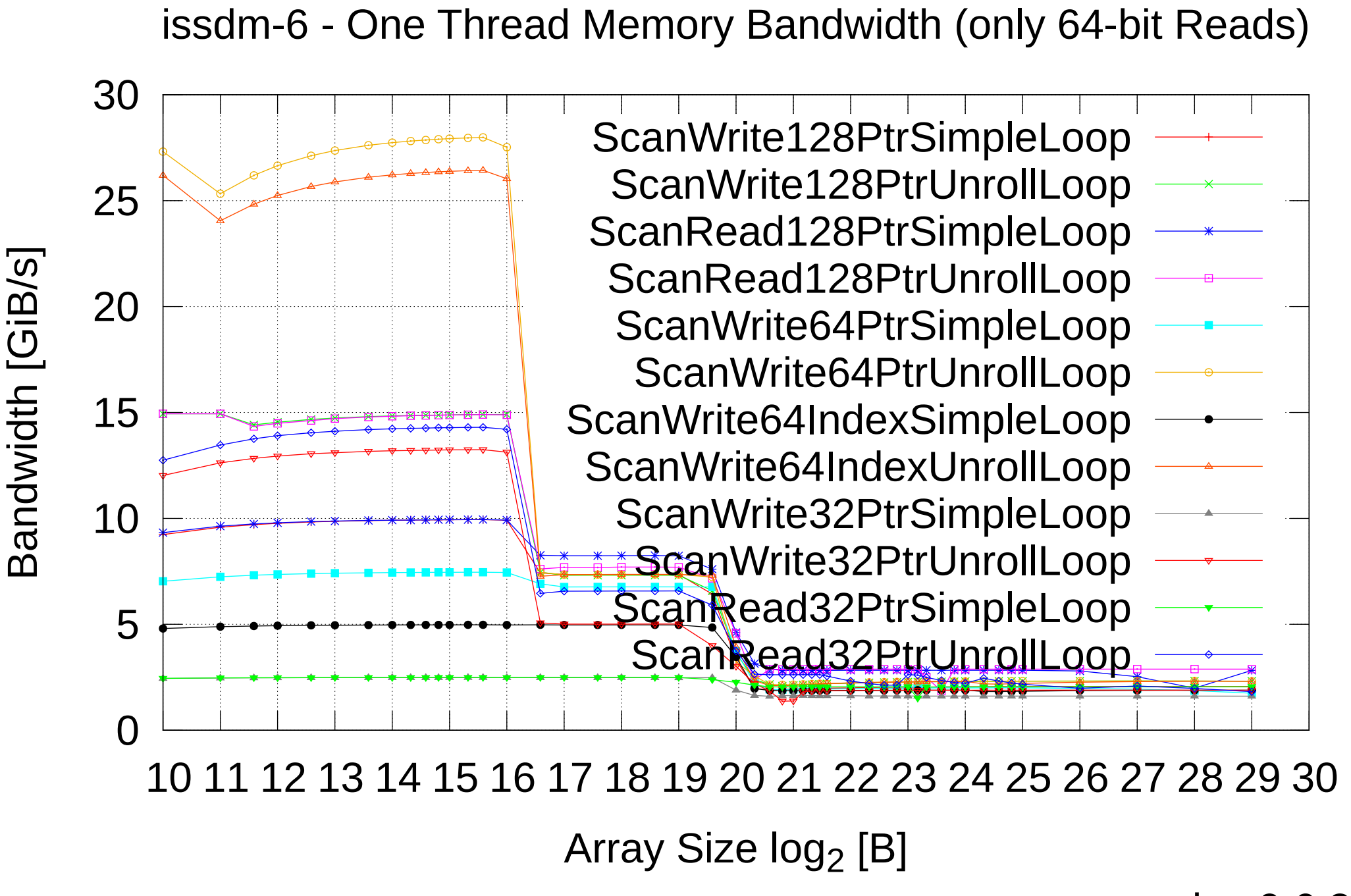
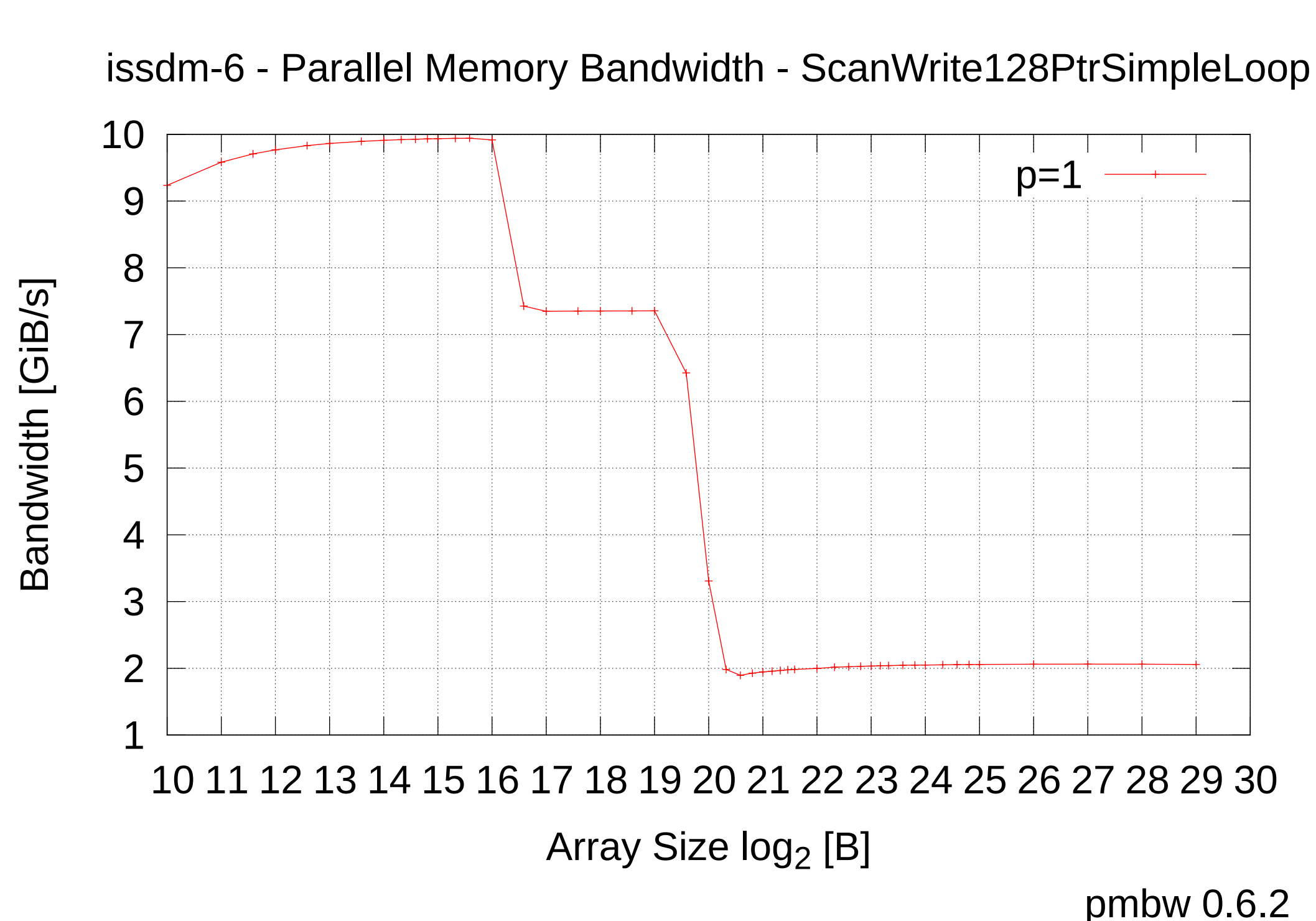
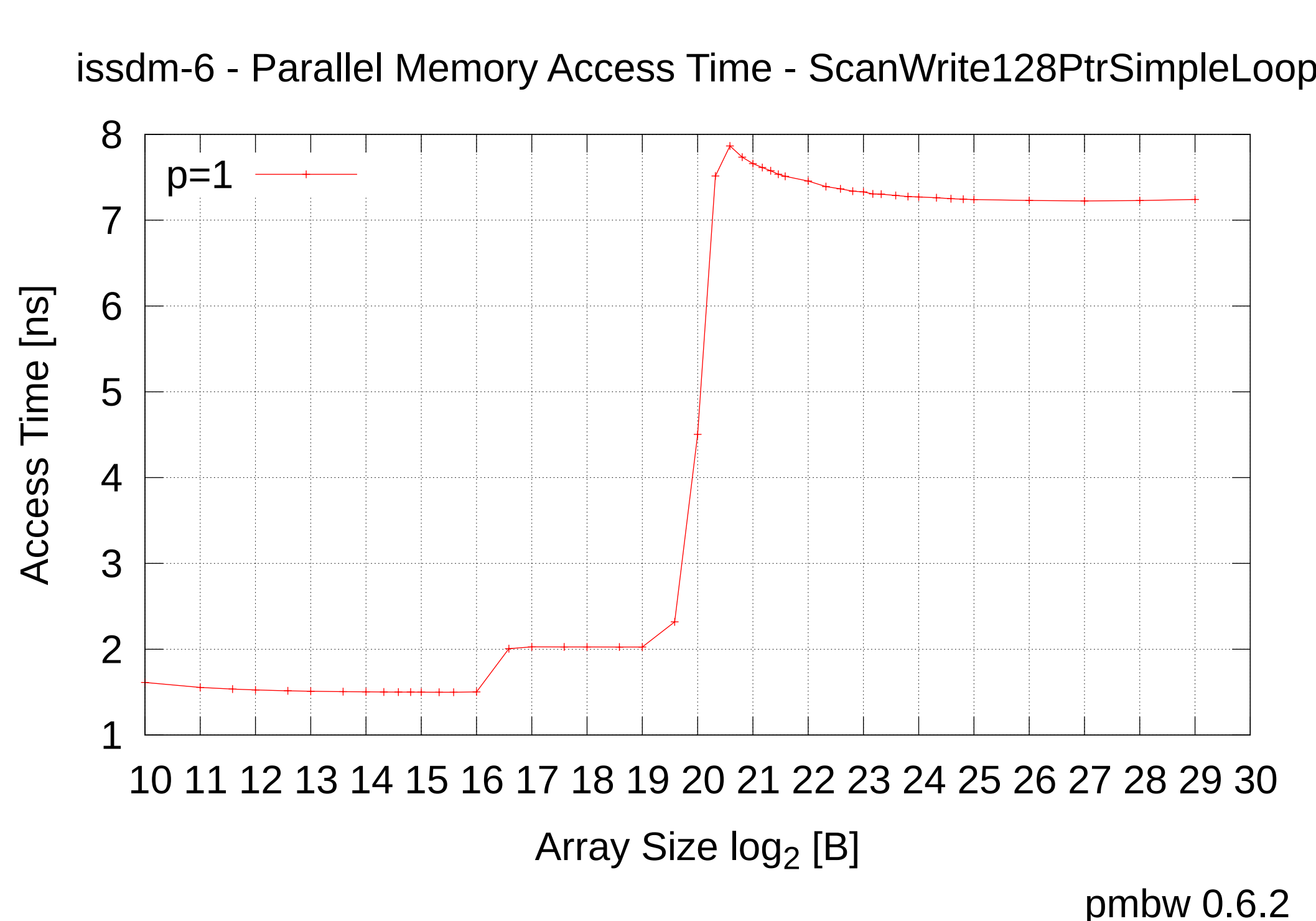

issdm-6 - One Thread Memory Bandwidth
Bandwidth [GiB/s]
Array Size log2 [B]
ScanWrite64IndexUnrollLoop
ScanRead64IndexSimpleLoop
ScanRead64IndexUnrollLoop
ScanWrite32PtrSimpleLoop
ScanWrite32PtrUnrollLoop
ScanRead32PtrSimpleLoop
ScanRead32PtrUnrollLoop
PermRead64SimpleLoop
PermRead64UnrollLoop
te128PtrSimpleLoop
rite128PtrUnrollLoop
ad128PtrSimpleLoop
ead128PtrUnrollLoop
rite64PtrSimpleLoop
Write64PtrUnrollLoop
ead64PtrSimpleLoop
Read64PtrUnrollLoop
e64IndexSimpleLoop
0
5
10
15
20
25
30
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
pmbw 0.6.2

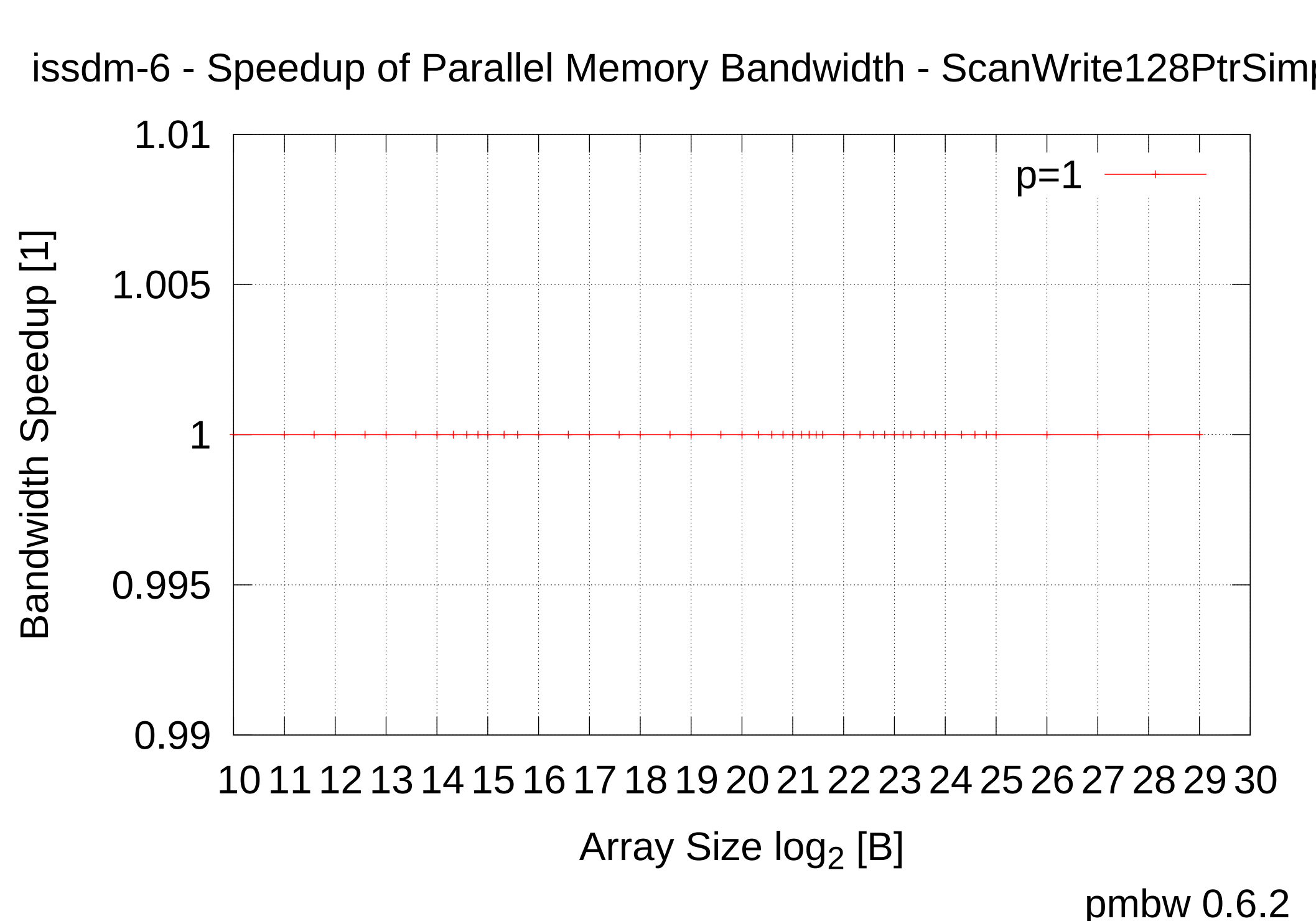

issdm-6 - One Thread Memory Latency (Access Time)
Access Time [ns]
120
100
80
60
40
20
0
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
ScanWrite128PtrSimpleLoop
ScanWrite128PtrUnrollLoop
ScanRead128PtrSimpleLoop
ScanRead128PtrUnrollLoop
ScanWrite64PtrSimpleLoop
ScanWrite64PtrUnrollLoop
ScanRead64PtrSimpleLoop
ScanRead64PtrUnrollLoop
ScanWrite64IndexSimpleLoop
pmbw 0.6.2

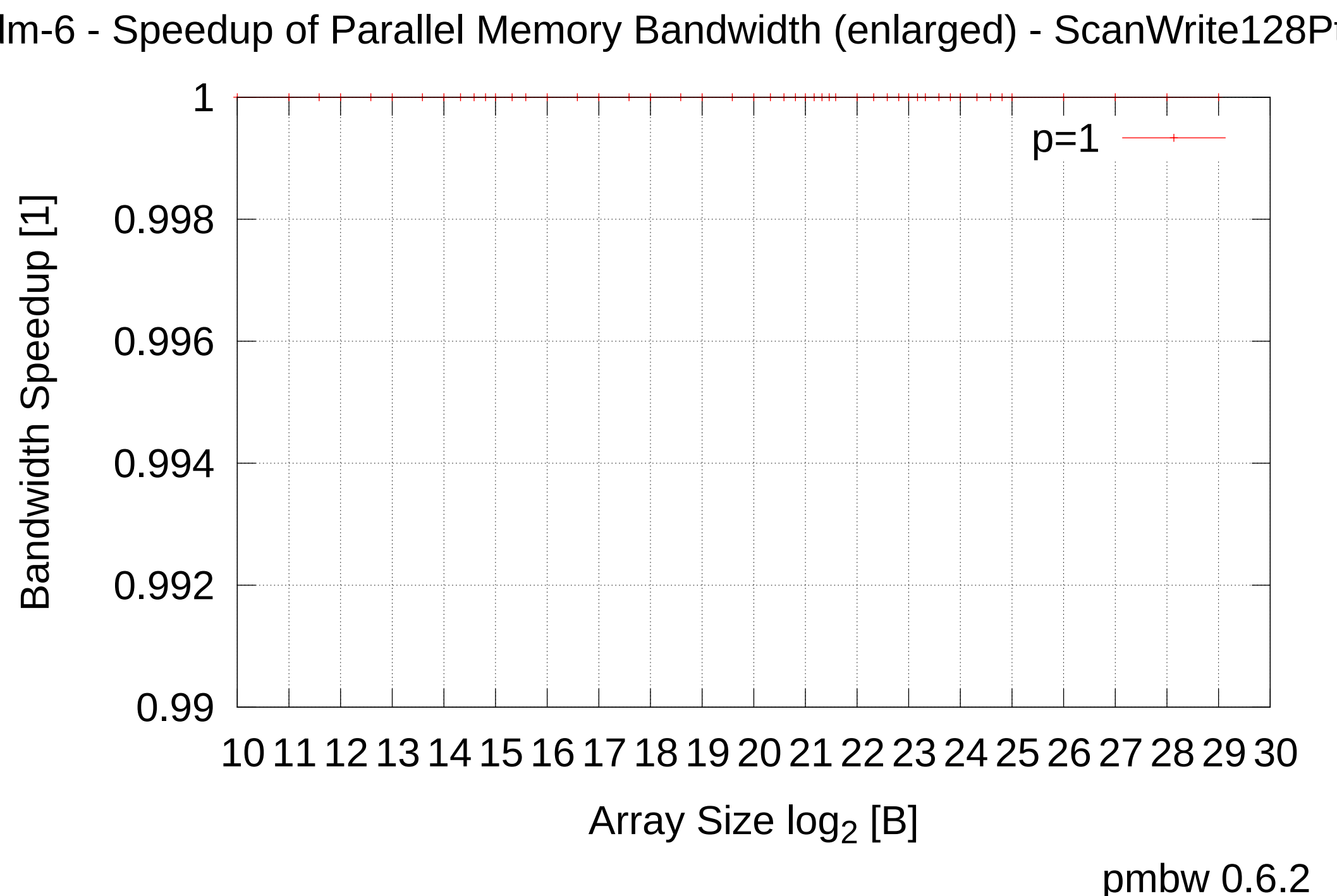

issdm-6 - One Thread Memory Latency (excluding Permutation)
ScanWrite128PtrSimpleLoop
ScanWrite128PtrUnrollLoop
ScanRead128PtrSimpleLoop
ScanRead128PtrUnrollLoop
ScanWrite64PtrSimpleLoop
ScanWrite64PtrUnrollLoop
ScanRead64PtrSimpleLoop
ScanRead64PtrUnrollLoop
Access Time [ns]
0 1 2 3 4 5 6 7 8 9
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

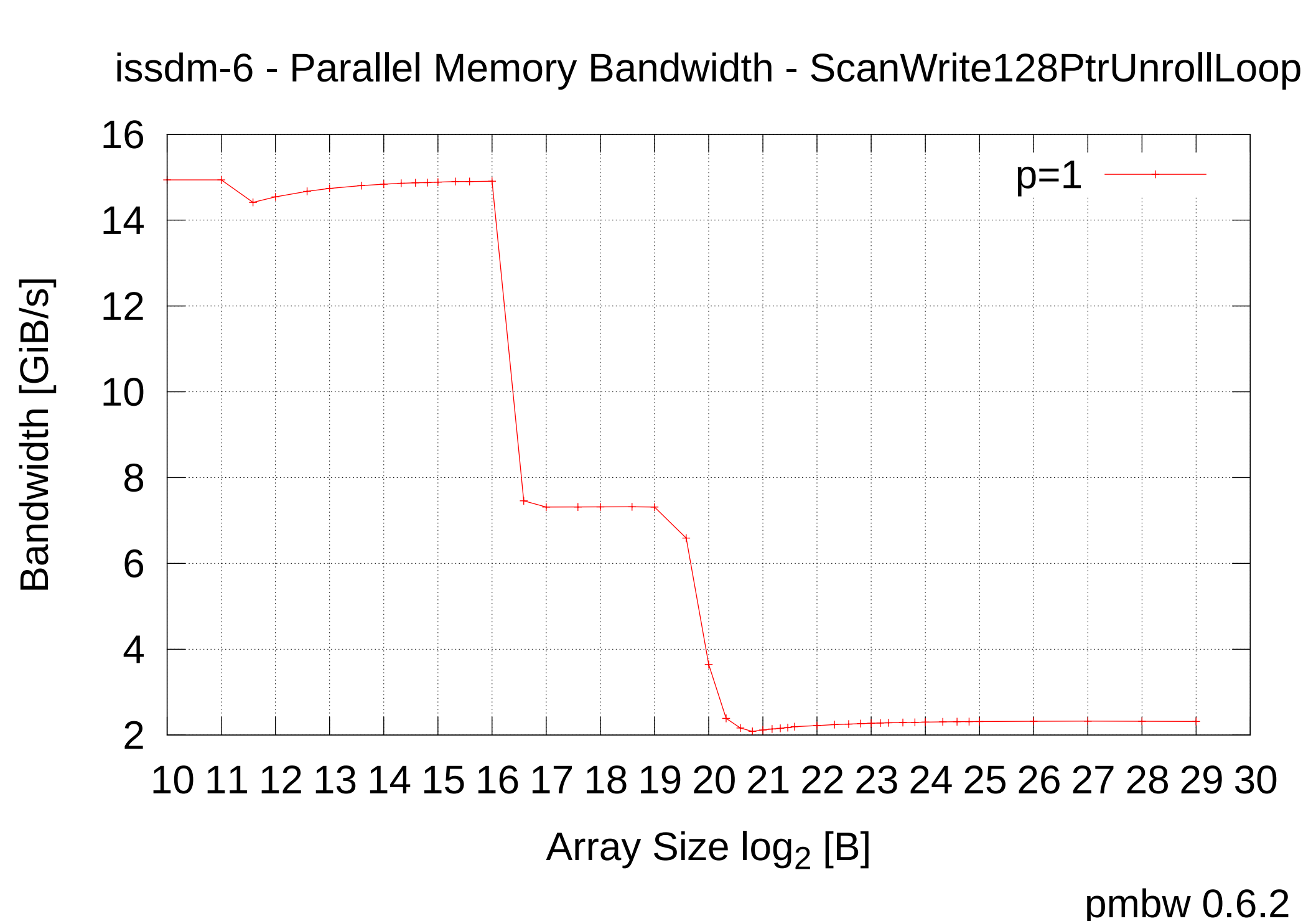

issdm-6 - One Thread Memory Bandwidth (only 64-bit Reads)
Bandwidth [GiB/s]
0
5
10
15
20
25
30
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
ScanWrite128PtrSimpleLoop
ScanWrite128PtrUnrollLoop
ScanRead128PtrSimpleLoop
ScanRead128PtrUnrollLoop
ScanWrite64PtrSimpleLoop
ScanWrite64PtrUnrollLoop
ScanWrite64IndexSimpleLoop
ScanWrite64IndexUnrollLoop
ScanWrite32PtrSimpleLoop
ScanWrite32PtrUnrollLoop
ScanRead32PtrSimpleLoop
ScanRead32PtrUnrollLoop
pmbw 0.6.2

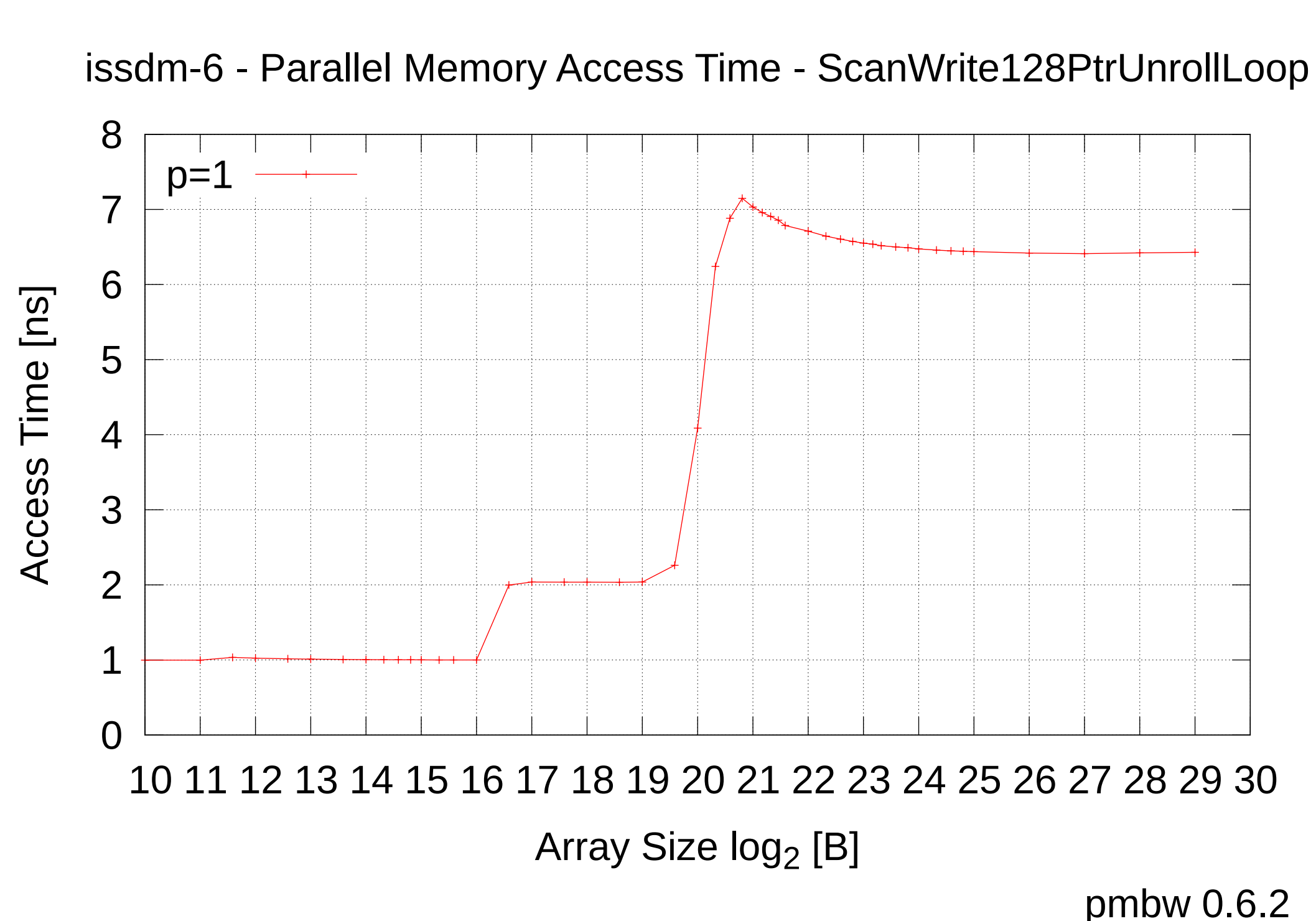

issdm-6 - Parallel Memory Bandwidth - ScanWrite128PtrSimpleLoop
Bandwidth [GiB/s]
10
9
8
7
6
5
4
3
2
1
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

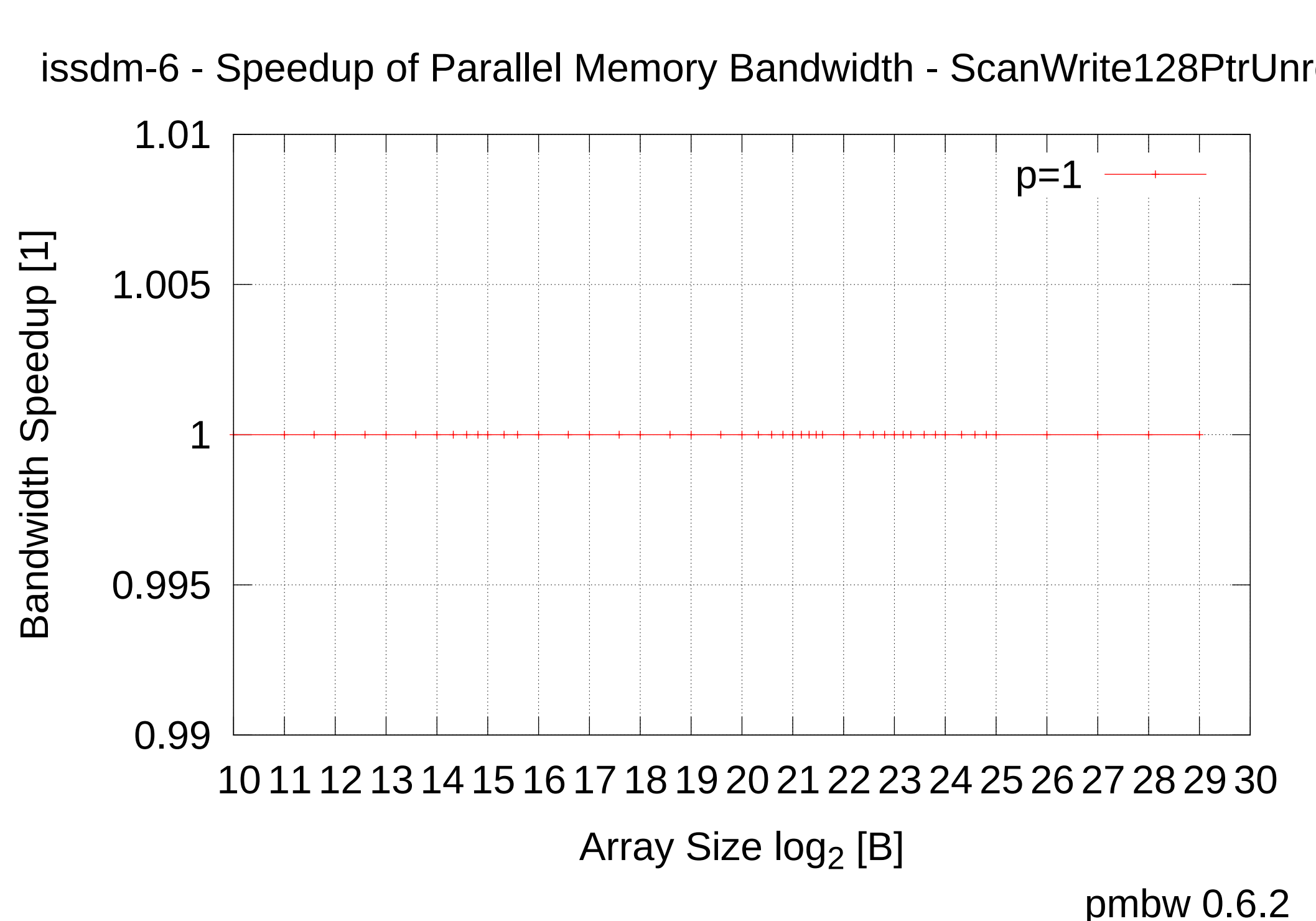

issdm-6 - Parallel Memory Access Time - ScanWrite128PtrSimpleLoop
p=1
Access Time [ns]
1
2
3
4
5
6
7
8
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

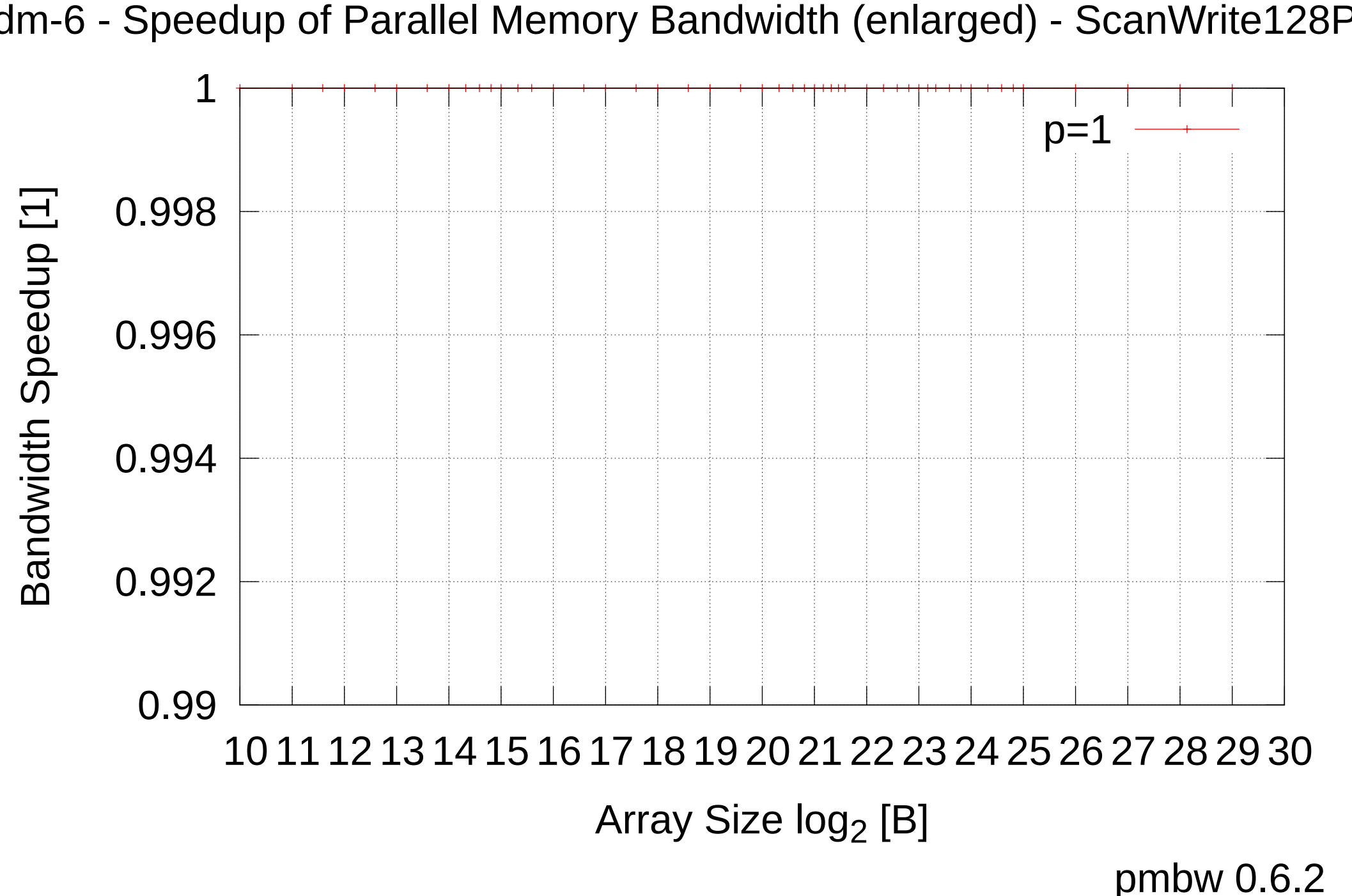

issdm-6 - Speedup of Parallel Memory Bandwidth - ScanWrite128PtrSimp
Bandwidth Speedup [1]
1.01
1.005
1
0.995
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

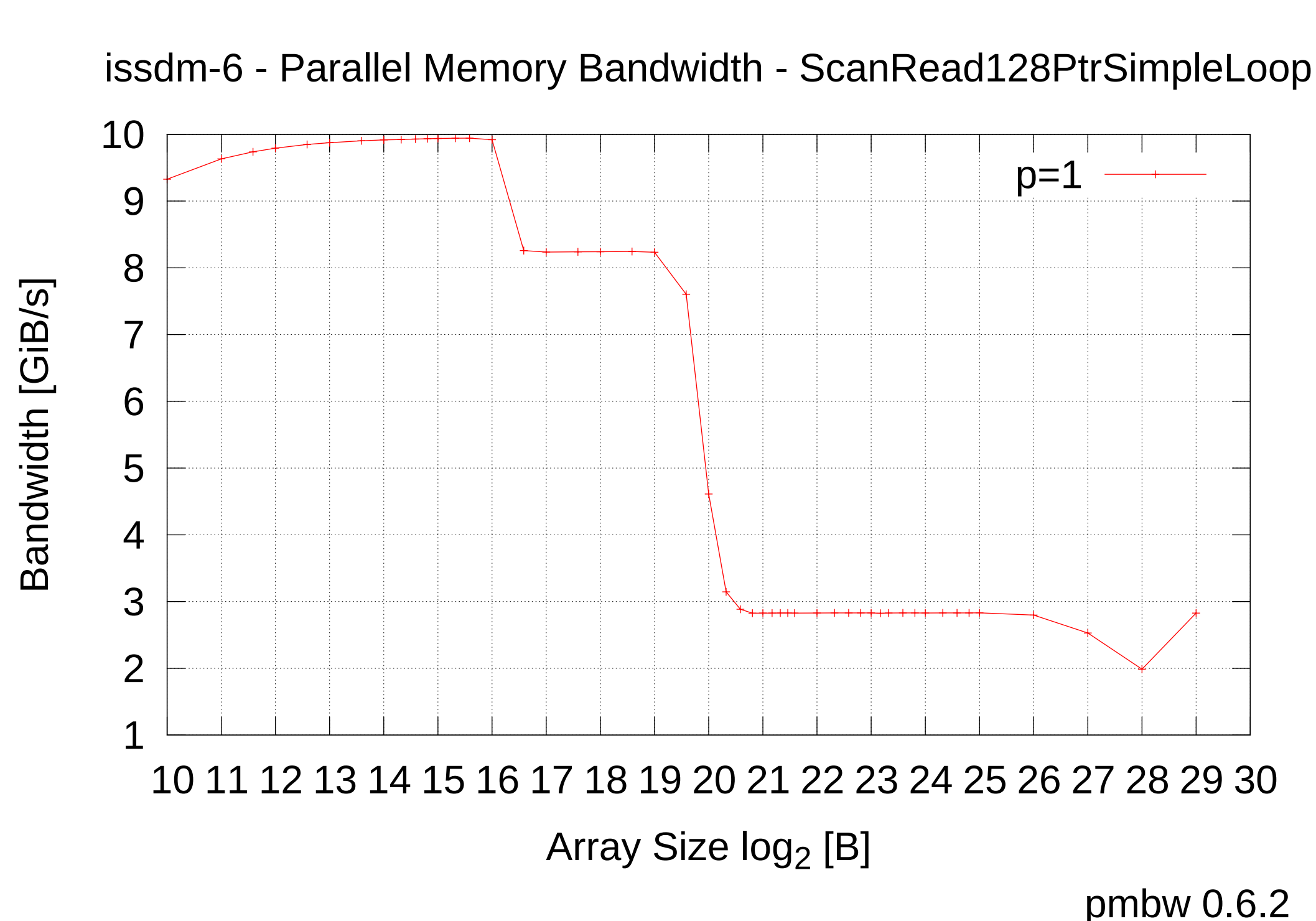

lm-6 - Speedup of Parallel Memory Bandwidth (enlarged) - ScanWrite128P
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

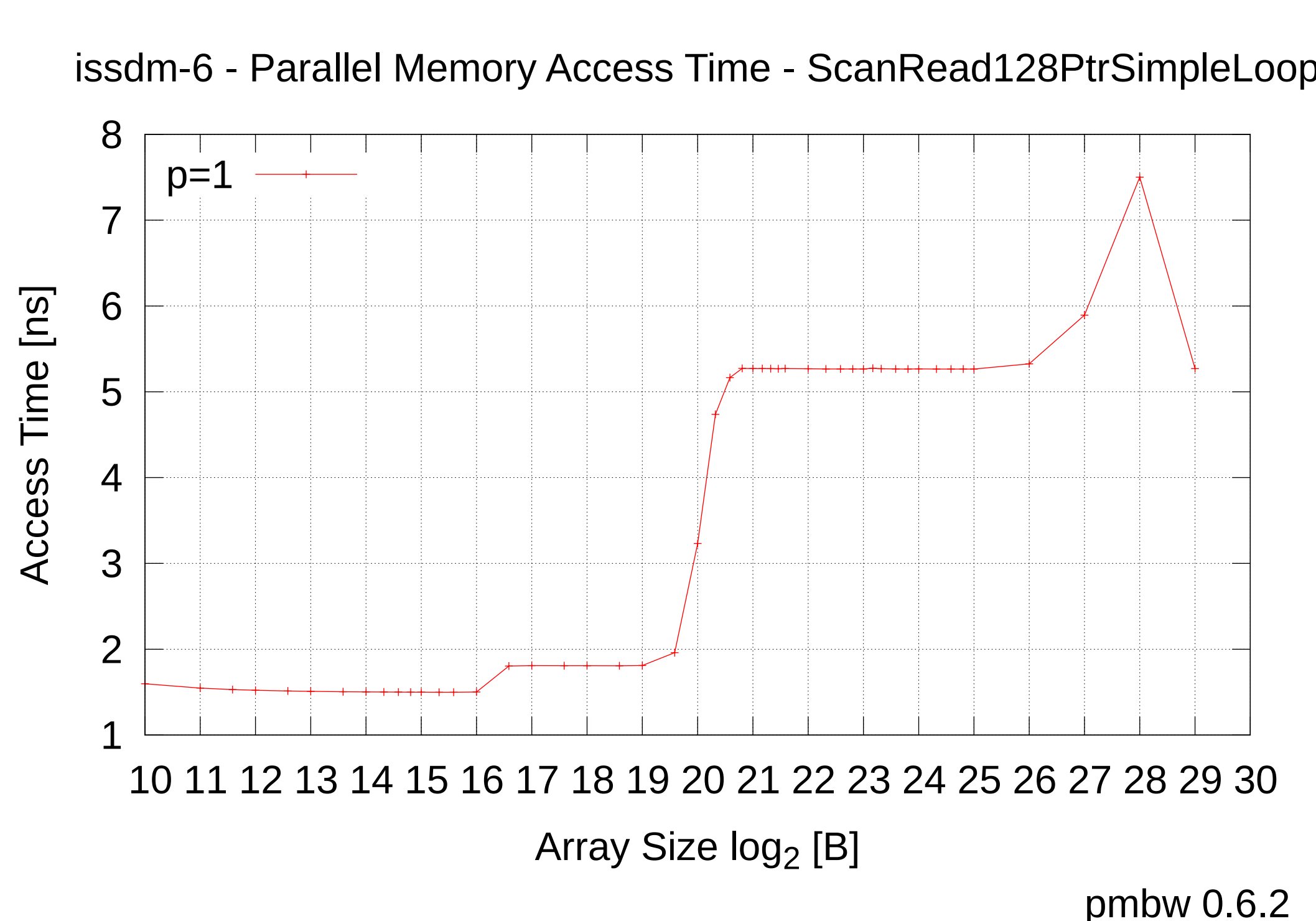

issdm-6 - Parallel Memory Bandwidth - ScanWrite128PtrUnrollLoop
Bandwidth [GiB/s]
16
14
12
10
8
6
4
2
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

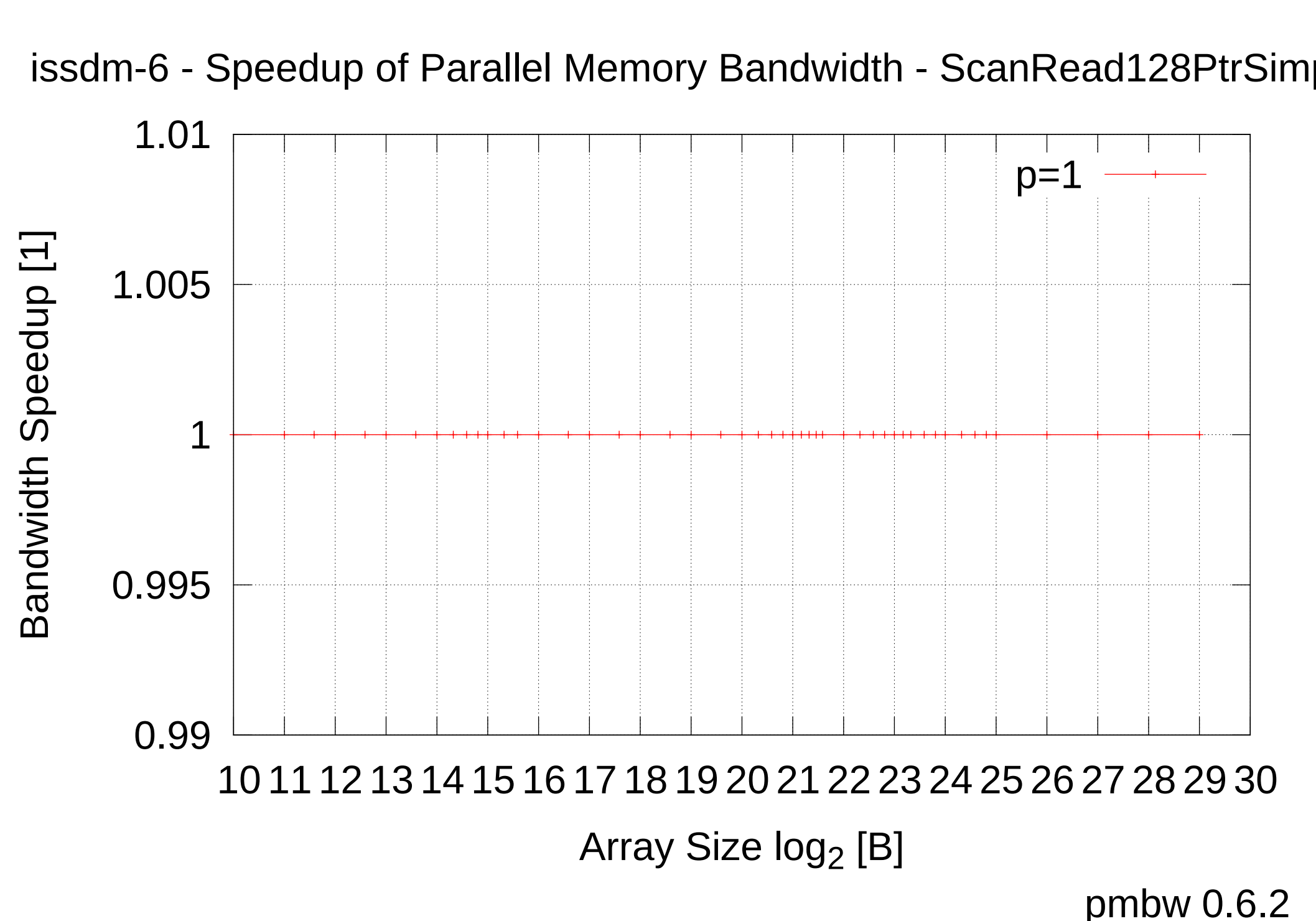

issdm-6 - Parallel Memory Access Time - ScanWrite128PtrUnrollLoop
p=1
Access Time [ns]
0
1
2
3
4
5
6
7
8
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

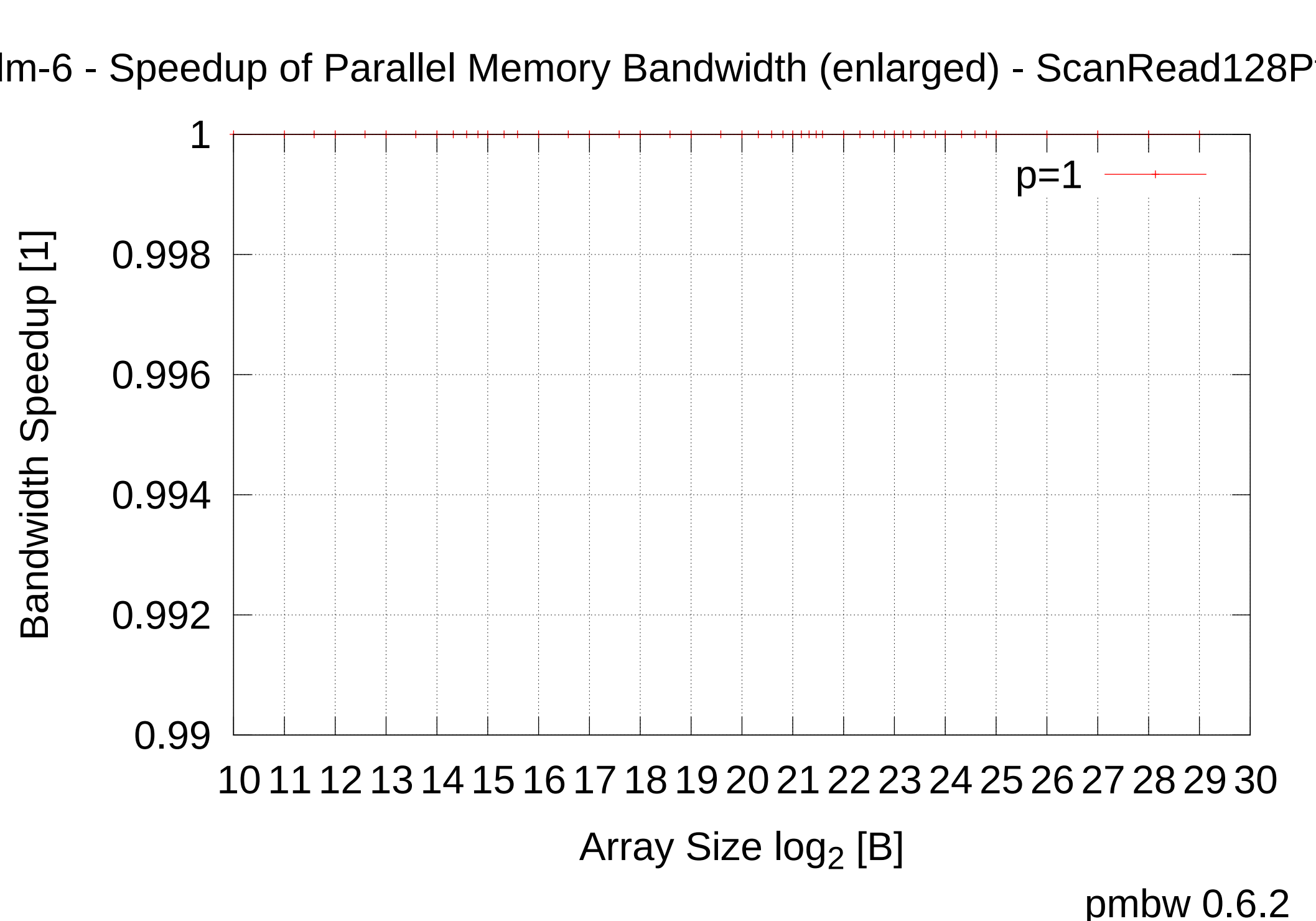

issdm-6 - Speedup of Parallel Memory Bandwidth - ScanWrite128PtrUnr
Bandwidth Speedup [1]
1.01
1.005
1
0.995
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

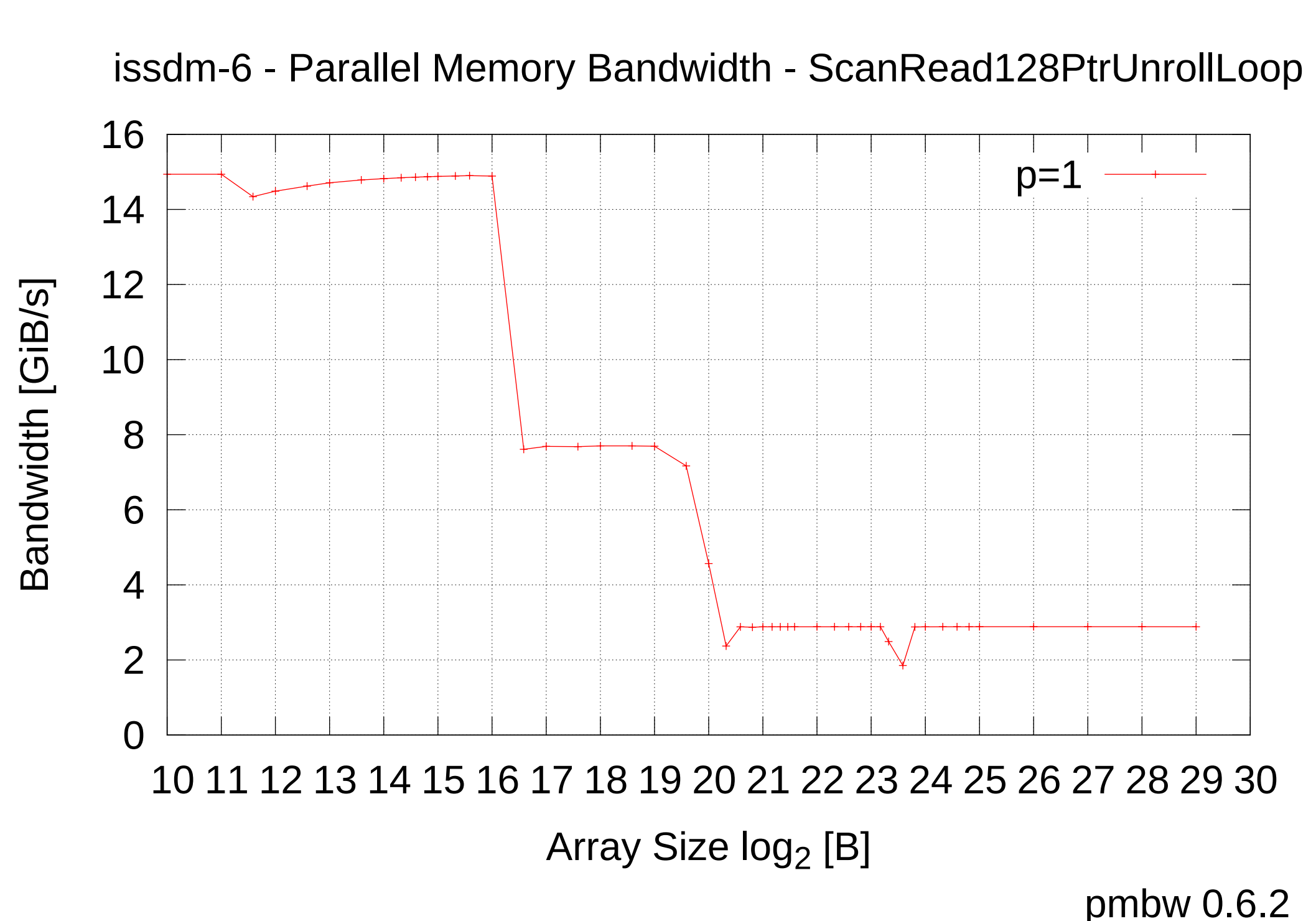

dm-6 - Speedup of Parallel Memory Bandwidth (enlarged) - ScanWrite128P
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

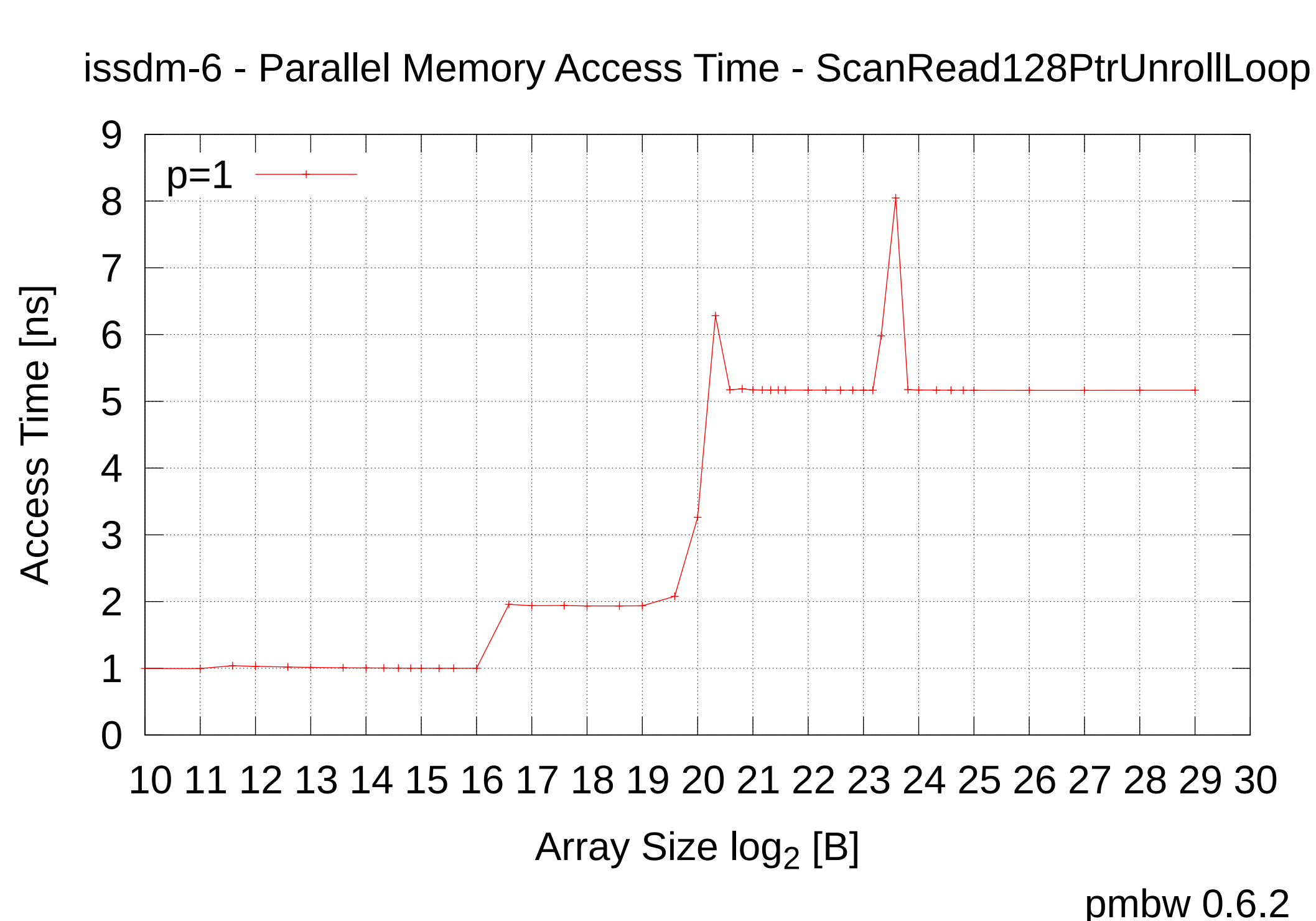

issdm-6 - Parallel Memory Bandwidth - ScanRead128PtrSimpleLoop
Bandwidth [GiB/s]
10
9
8
7
6
5
4
3
2
1
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

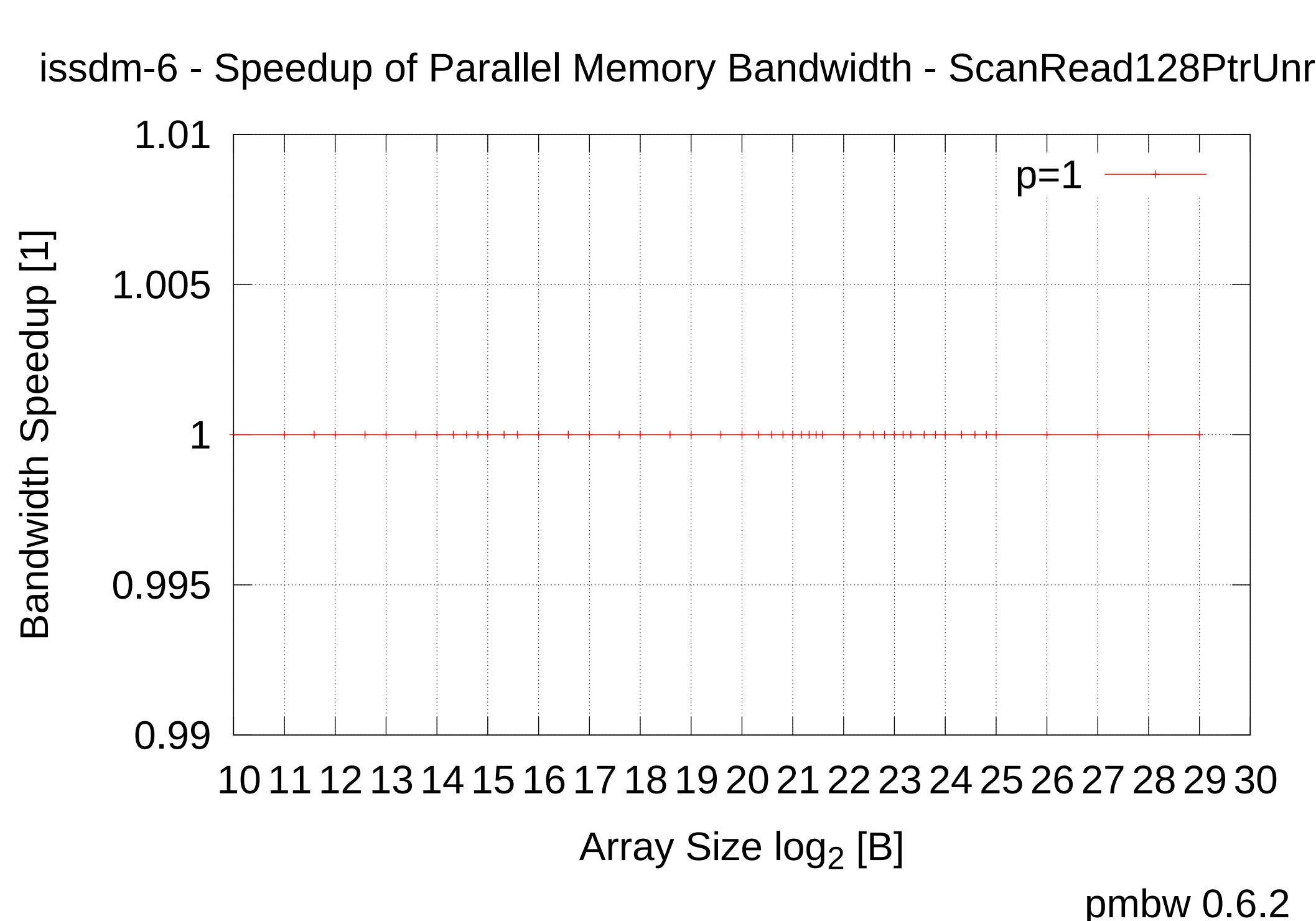

issdm-6 - Parallel Memory Access Time - ScanRead128PtrSimpleLoop
p=1
Access Time [ns]
1
2
3
4
5
6
7
8
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

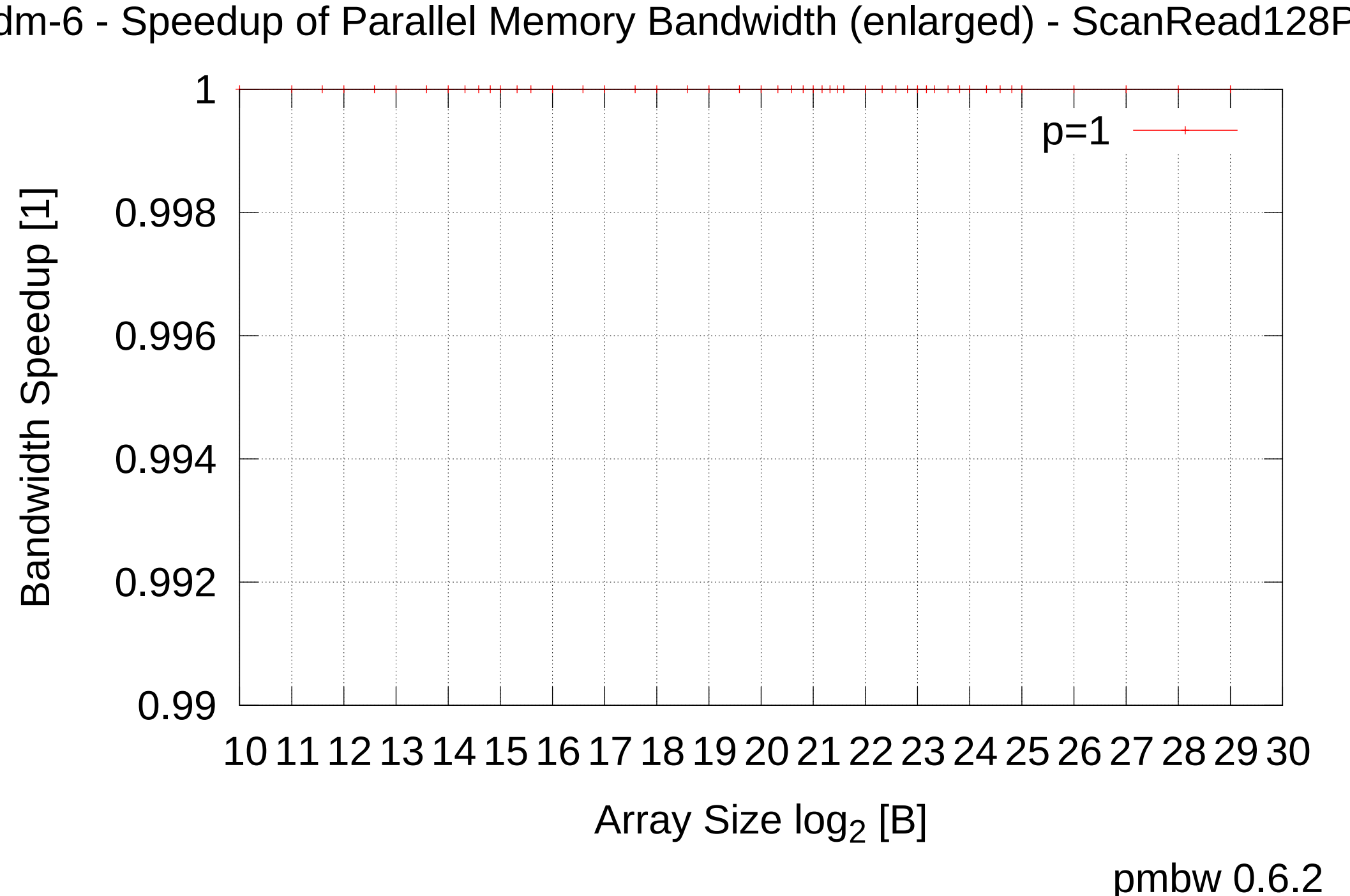

issdm-6 - Speedup of Parallel Memory Bandwidth - ScanRead128PtrSimp
Bandwidth Speedup [1]
1.01
1.005
1
0.995
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

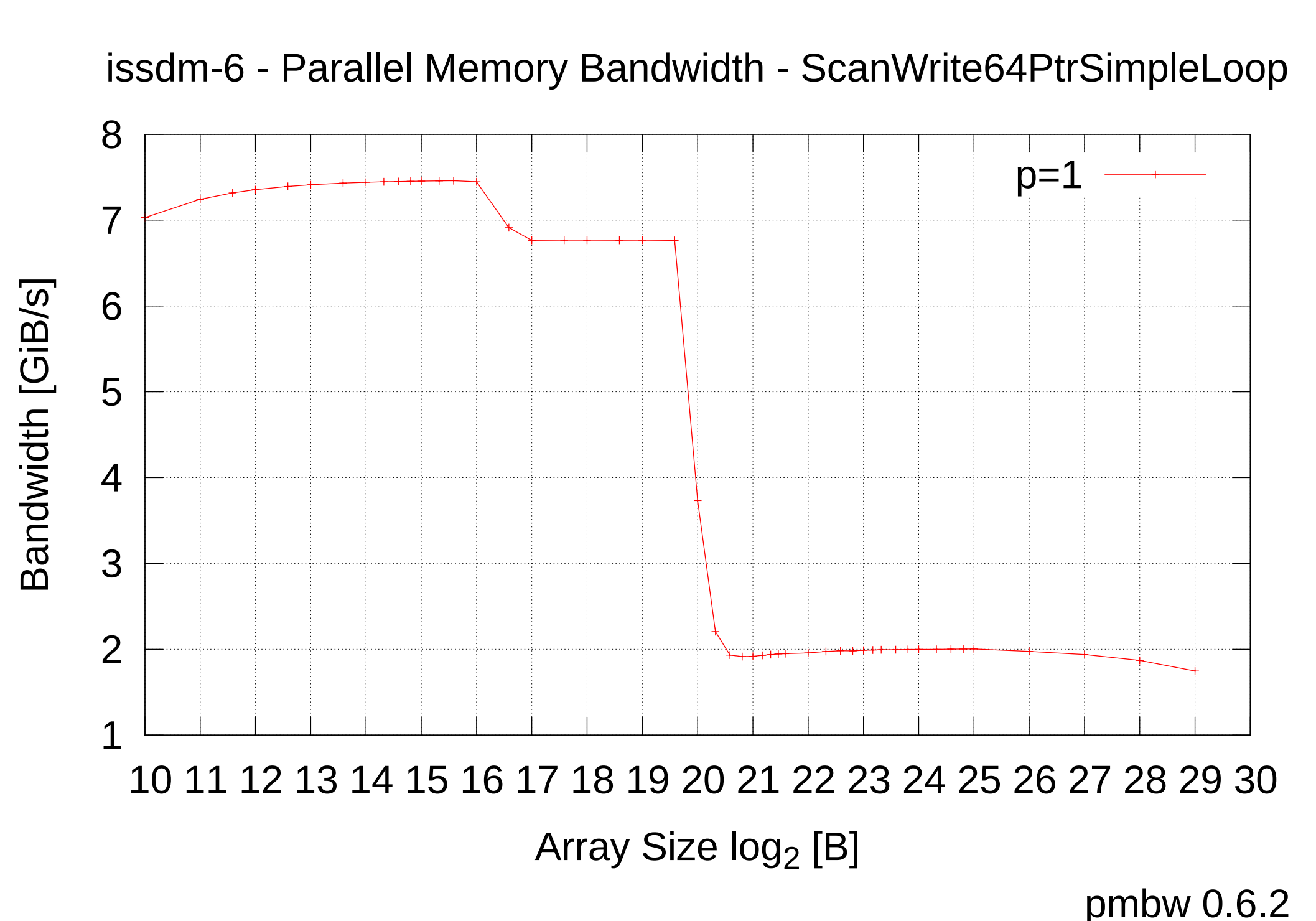

lm-6 - Speedup of Parallel Memory Bandwidth (enlarged) - ScanRead128P
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

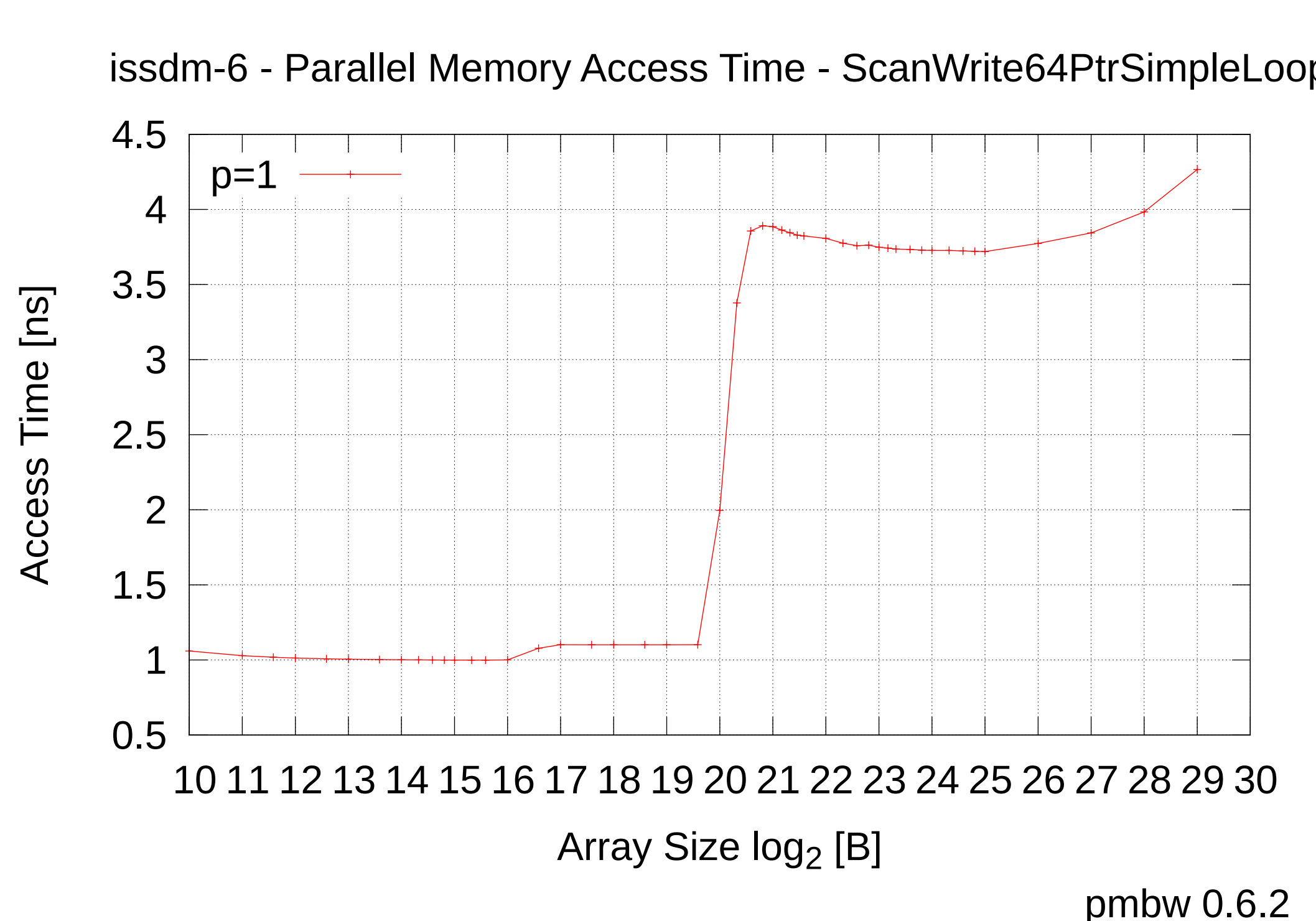

issdm-6 - Parallel Memory Bandwidth - ScanRead128PtrUnrollLoop
Bandwidth [GiB/s]
0
2
4
6
8
10
12
14
16
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

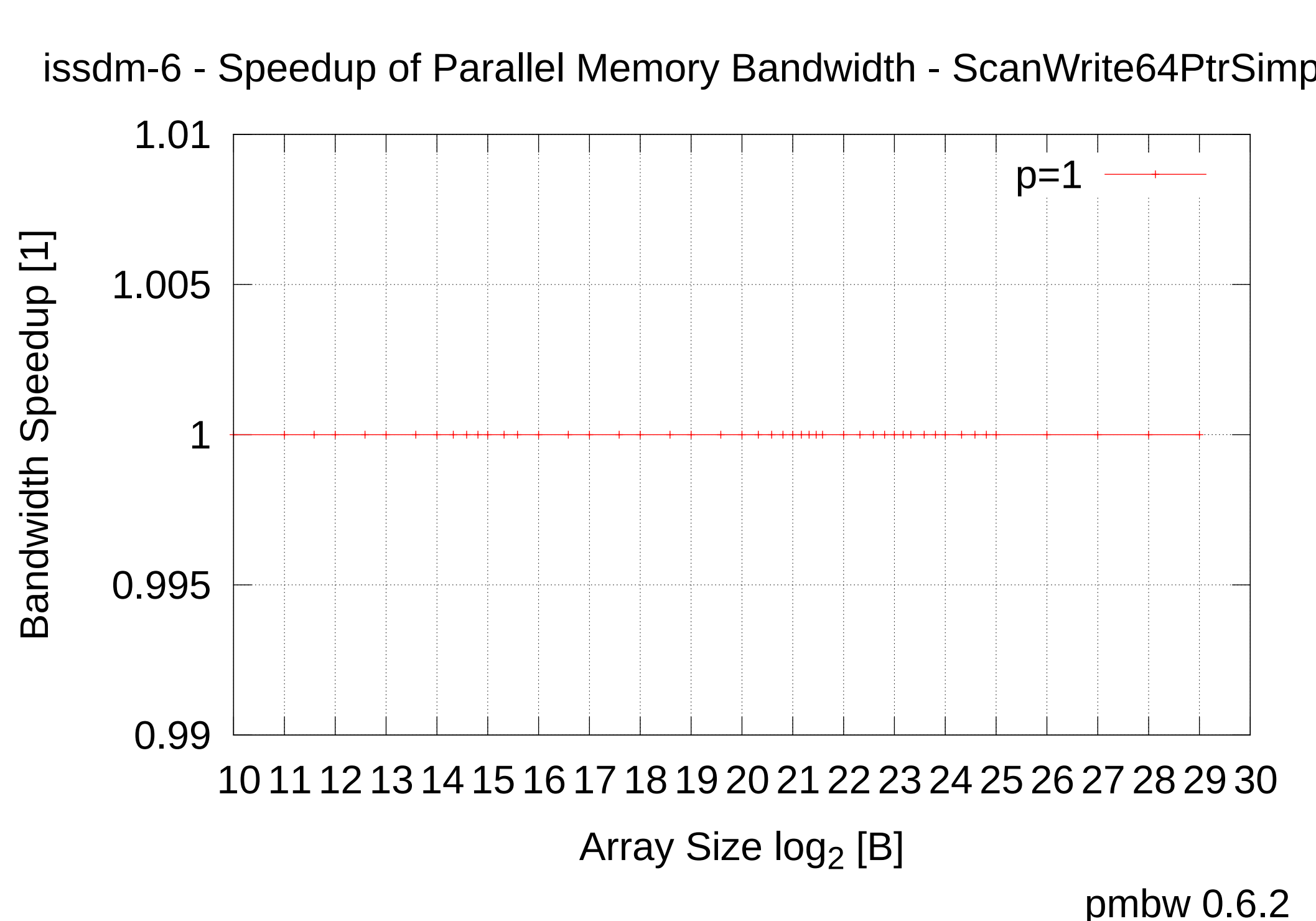

issdm-6 - Parallel Memory Access Time - ScanRead128PtrUnrollLoop
p=1
Access Time [ns]
0
1
2
3
4
5
6
7
8
9
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

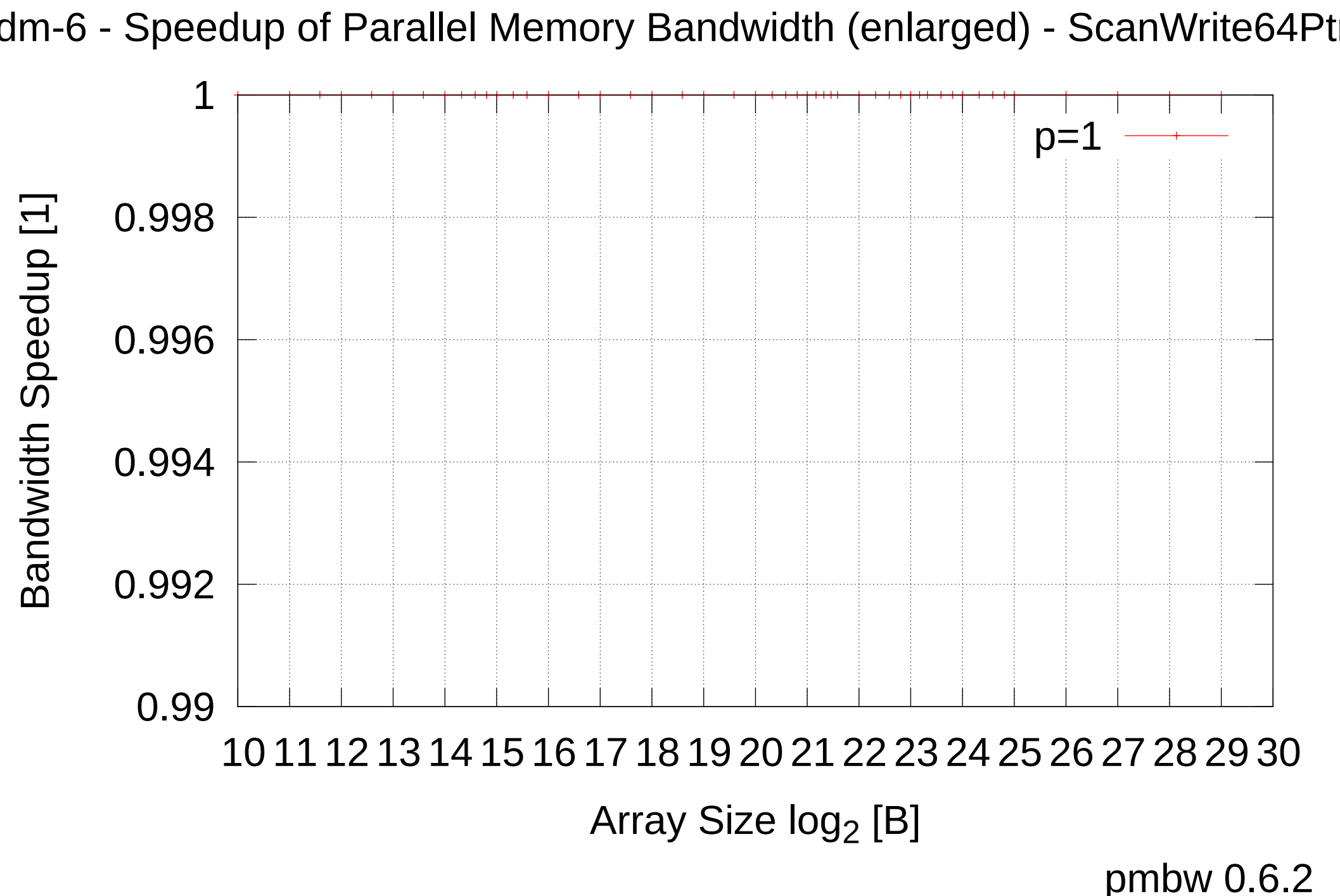

issdm-6 - Speedup of Parallel Memory Bandwidth - ScanRead128PtrUnr
Bandwidth Speedup [1]
1.01
1.005
1
0.995
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

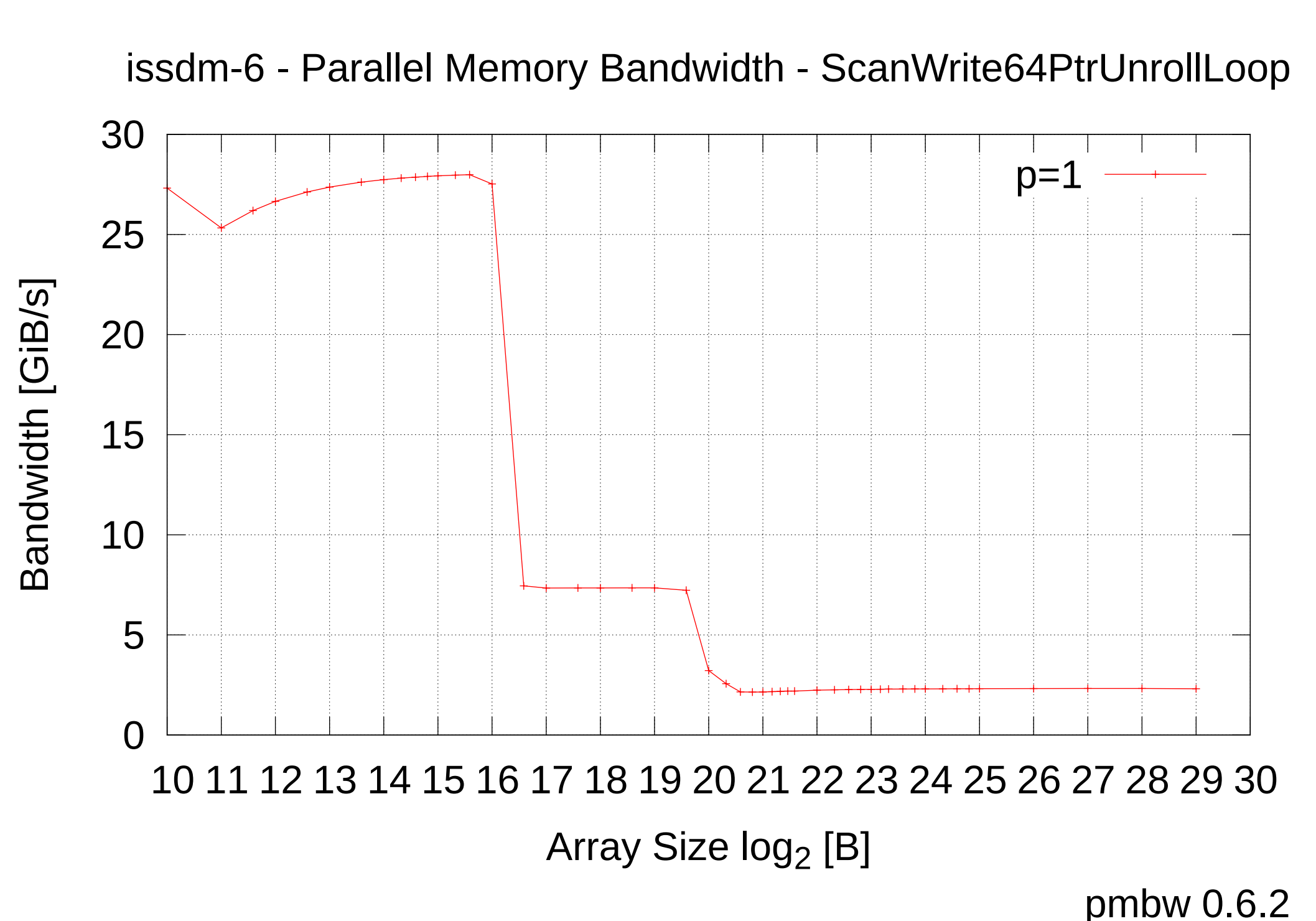

dm-6 - Speedup of Parallel Memory Bandwidth (enlarged) - ScanRead128P
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

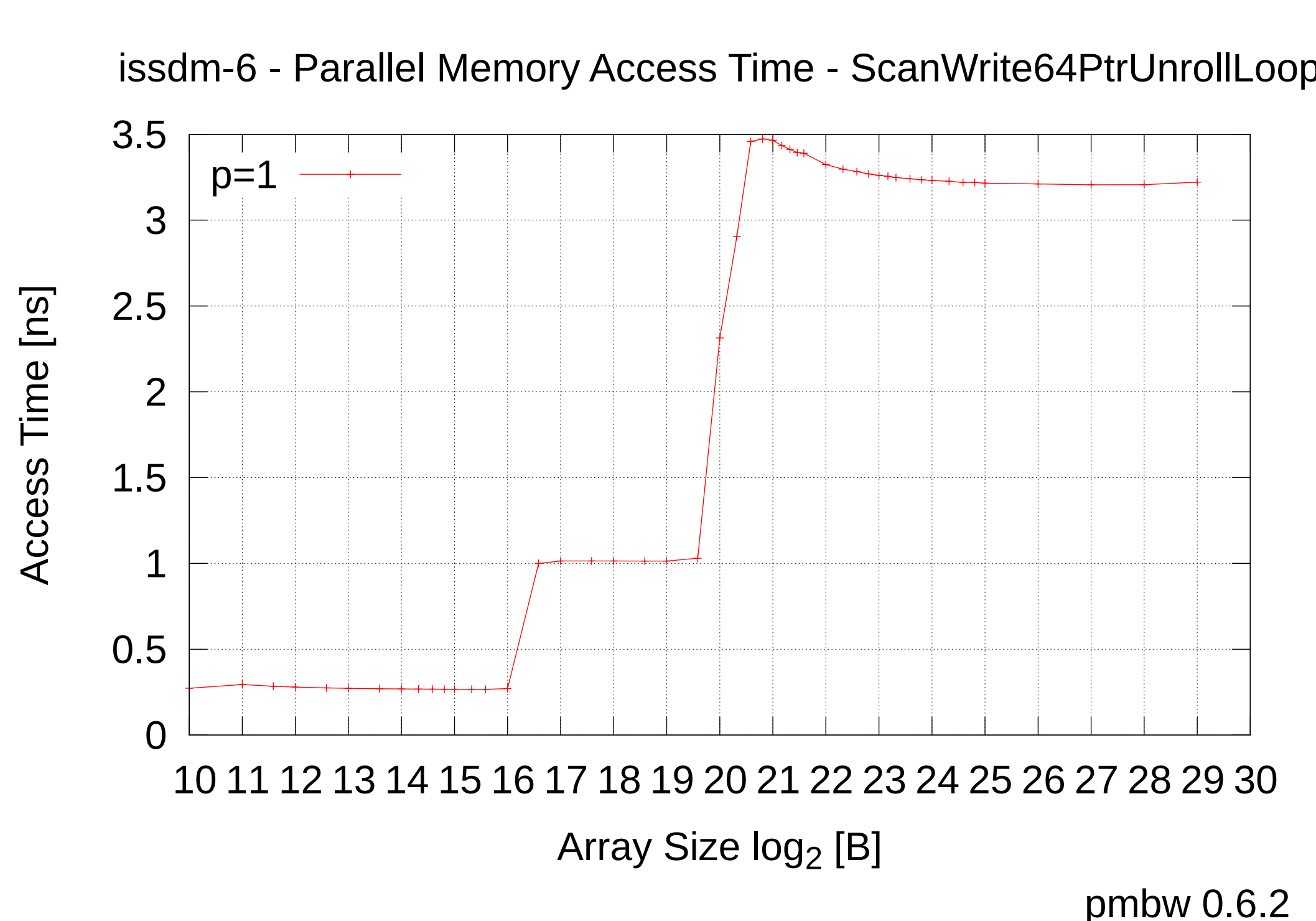

issdm-6 - Parallel Memory Bandwidth - ScanWrite64PtrSimpleLoop
Bandwidth [GiB/s]
8
7
6
5
4
3
2
1
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

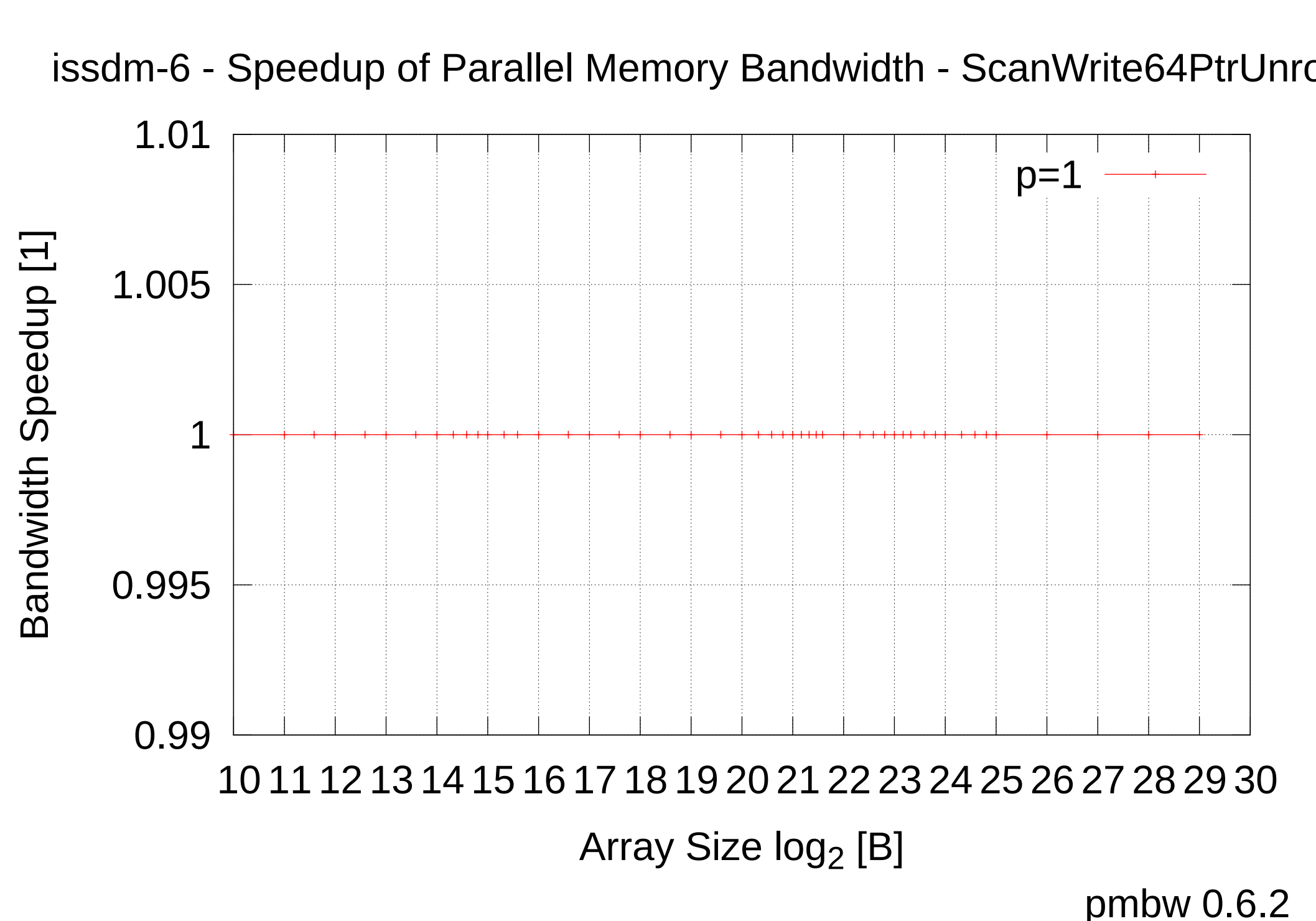

issdm-6 - Parallel Memory Access Time - ScanWrite64PtrSimpleLoop
p=1
Access Time [ns]
4.5
4
3.5
3
2.5
2
1.5
1
0.5
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

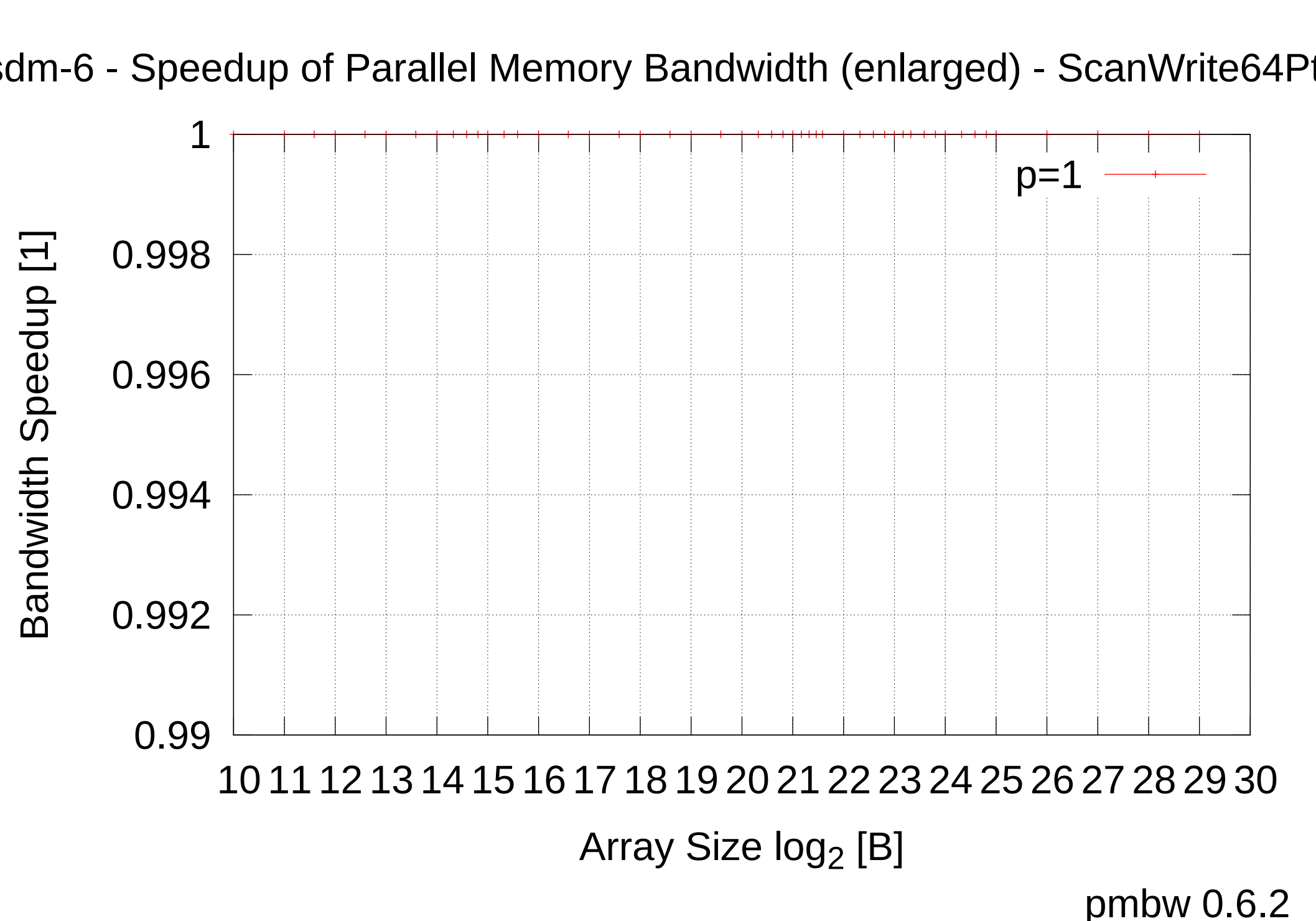

issdm-6 - Speedup of Parallel Memory Bandwidth - ScanWrite64PtrSimp
Bandwidth Speedup [1]
1.01
1.005
1
0.995
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

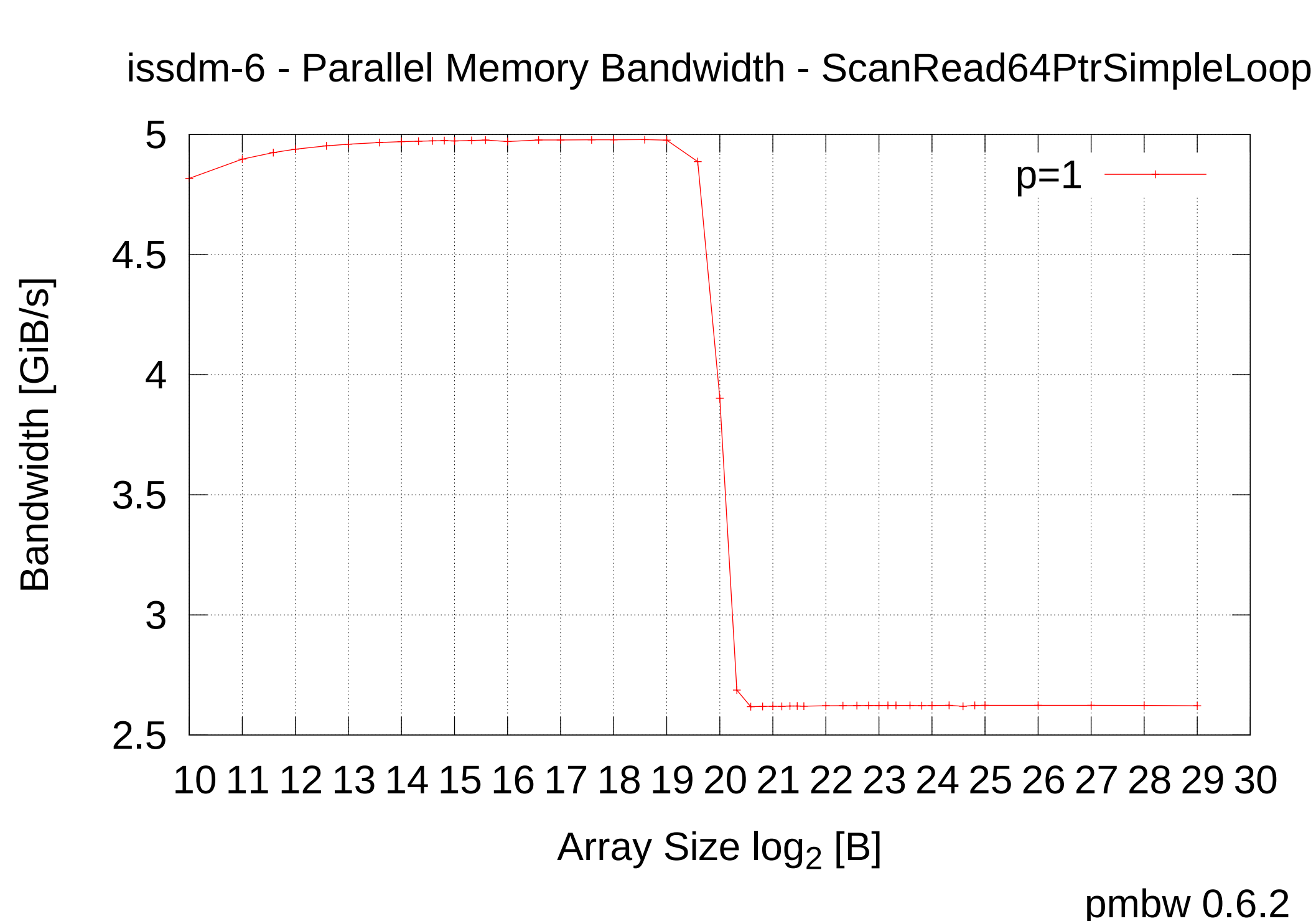

dm-6 - Speedup of Parallel Memory Bandwidth (enlarged) - ScanWrite64Pt
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

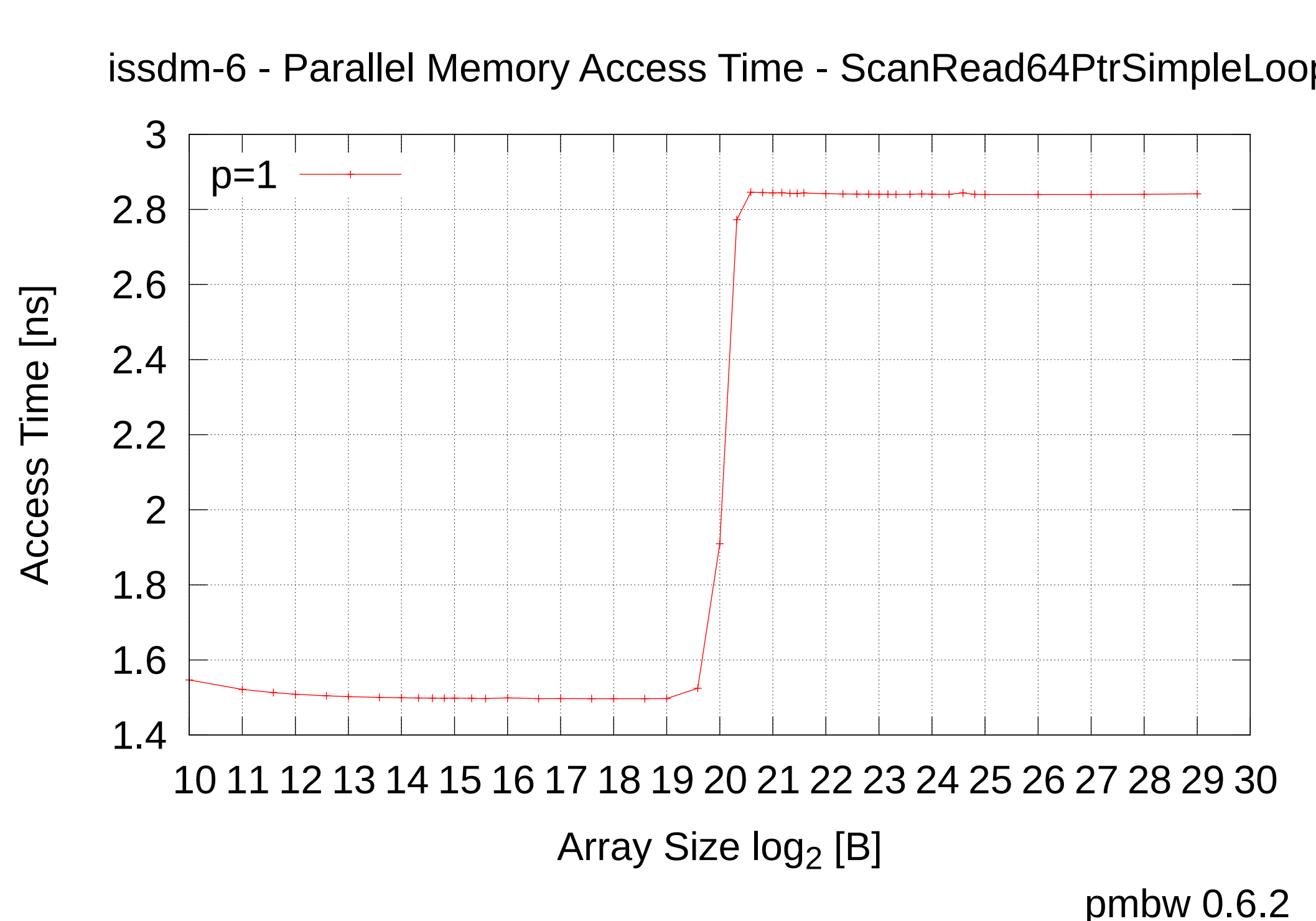

issdm-6 - Parallel Memory Bandwidth - ScanWrite64PtrUnrollLoop
Bandwidth [GiB/s]
0
5
10
15
20
25
30
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

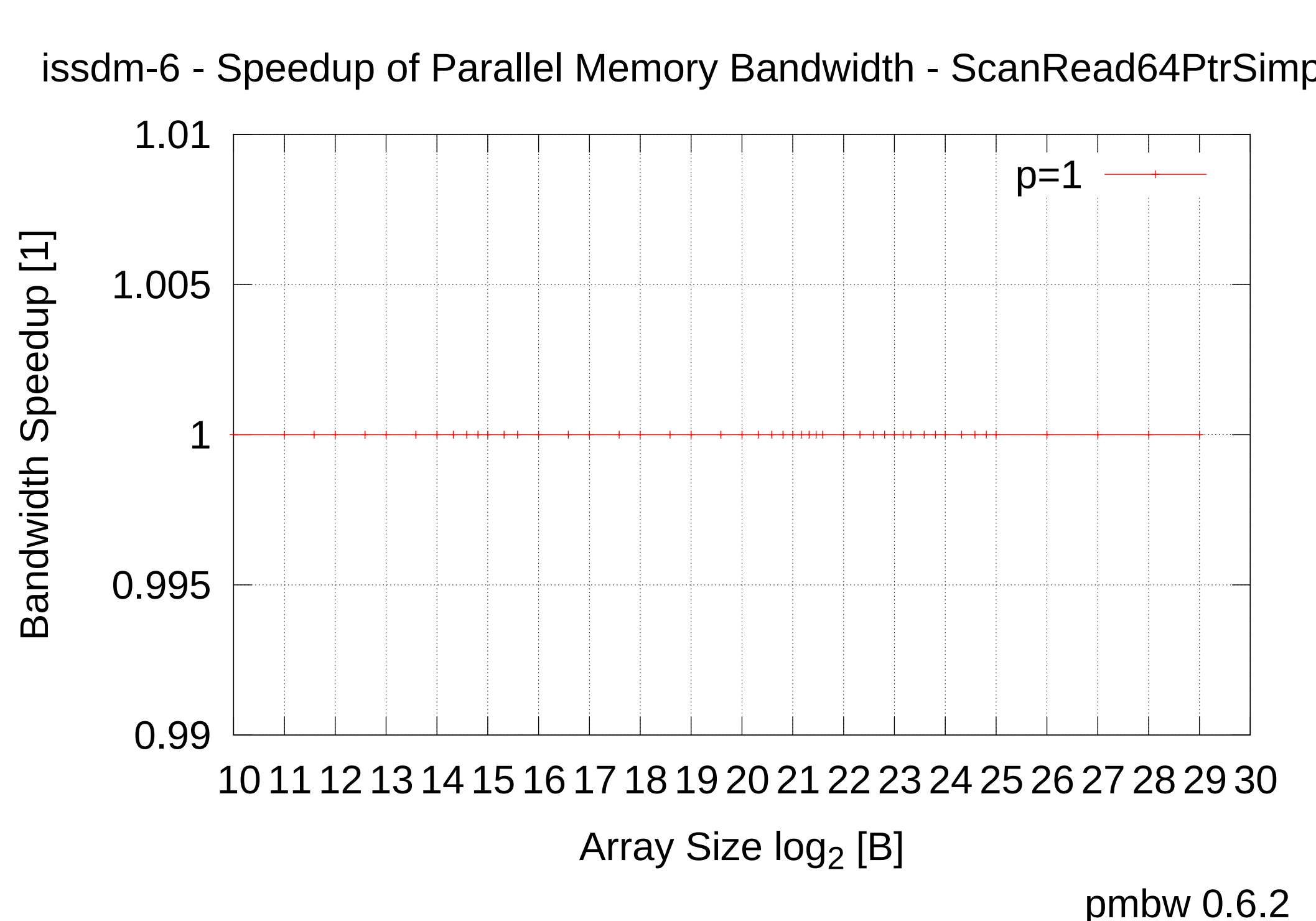

issdm-6 - Parallel Memory Access Time - ScanWrite64PtrUnrollLoop
p=1
Access Time [ns]
0
0.5
1
1.5
2
2.5
3
3.5
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

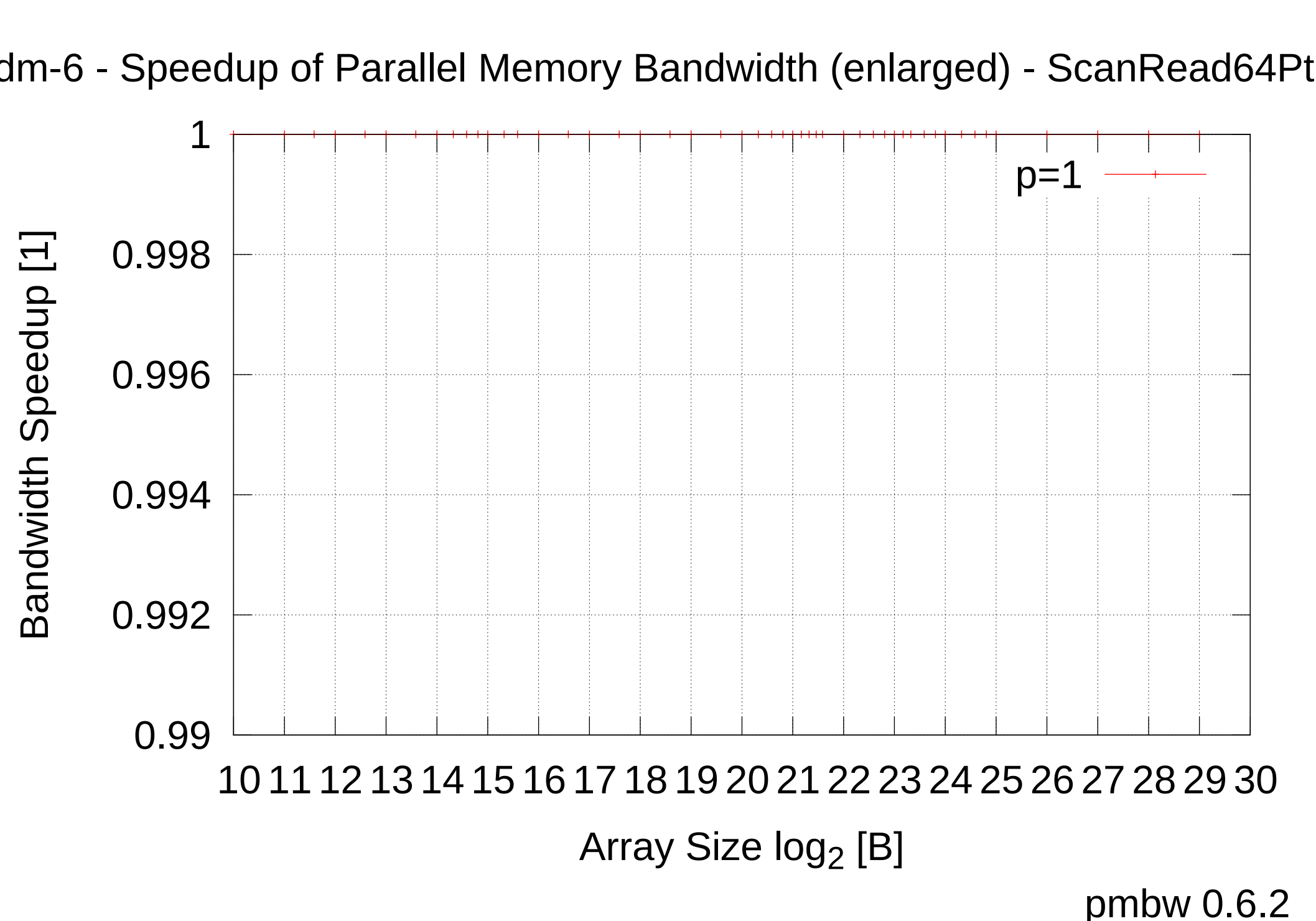

issdm-6 - Speedup of Parallel Memory Bandwidth - ScanWrite64PtrUnro
1.01
1.005
1
0.995
0.99
Bandwidth Speedup [1]
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

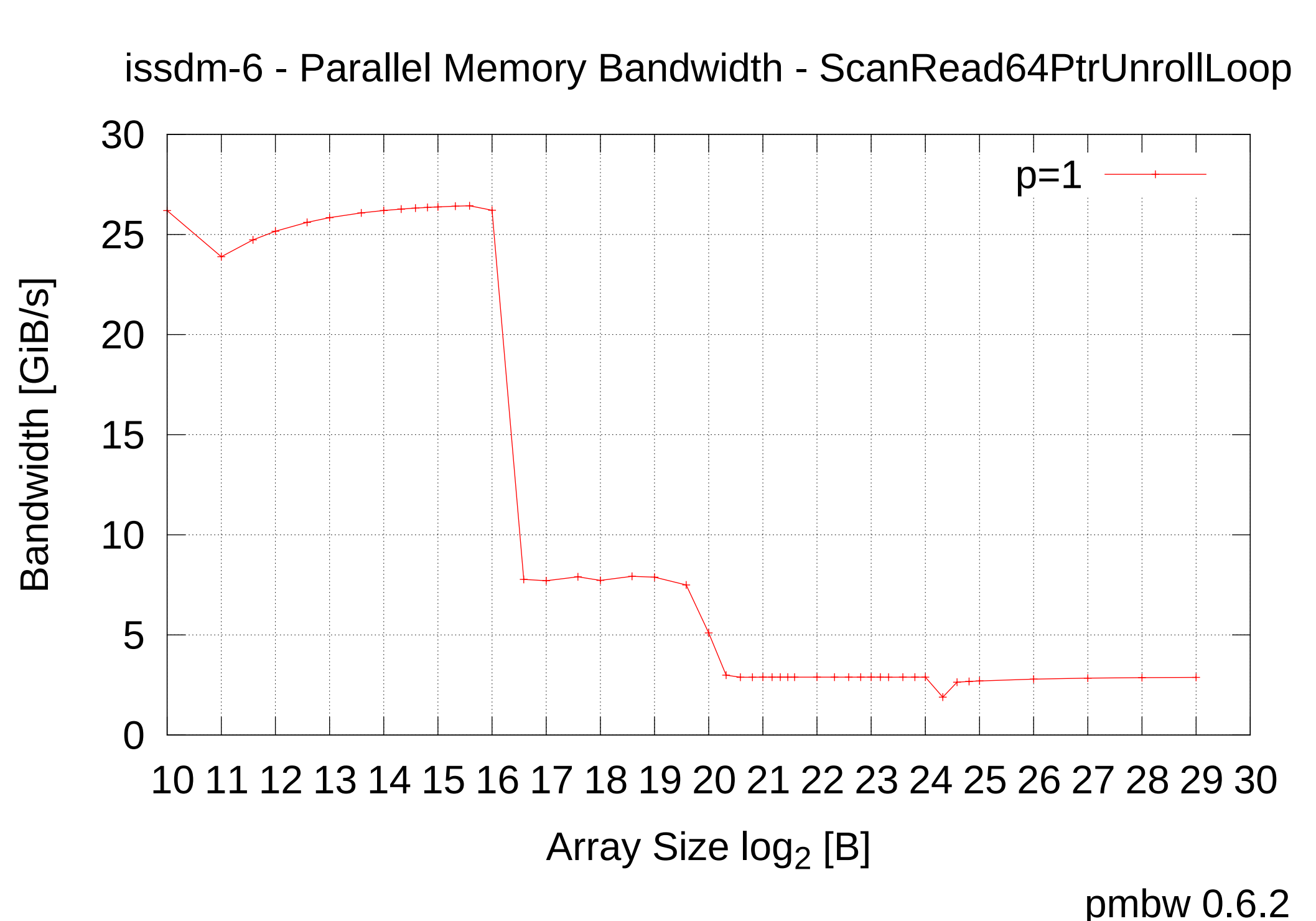

sdm-6 - Speedup of Parallel Memory Bandwidth (enlarged) - ScanWrite64Pf
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

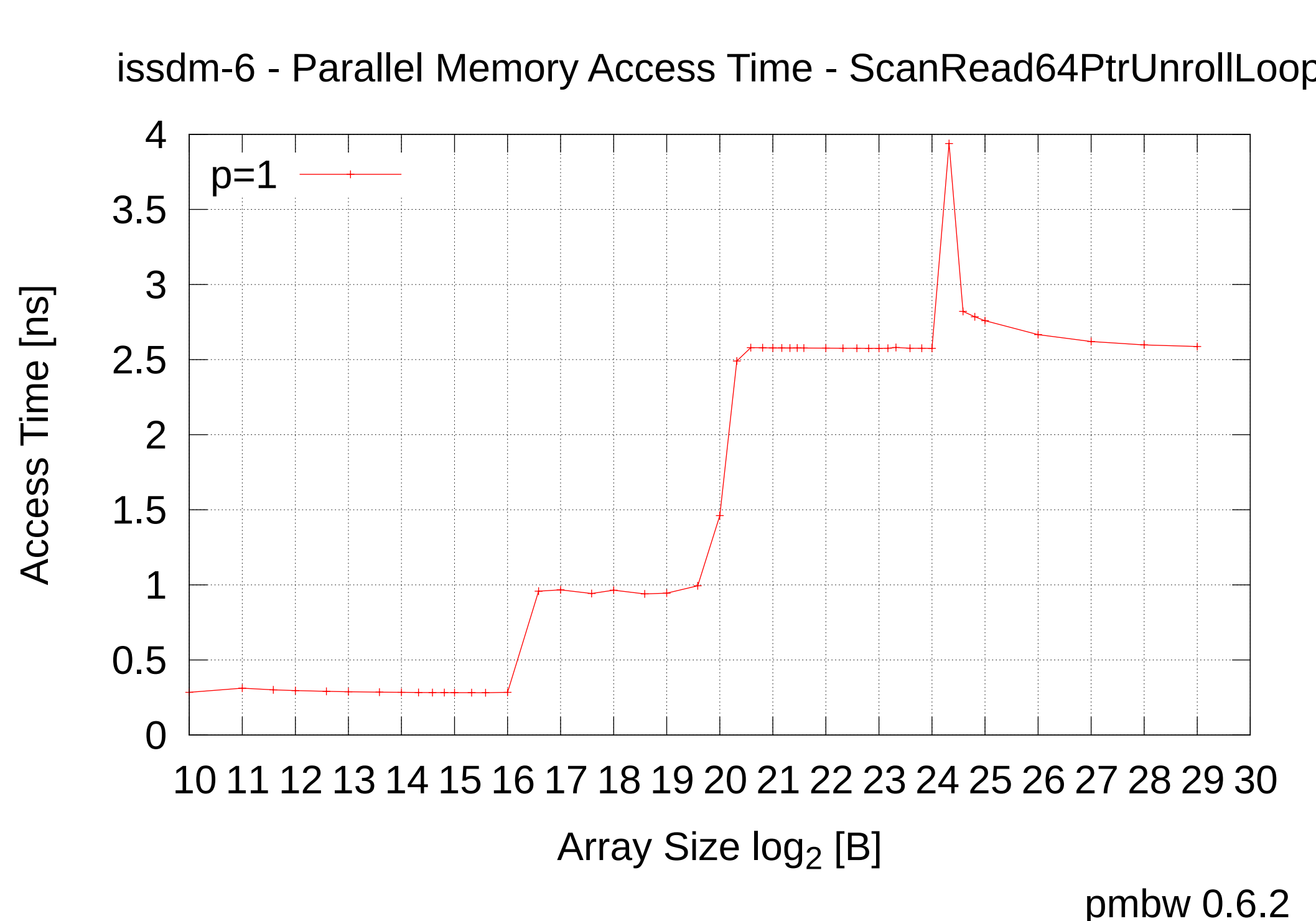

issdm-6 - Parallel Memory Bandwidth - ScanRead64PtrSimpleLoop
Bandwidth [GiB/s]
5
4.5
4
3.5
3
2.5
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

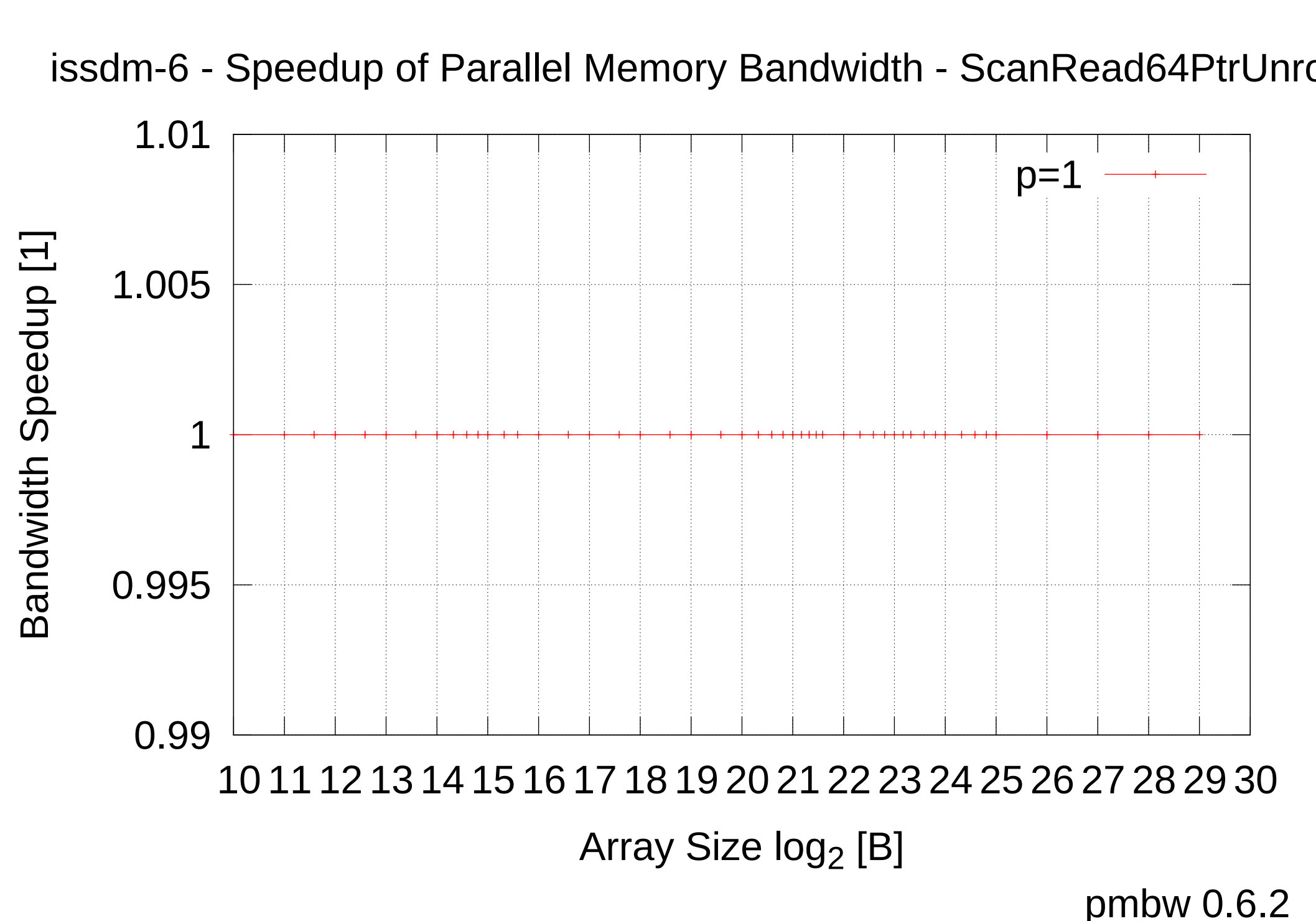

issdm-6 - Parallel Memory Access Time - ScanRead64PtrSimpleLoop
p=1
Access Time [ns]
3
2.8
2.6
2.4
2.2
2
1.8
1.6
1.4
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

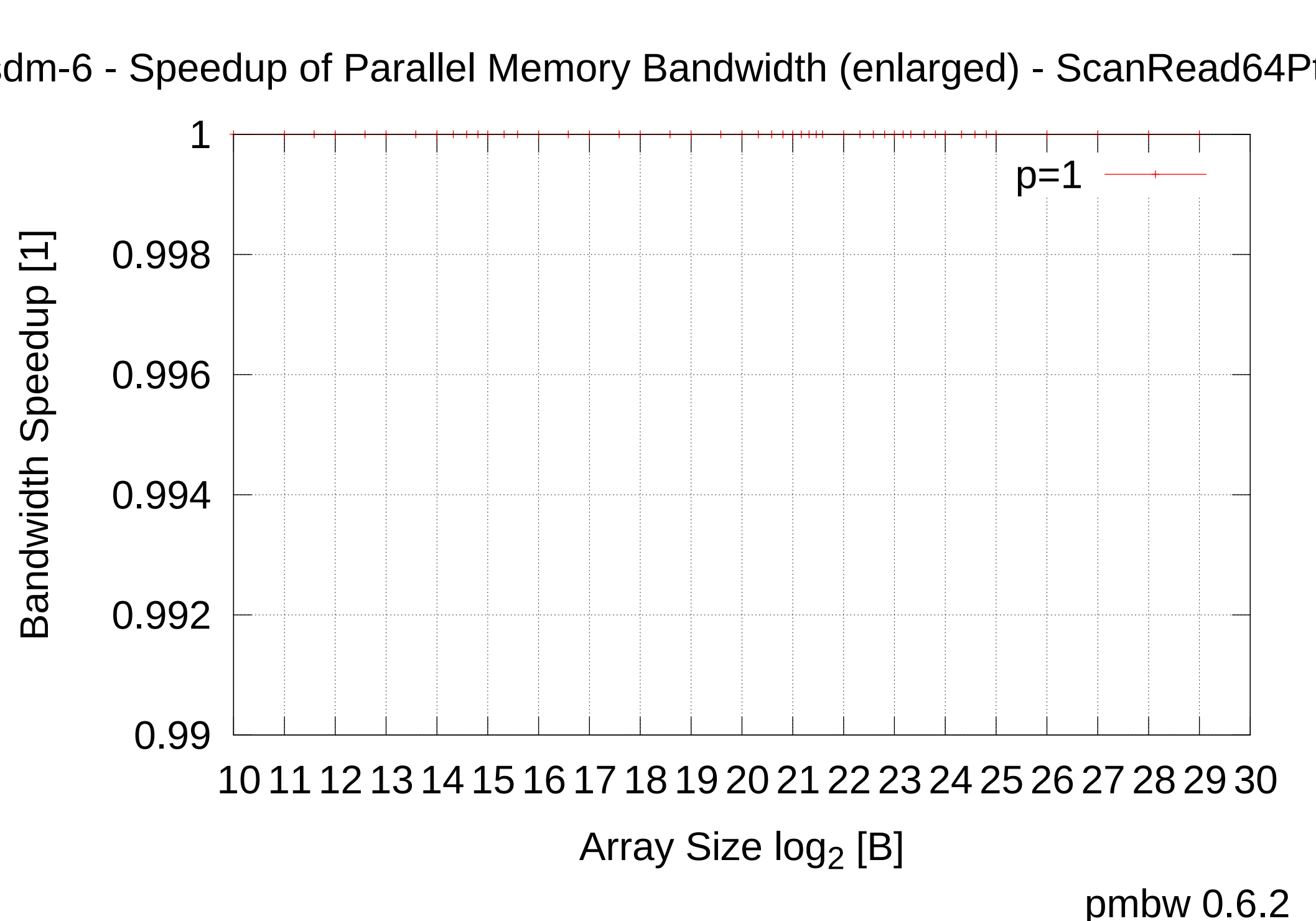

issdm-6 - Speedup of Parallel Memory Bandwidth - ScanRead64PtrSimp
Bandwidth Speedup [1]
1.01
1.005
1
0.995
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

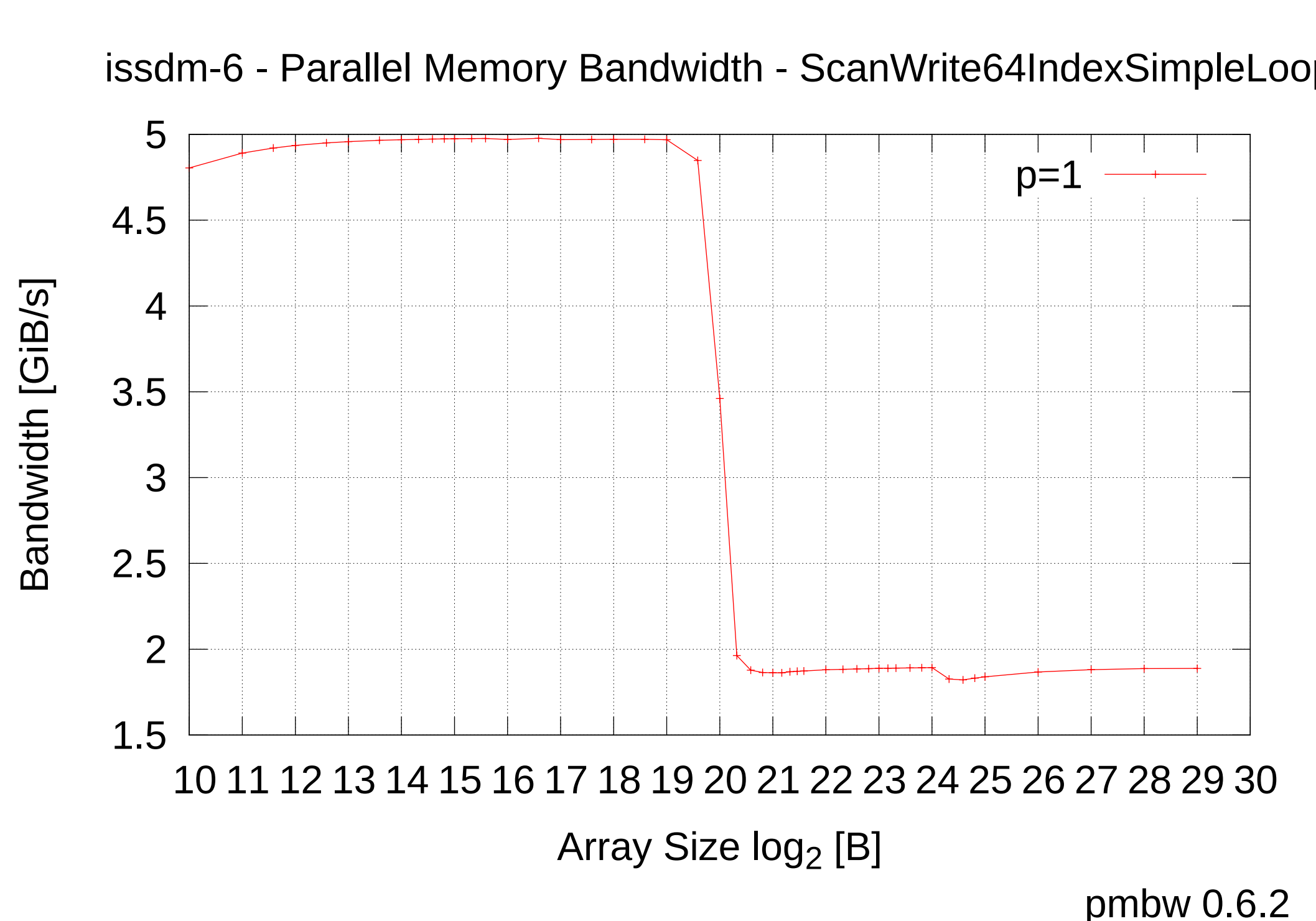

dm-6 - Speedup of Parallel Memory Bandwidth (enlarged) - ScanRead64Pt
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

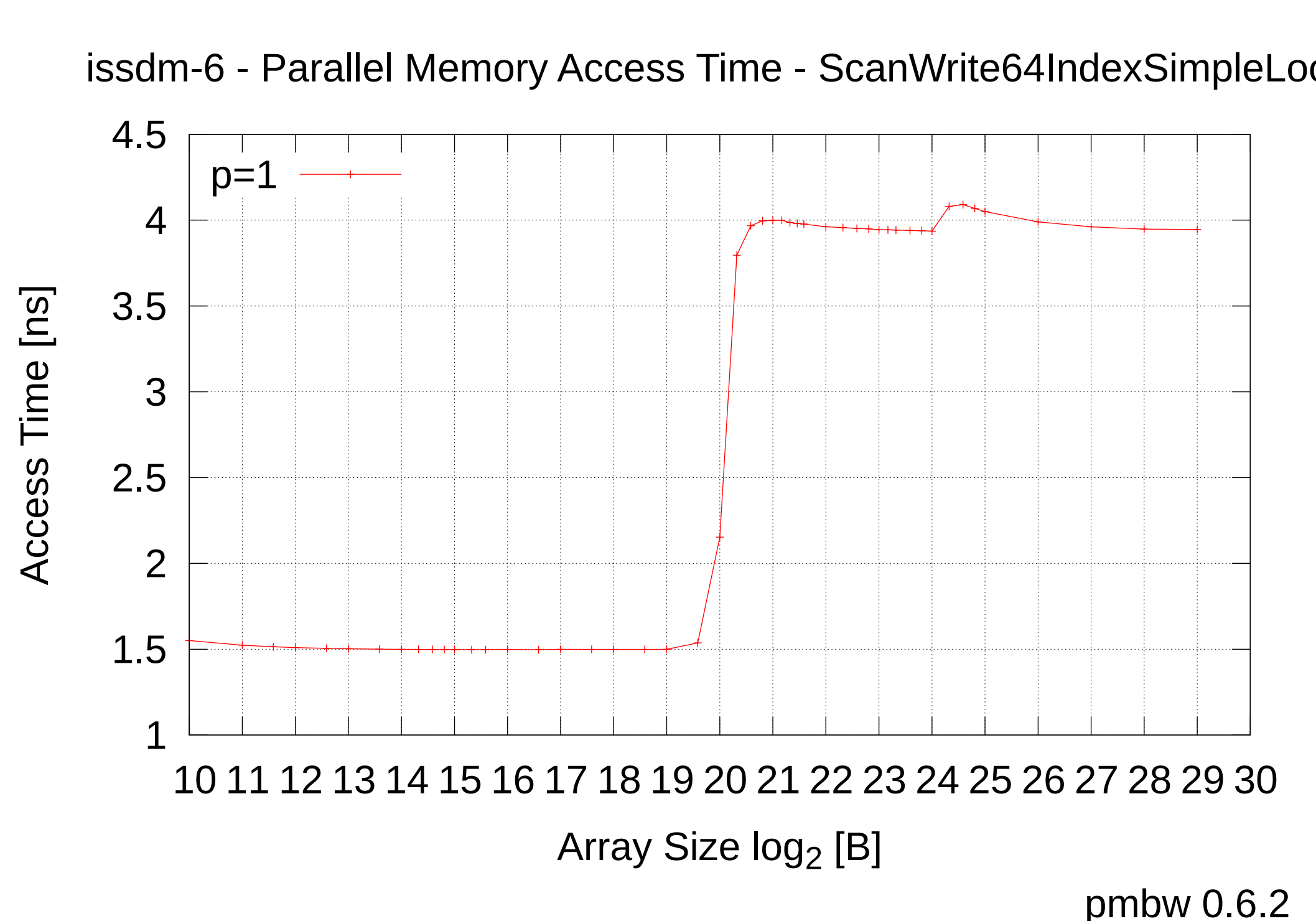

issdm-6 - Parallel Memory Bandwidth - ScanRead64PtrUnrollLoop
p=1
Bandwidth [GiB/s]
0
5
10
15
20
25
30
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

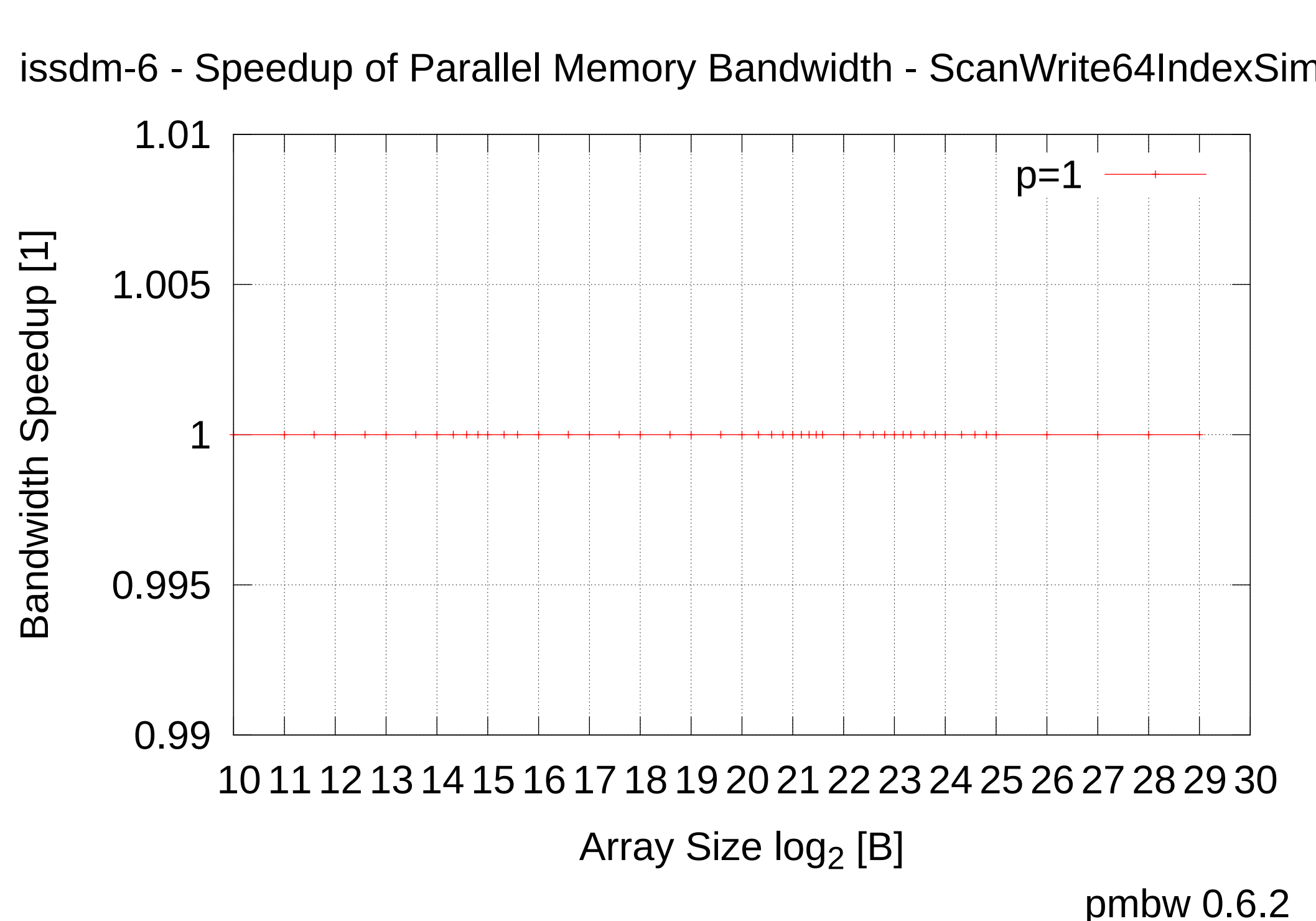

issdm-6 - Parallel Memory Access Time - ScanRead64PtrUnrollLoop
p=1
Access Time [ns]
0
0.5
1
1.5
2
2.5
3
3.5
4
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

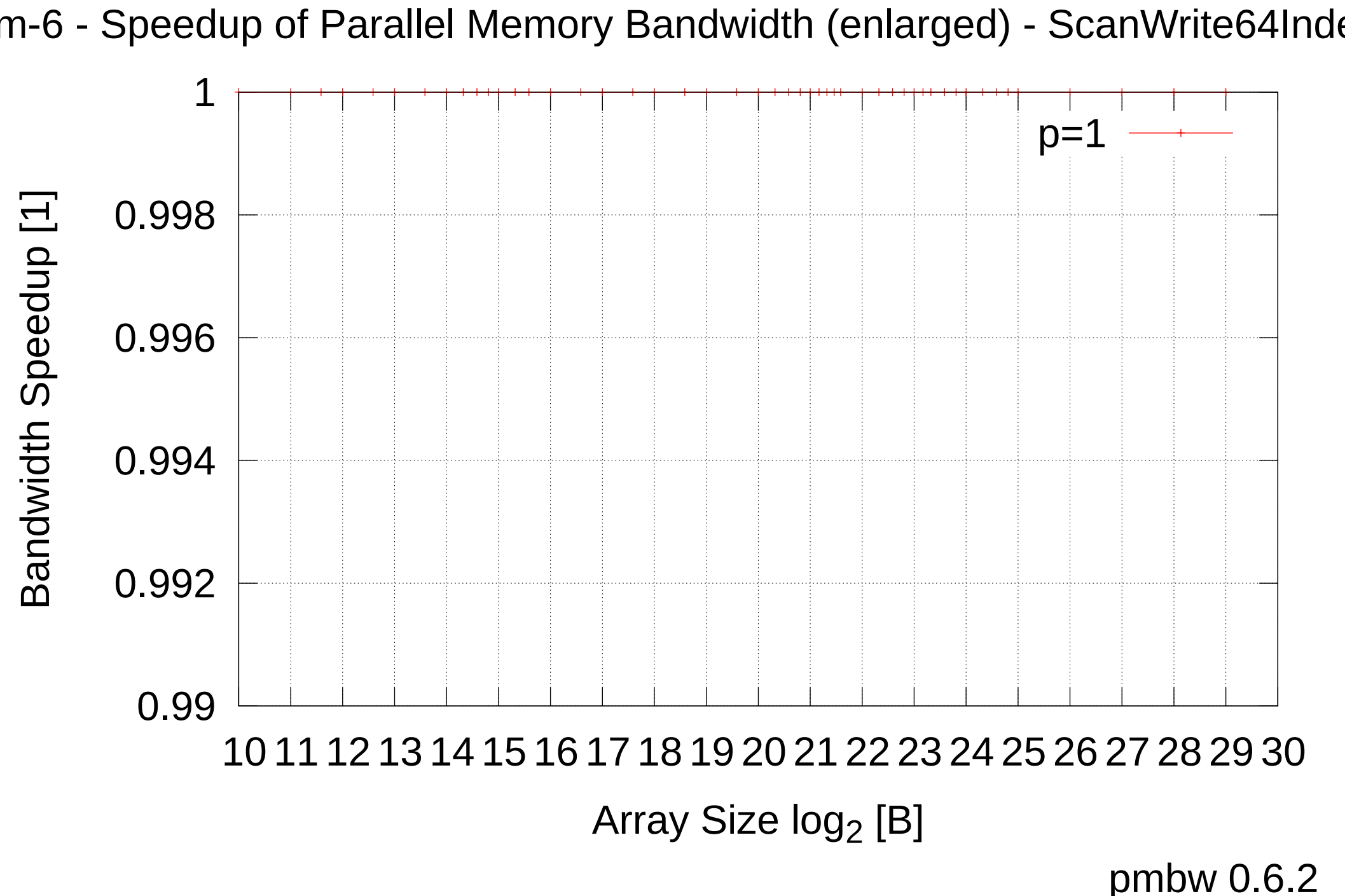

issdm-6 - Speedup of Parallel Memory Bandwidth - ScanRead64PtrUnro
Bandwidth Speedup [1]
1.01
1.005
1
0.995
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

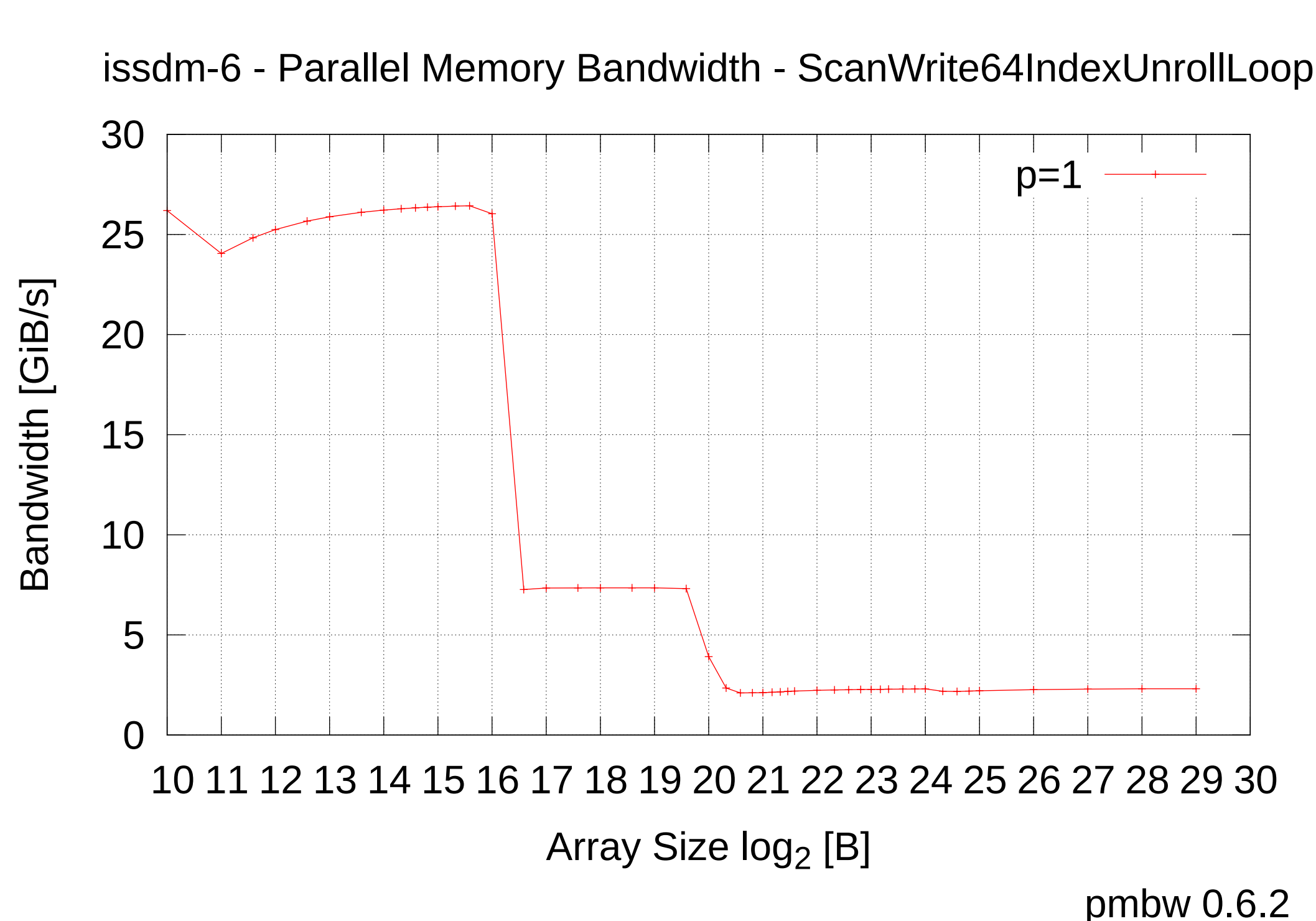

sdm-6 - Speedup of Parallel Memory Bandwidth (enlarged) - ScanRead64P
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

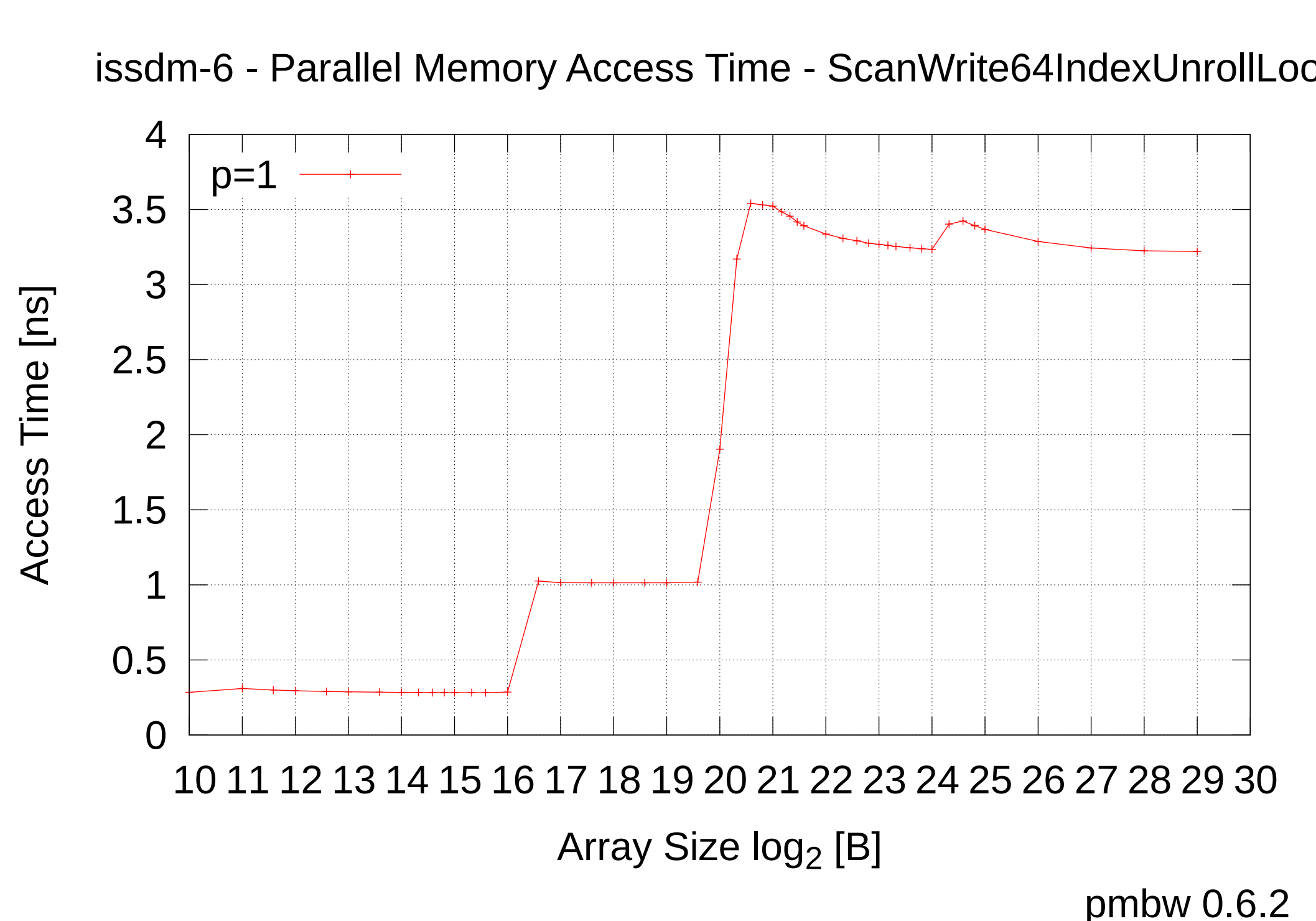

issdm-6 - Parallel Memory Bandwidth - ScanWrite64IndexSimpleLoop
Bandwidth [GiB/s]
5
4.5
4
3.5
3
2.5
2
1.5
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

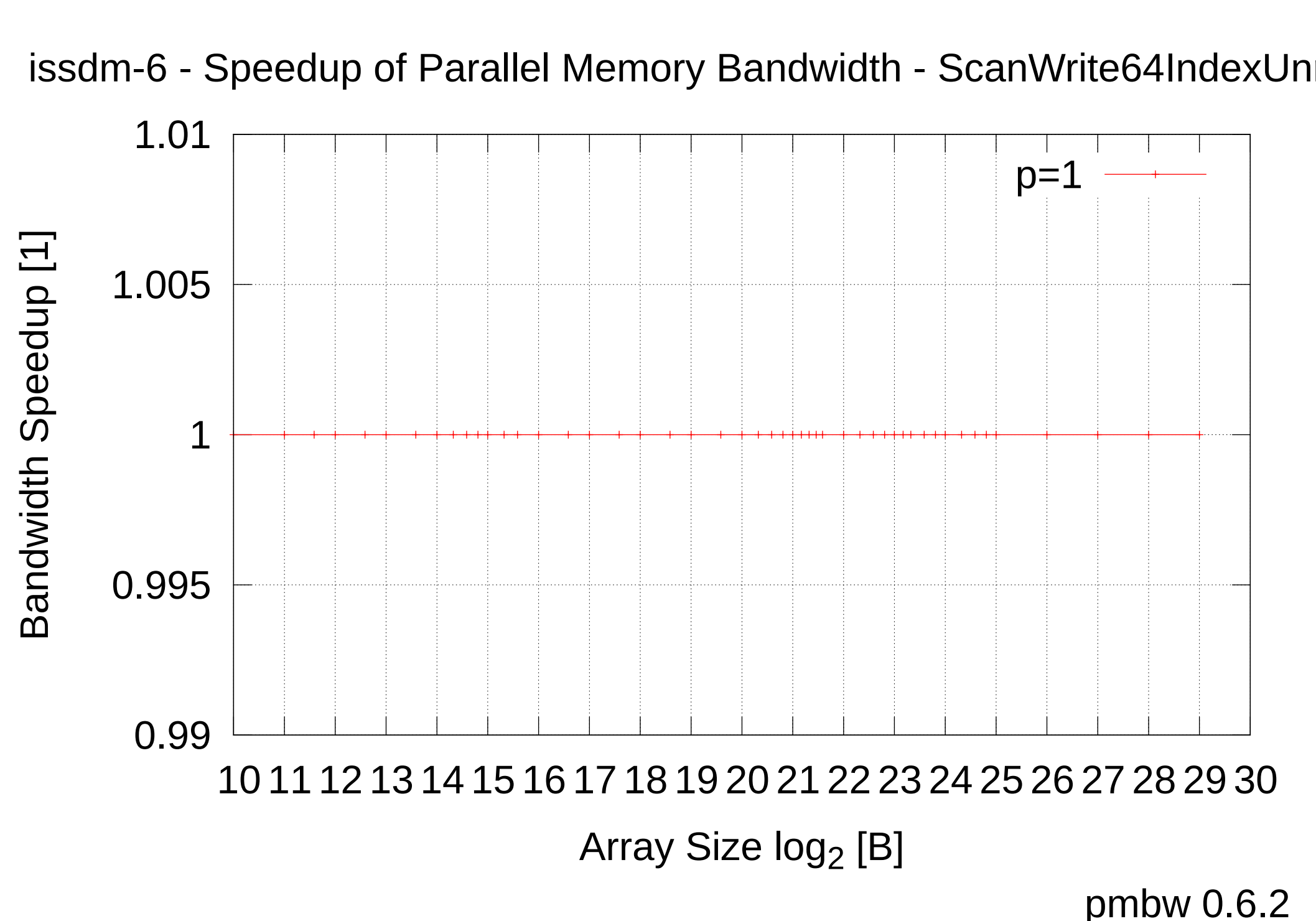

issdm-6 - Parallel Memory Access Time - ScanWrite64IndexSimpleLoo
p=1
Access Time [ns]
4.5
4
3.5
3
2.5
2
1.5
1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

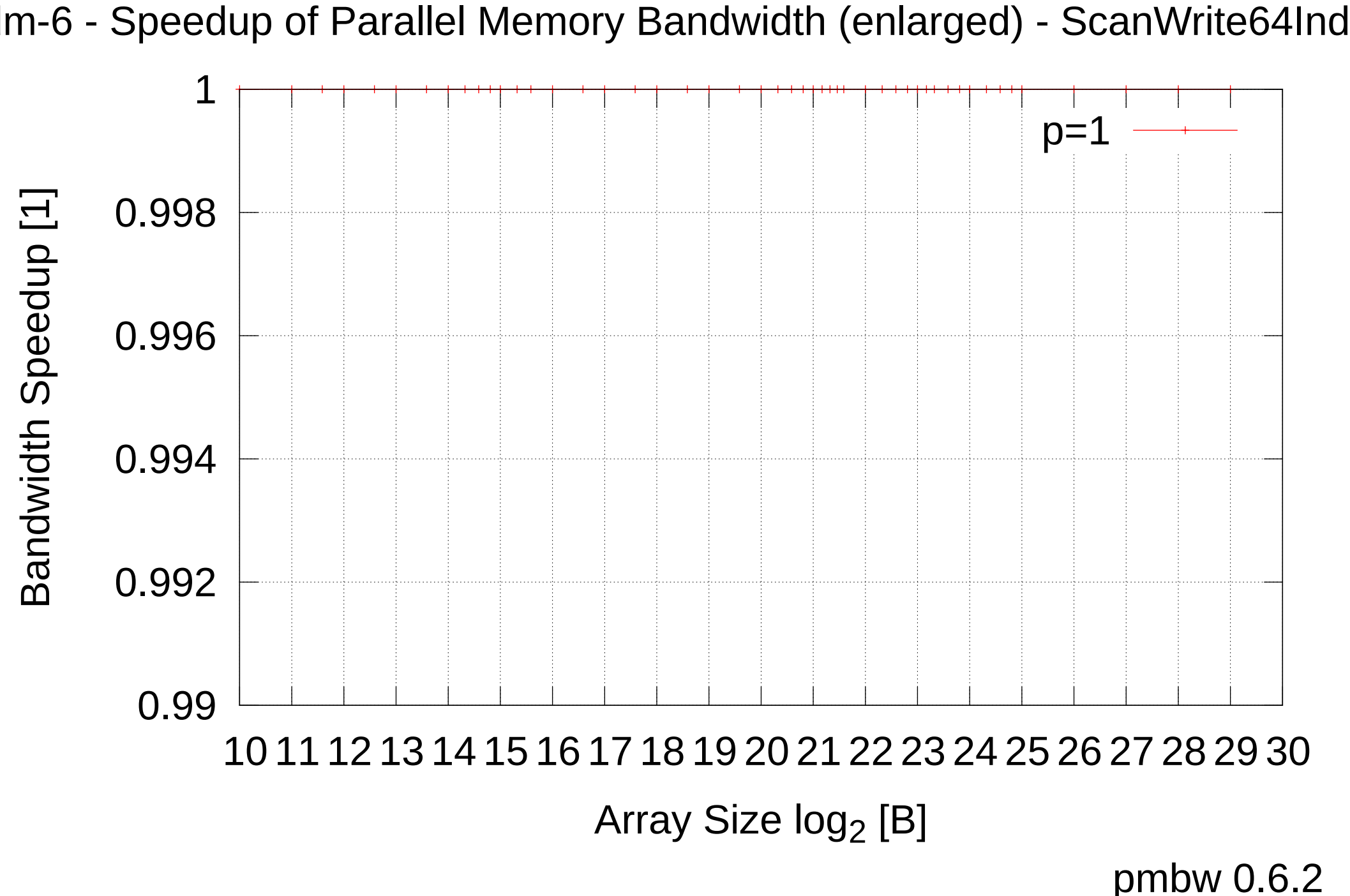

issdm-6 - Speedup of Parallel Memory Bandwidth - ScanWrite64IndexSim
Bandwidth Speedup [1]
1.01
1.005
1
0.995
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

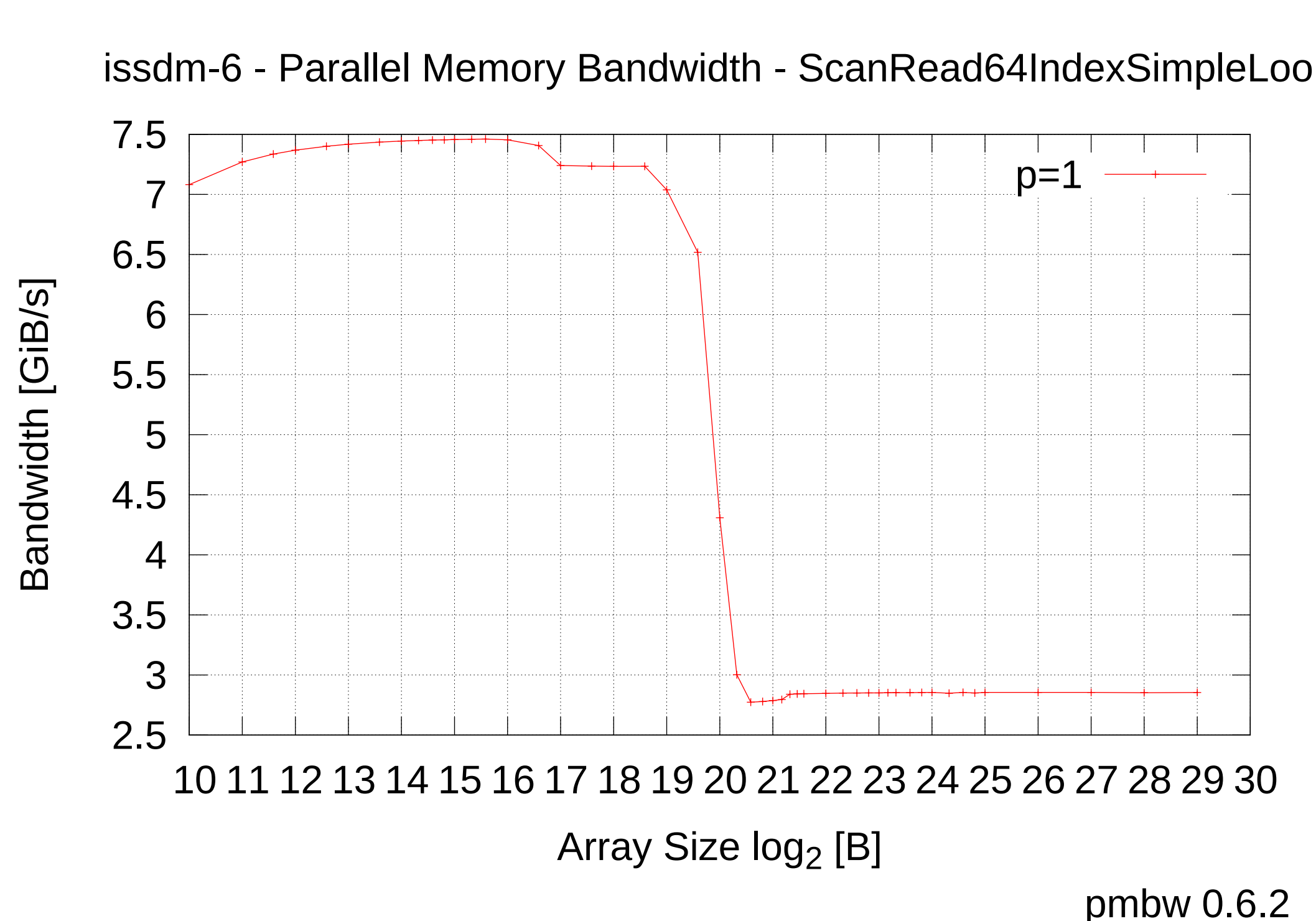

m-6 - Speedup of Parallel Memory Bandwidth (enlarged) - ScanWrite64Inde
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

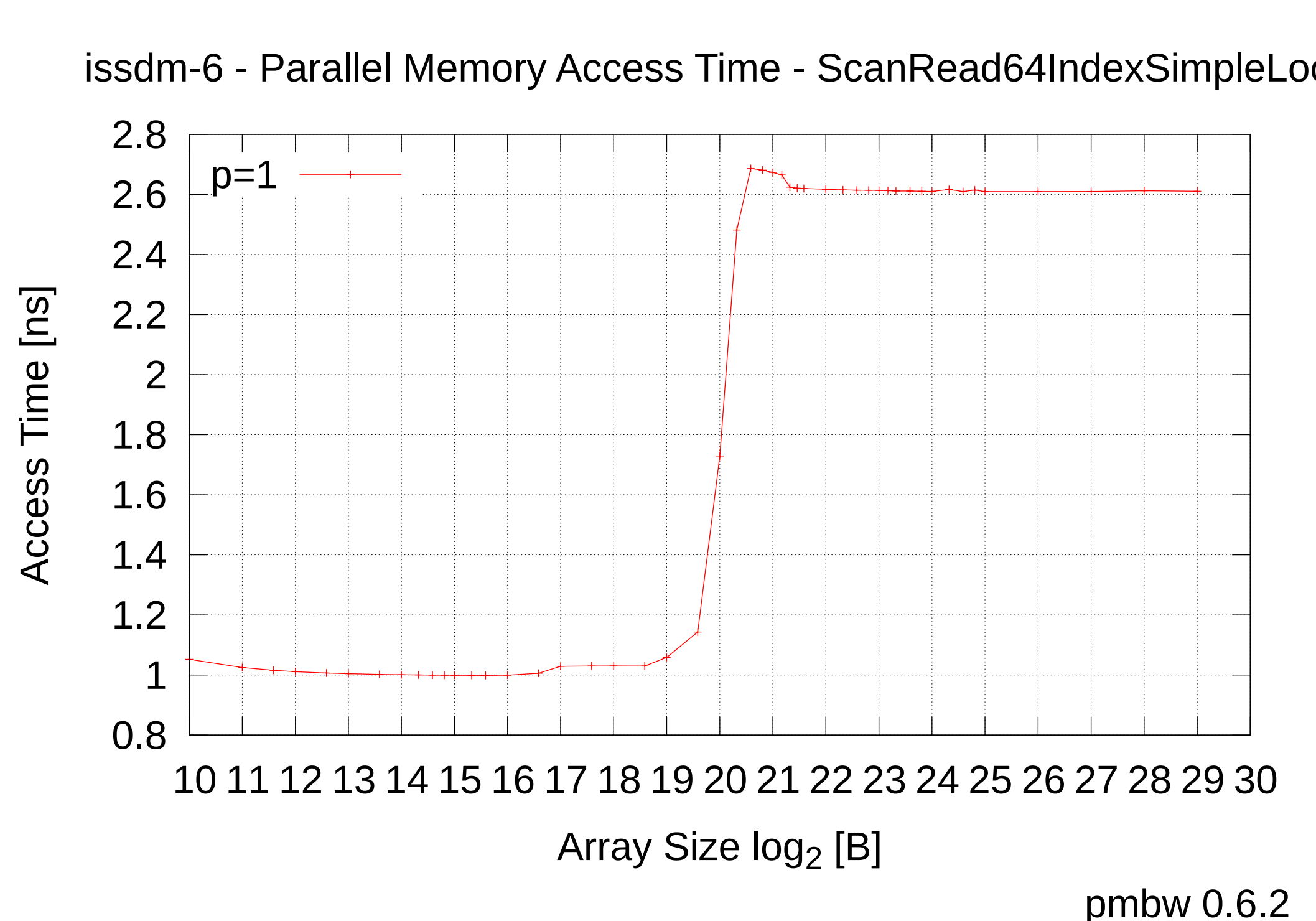

issdm-6 - Parallel Memory Bandwidth - ScanWrite64IndexUnrollLoop
p=1
Bandwidth [GiB/s]
0
5
10
15
20
25
30
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

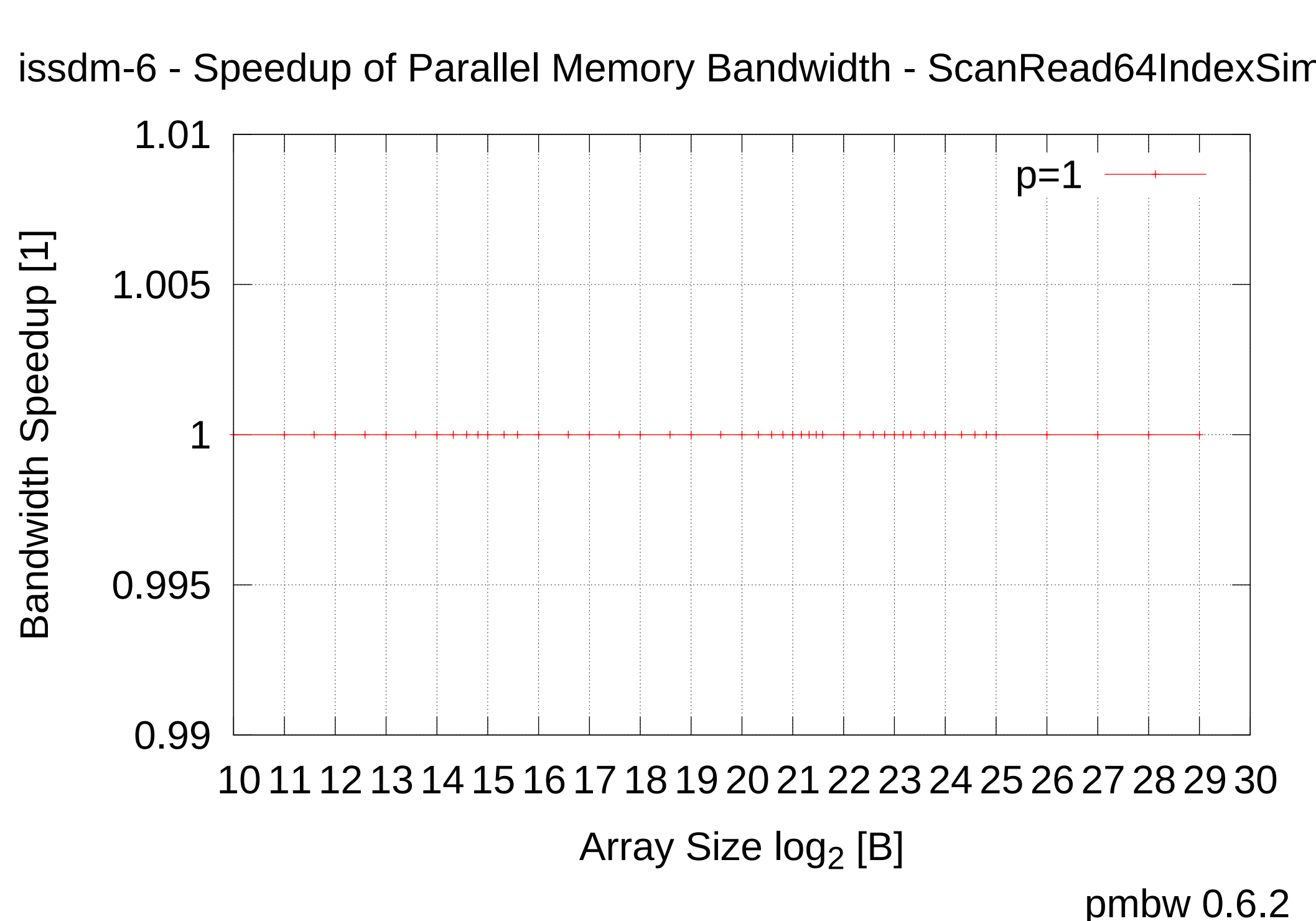

issdm-6 - Parallel Memory Access Time - ScanWrite64IndexUnrollLoc
p=1
Access Time [ns]
0
0.5
1
1.5
2
2.5
3
3.5
4
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

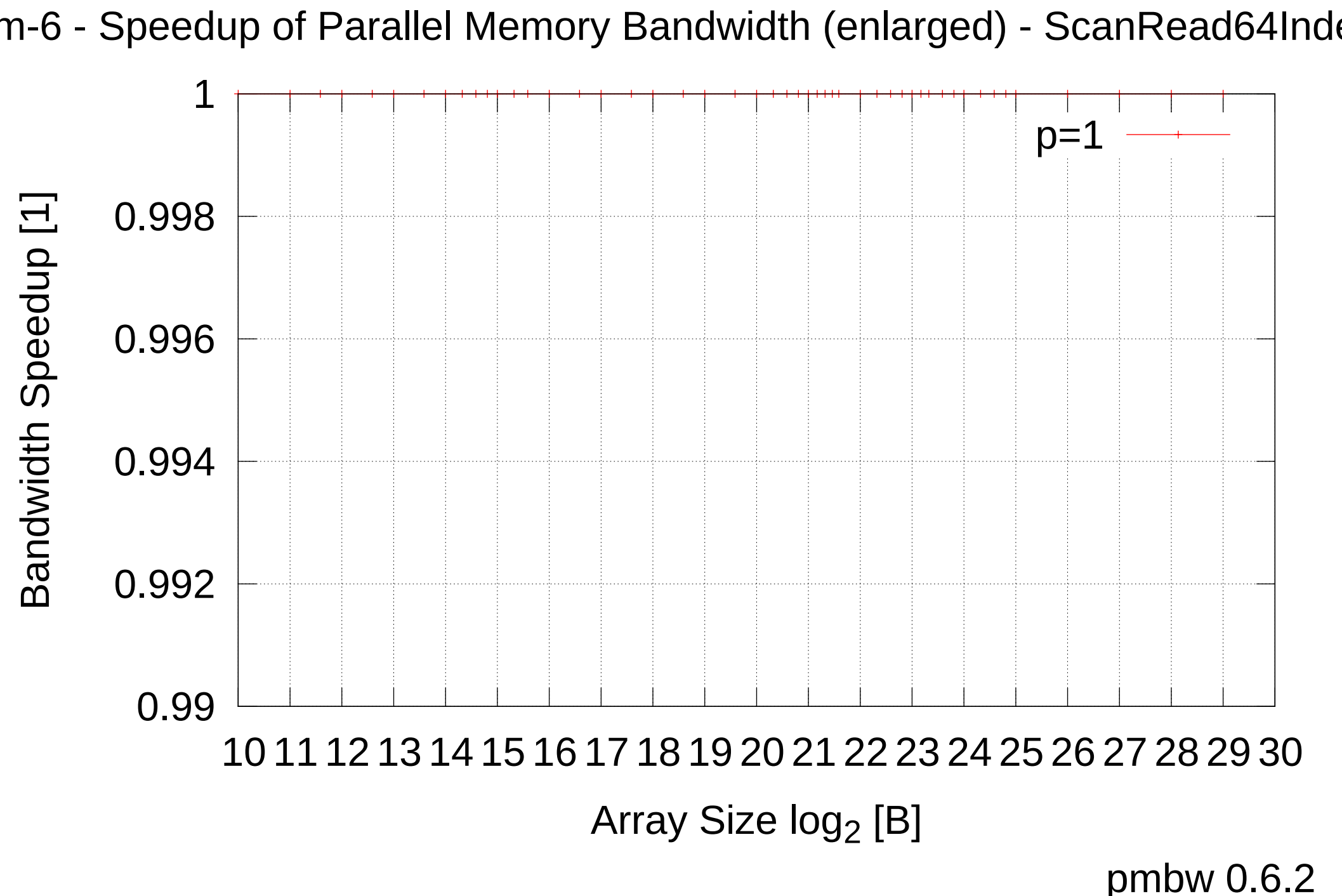

issdm-6 - Speedup of Parallel Memory Bandwidth - ScanWrite64IndexUn
1.01
1.005
1
0.995
0.99
Bandwidth Speedup [1]
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

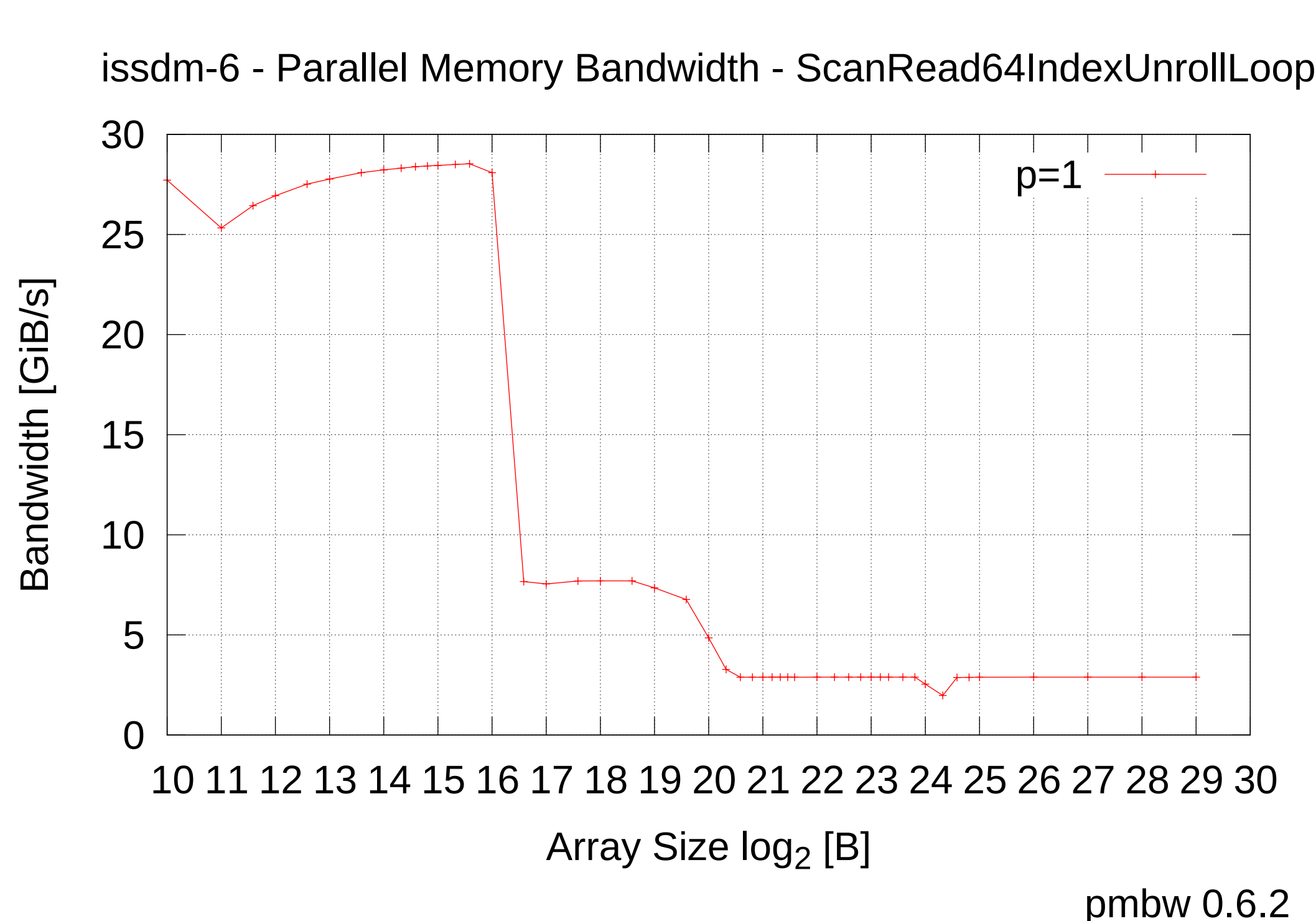

m-6 - Speedup of Parallel Memory Bandwidth (enlarged) - ScanWrite64Ind
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

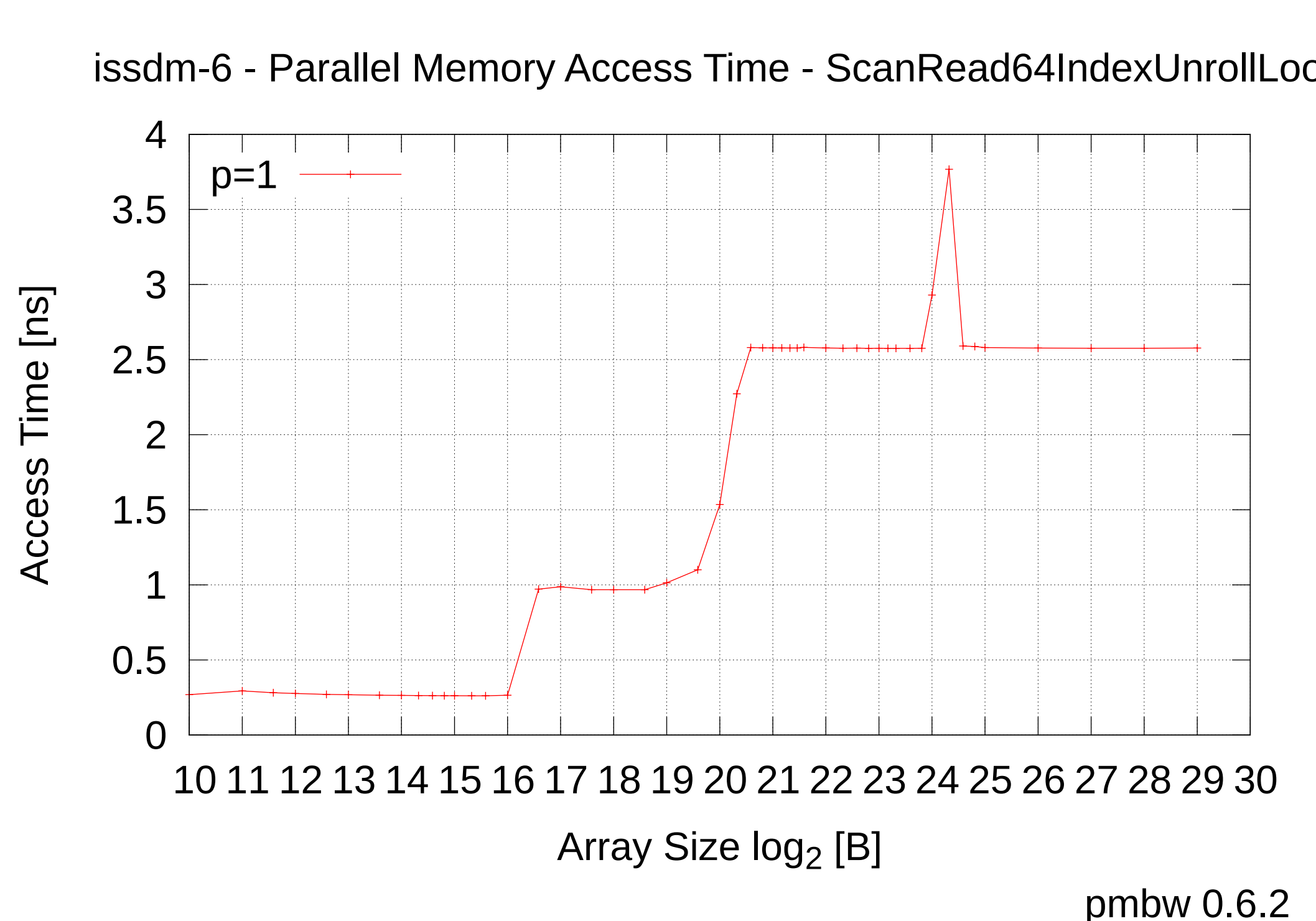

issdm-6 - Parallel Memory Bandwidth - ScanRead64IndexSimpleLoo
Bandwidth [GiB/s]
7.5
7
6.5
6
5.5
5
4.5
4
3.5
3
2.5
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

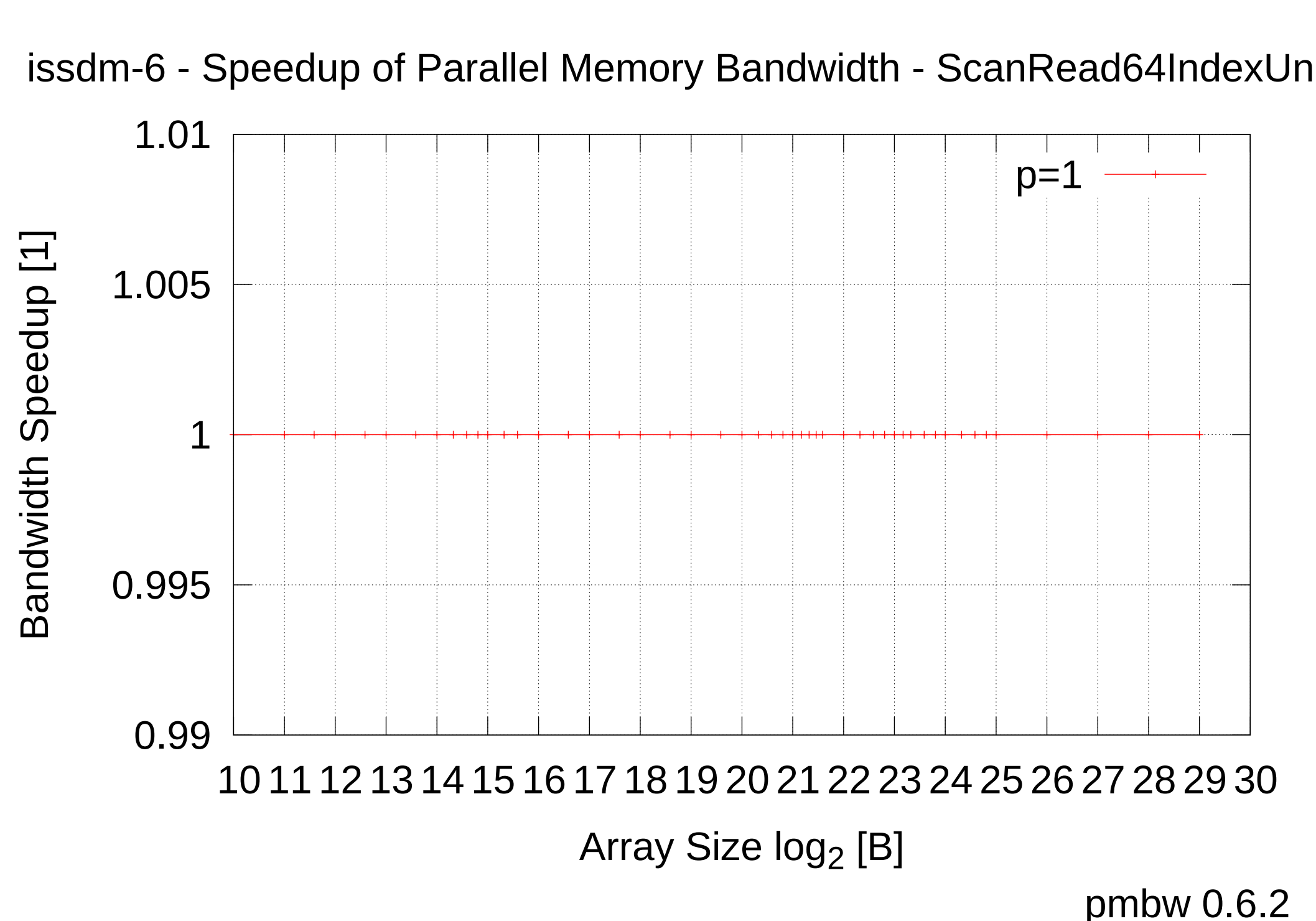

issdm-6 - Parallel Memory Access Time - ScanRead64IndexSimpleLo
p=1
Access Time [ns]
2.8
2.6
2.4
2.2
2
1.8
1.6
1.4
1.2
1
0.8
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

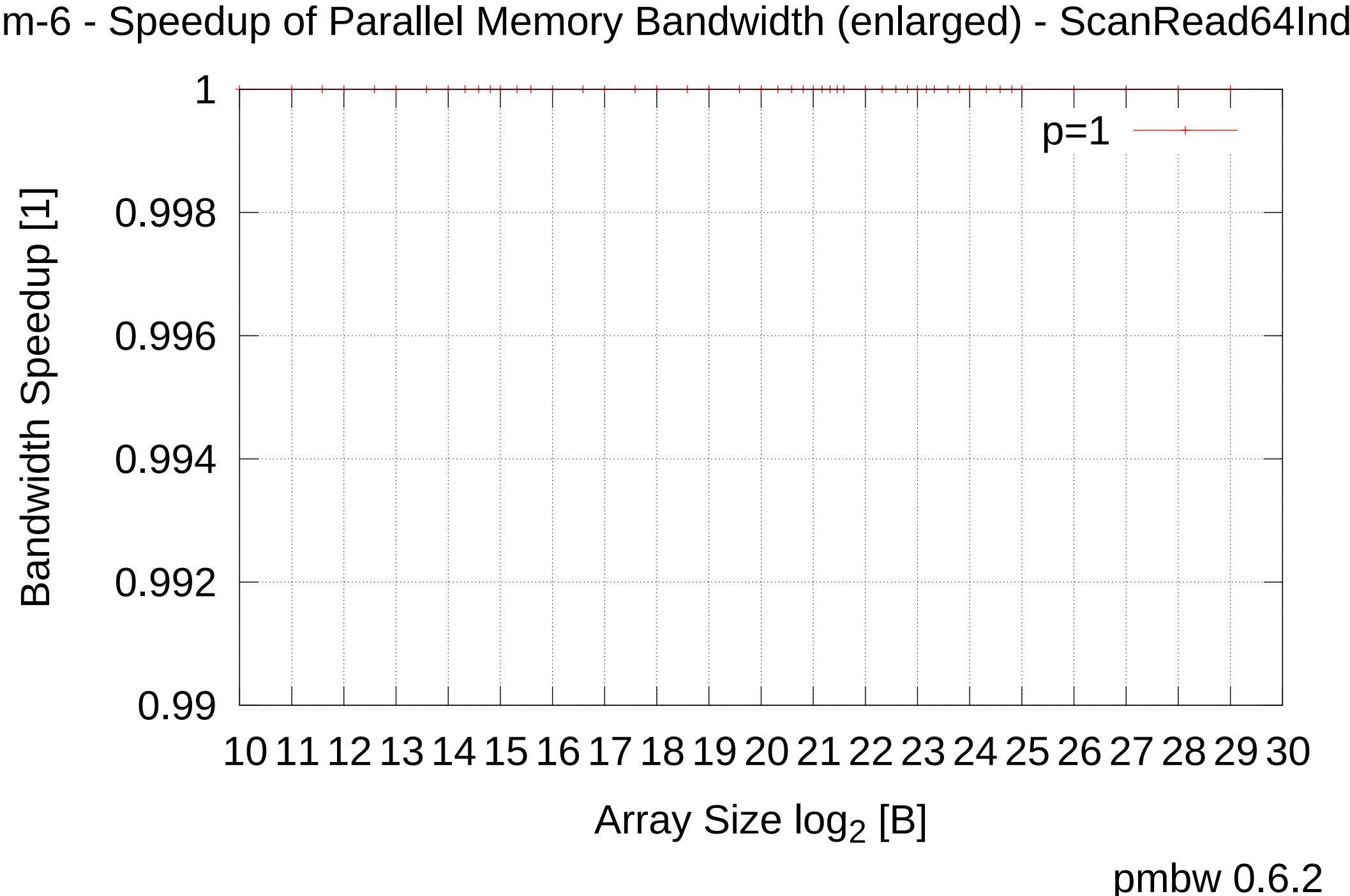

issdm-6 - Speedup of Parallel Memory Bandwidth - ScanRead64IndexSim
Bandwidth Speedup [1]
1.01
1.005
1
0.995
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

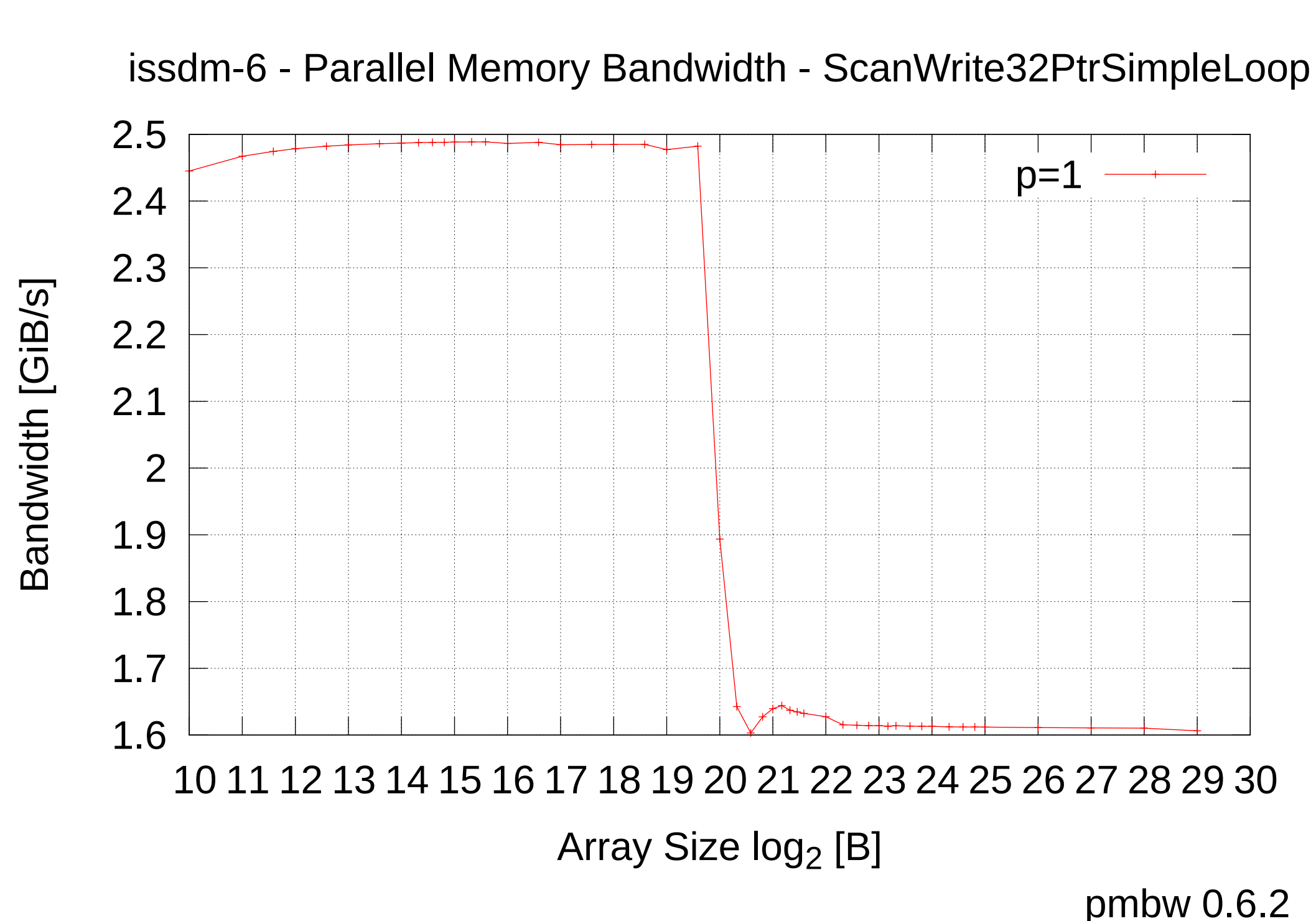

m-6 - Speedup of Parallel Memory Bandwidth (enlarged) - ScanRead64Inde
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

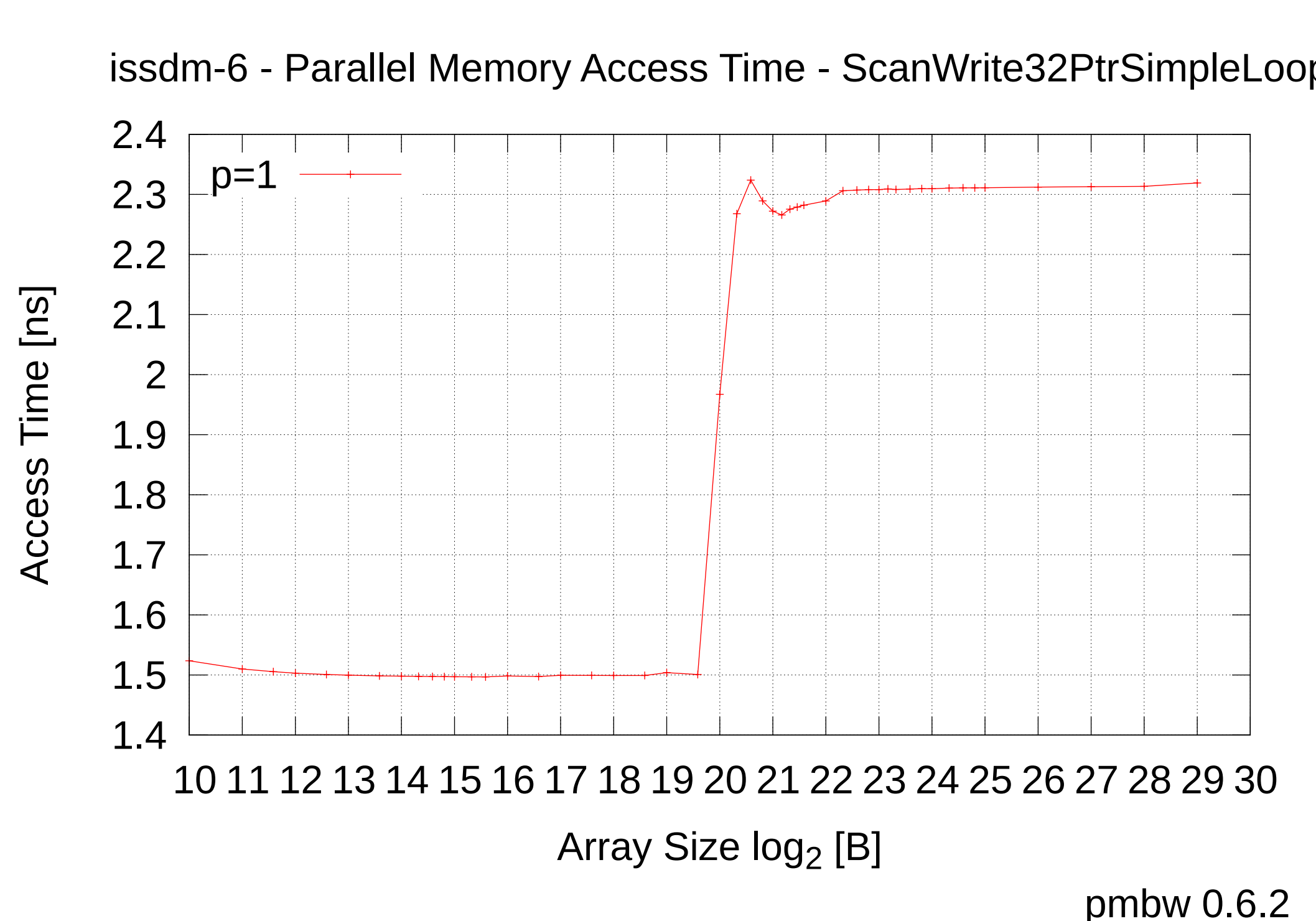

issdm-6 - Parallel Memory Bandwidth - ScanRead64IndexUnrollLoop
Bandwidth [GiB/s]
0
5
10
15
20
25
30
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

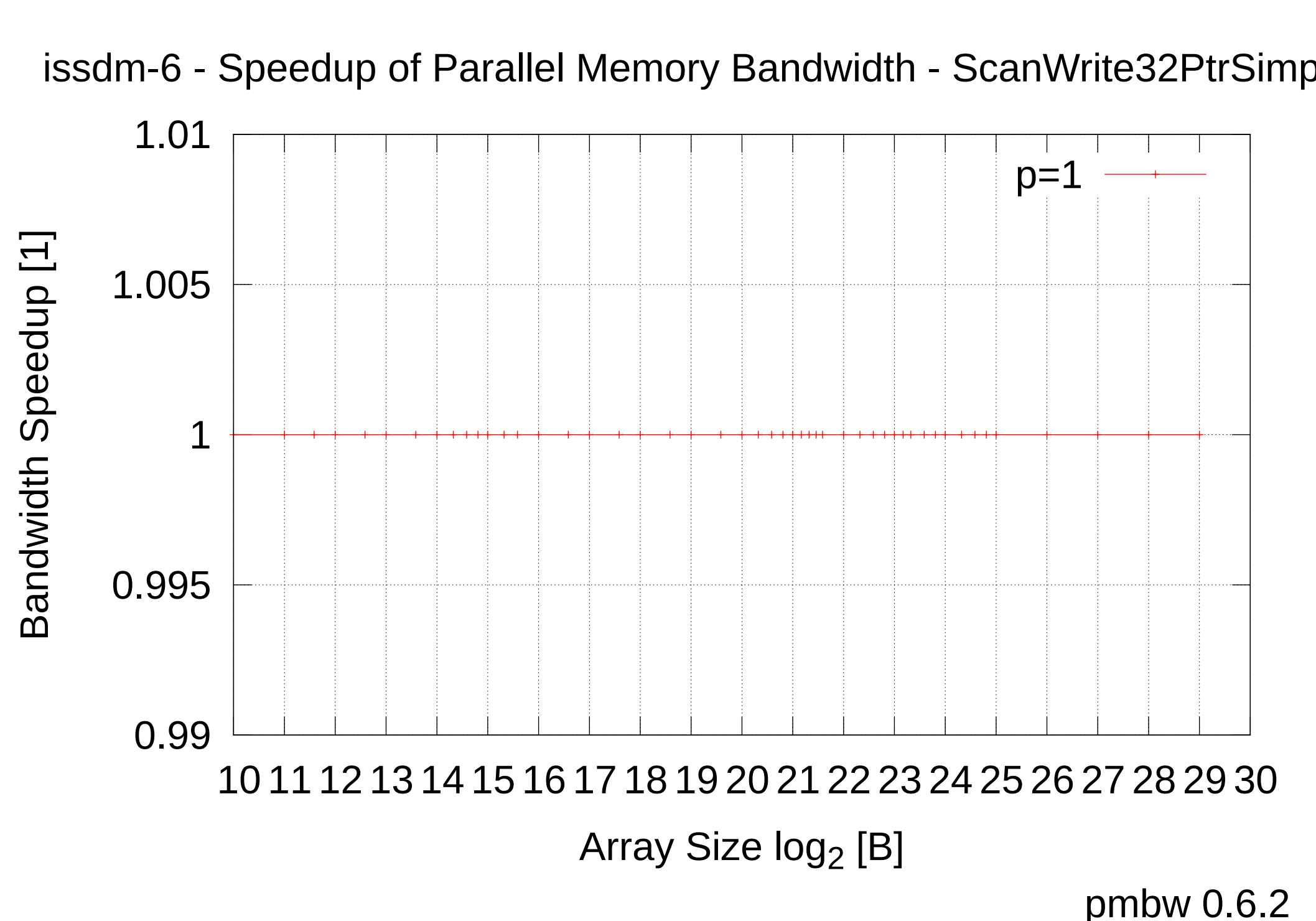

issdm-6 - Parallel Memory Access Time - ScanRead64IndexUnrollLoc
p=1
Access Time [ns]
0
0.5
1
1.5
2
2.5
3
3.5
4
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

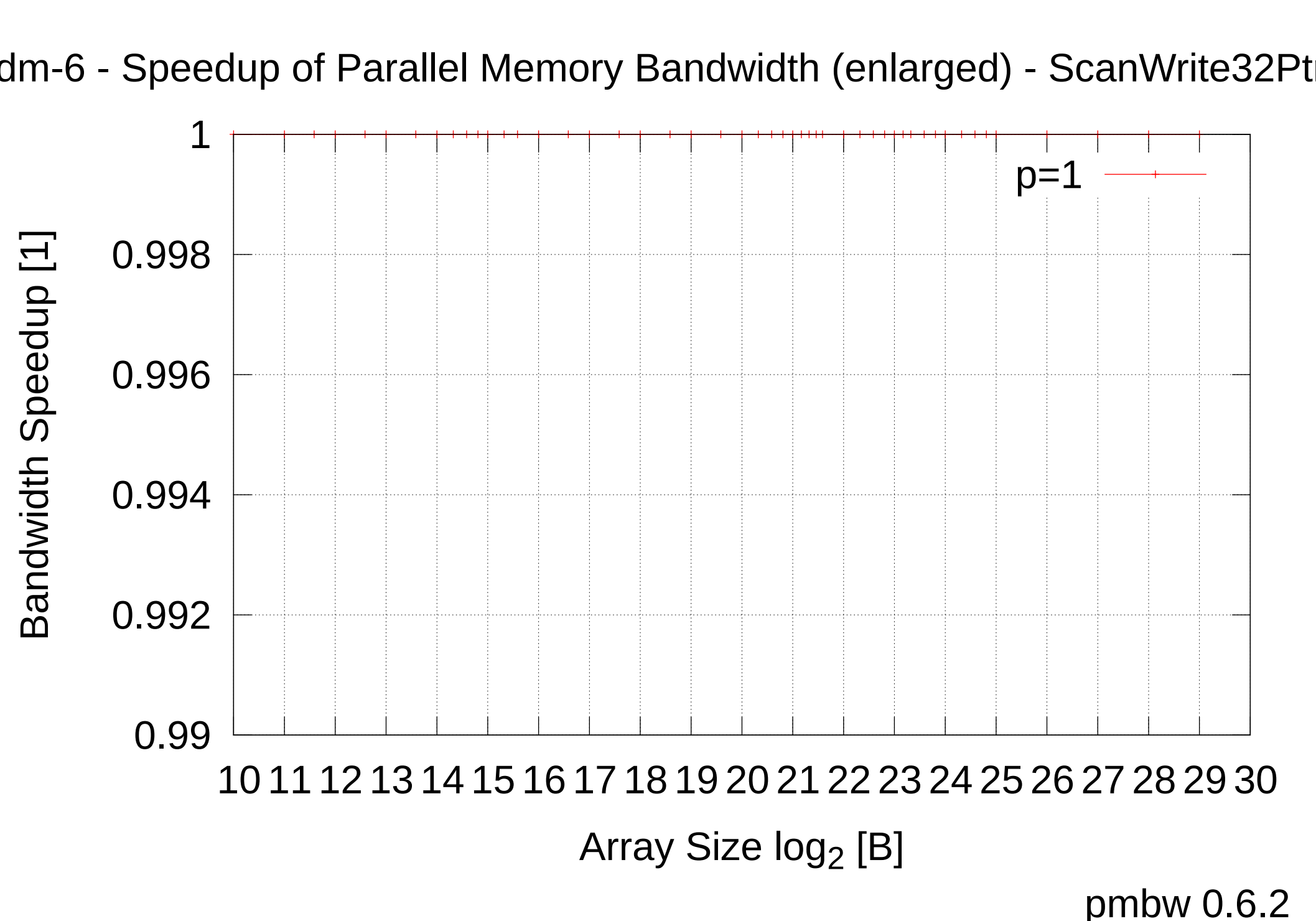

issdm-6 - Speedup of Parallel Memory Bandwidth - ScanRead64IndexUn
Bandwidth Speedup [1]
1.01
1.005
1
0.995
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

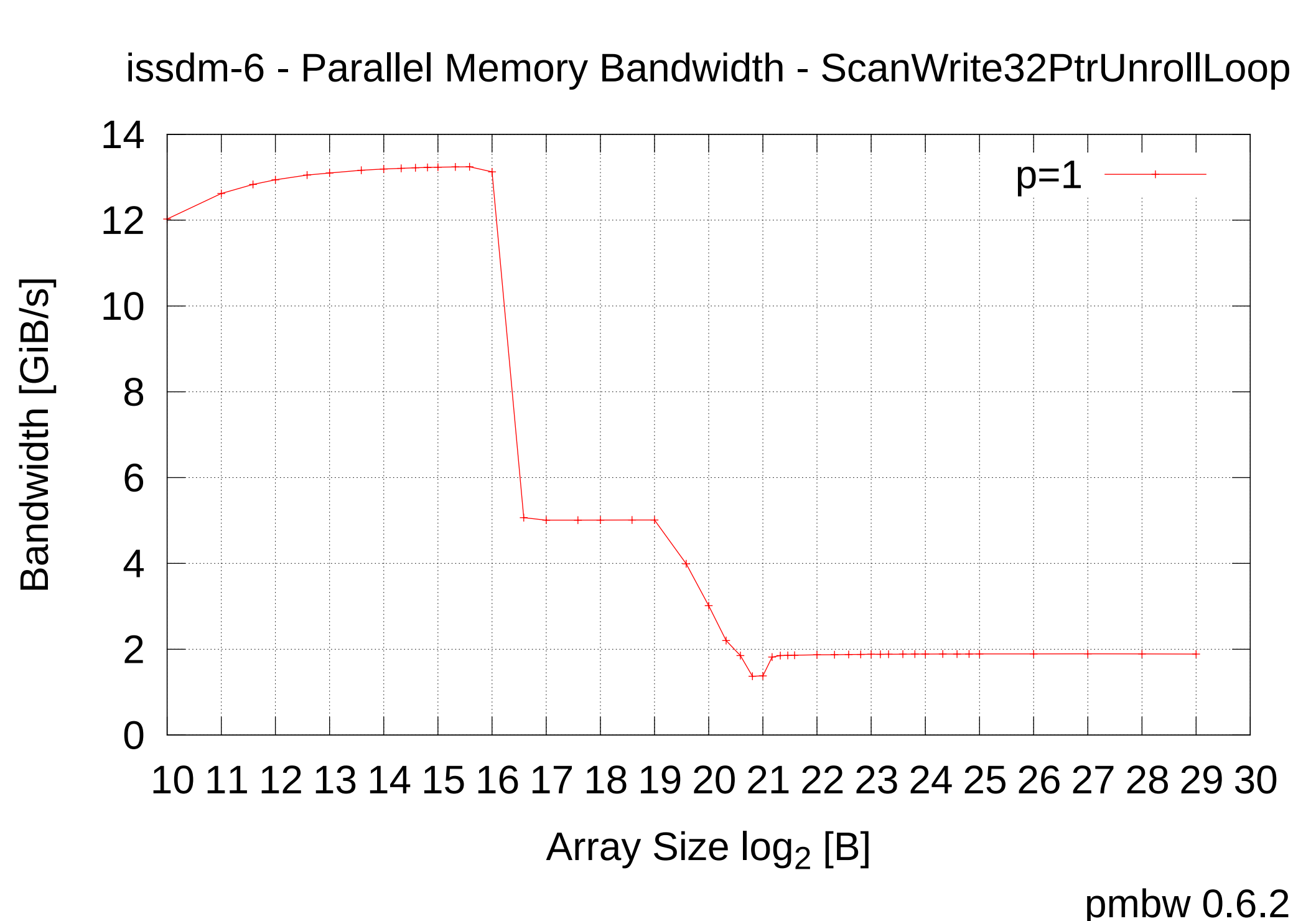

m-6 - Speedup of Parallel Memory Bandwidth (enlarged) - ScanRead64Ind
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

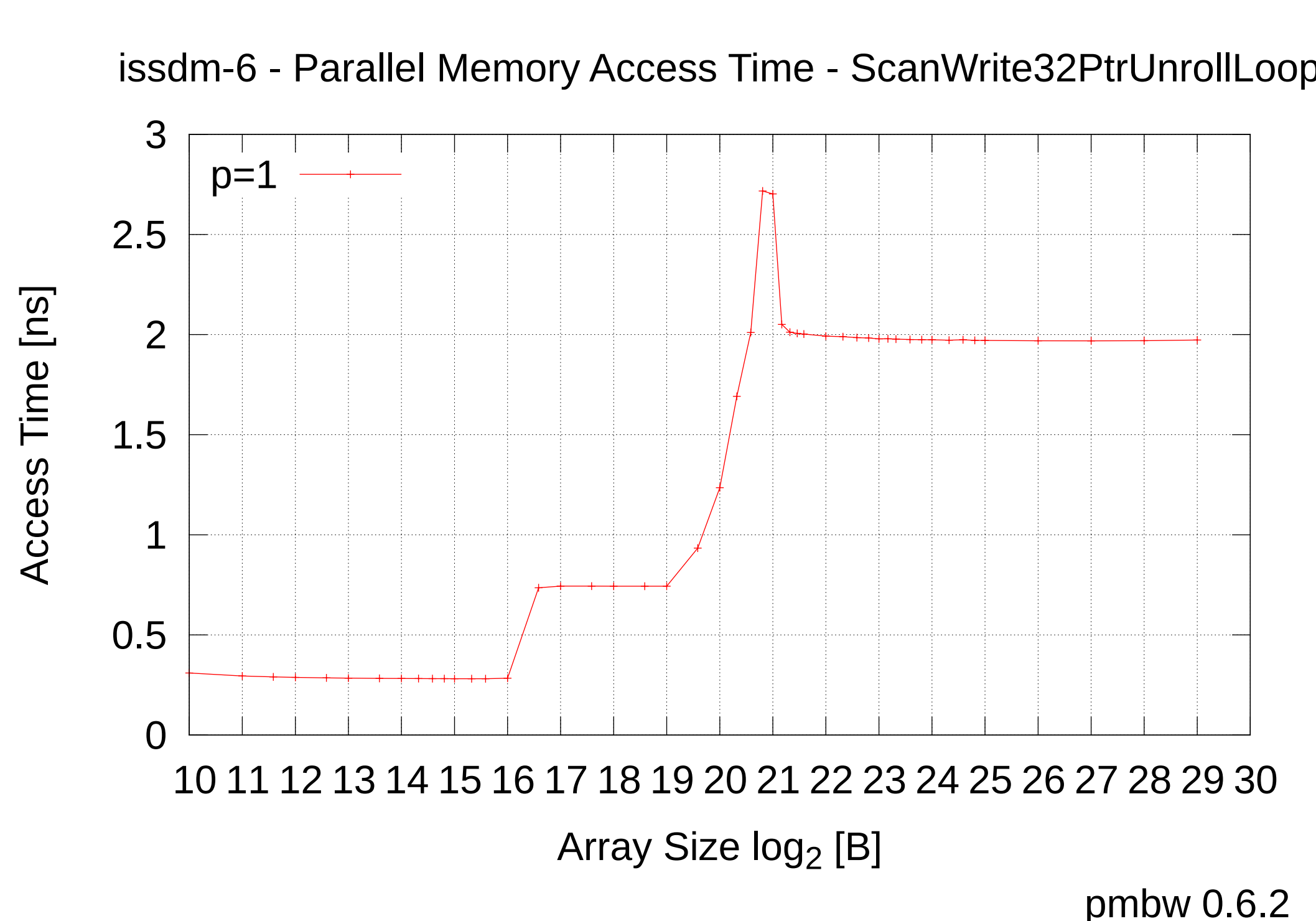

issdm-6 - Parallel Memory Bandwidth - ScanWrite32PtrSimpleLoop
Bandwidth [GiB/s]
2.5
2.4
2.3
2.2
2.1
2
1.9
1.8
1.7
1.6
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

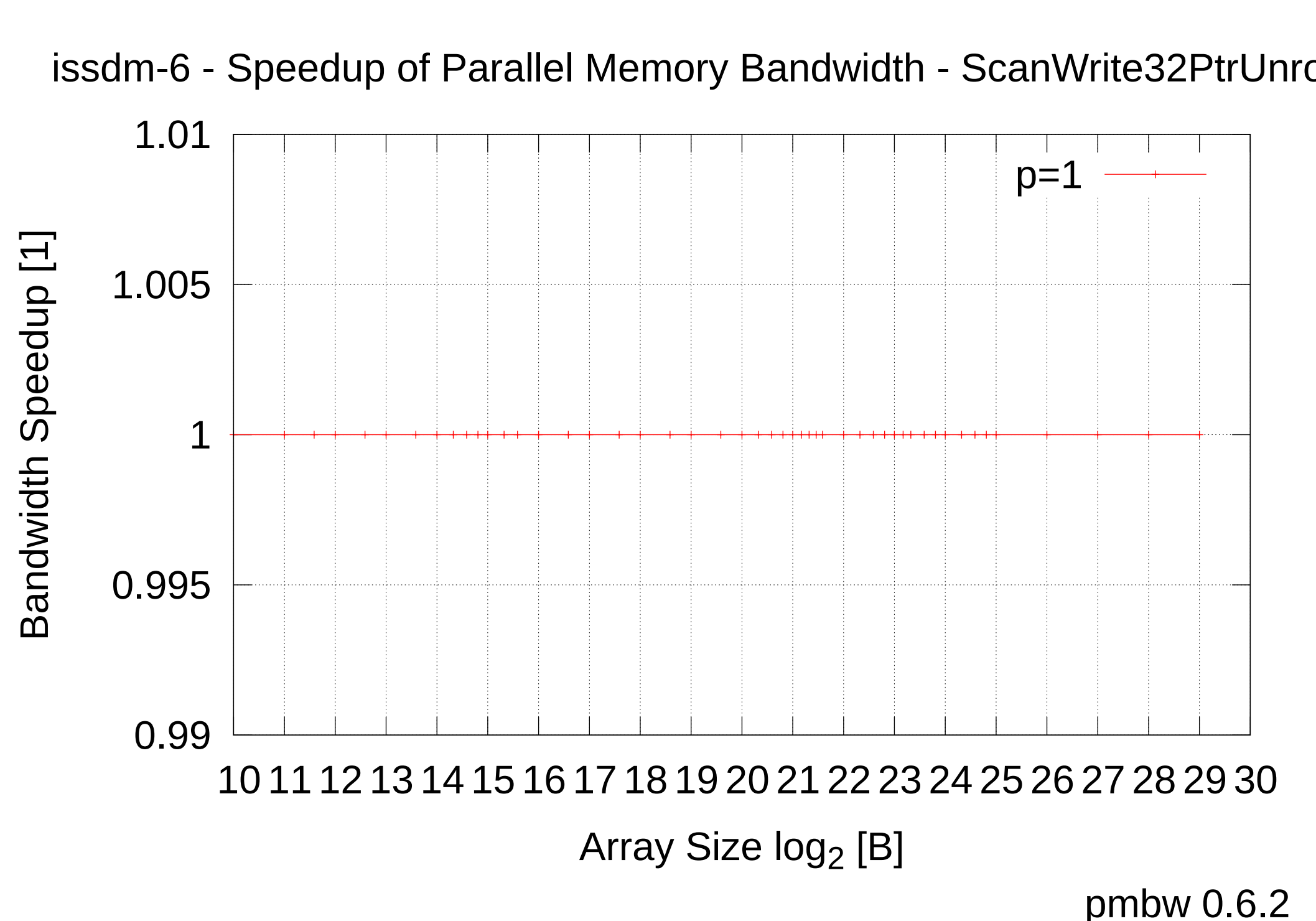

issdm-6 - Parallel Memory Access Time - ScanWrite32PtrSimpleLoop
p=1
Access Time [ns]
2.4
2.3
2.2
2.1
2
1.9
1.8
1.7
1.6
1.5
1.4
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

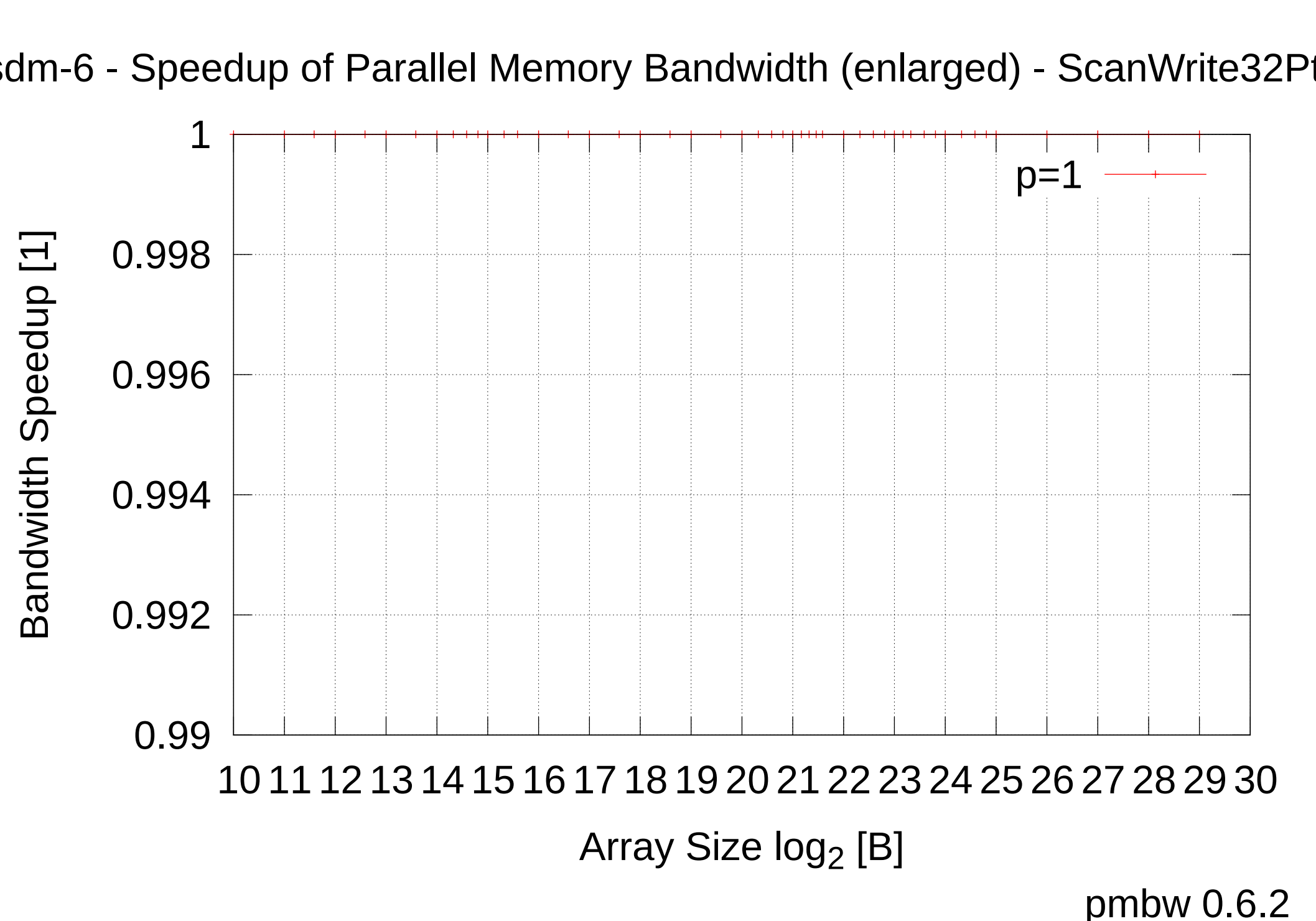

issdm-6 - Speedup of Parallel Memory Bandwidth - ScanWrite32PtrSimp
Bandwidth Speedup [1]
1.01
1.005
1
0.995
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

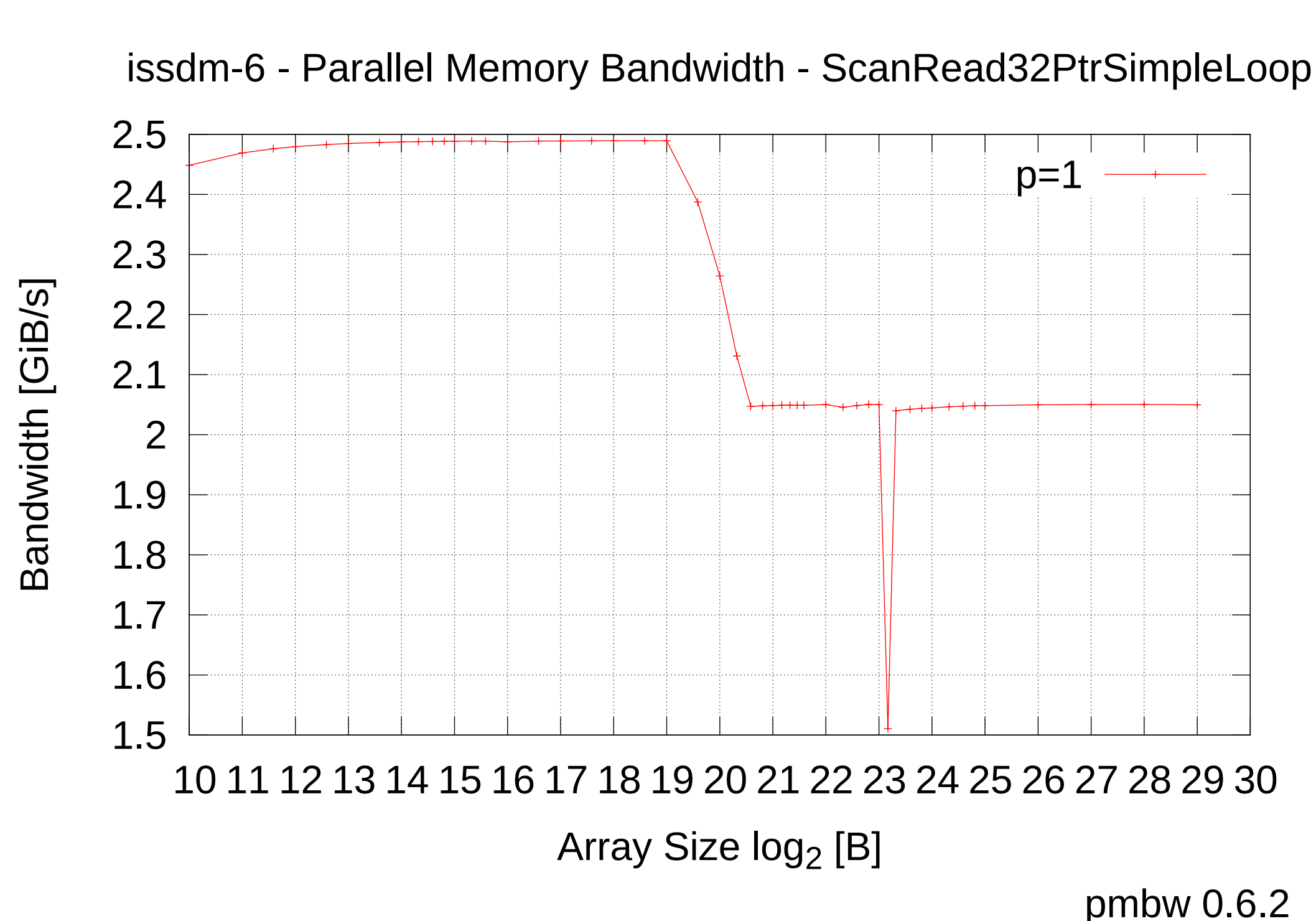

dm-6 - Speedup of Parallel Memory Bandwidth (enlarged) - ScanWrite32Pt
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

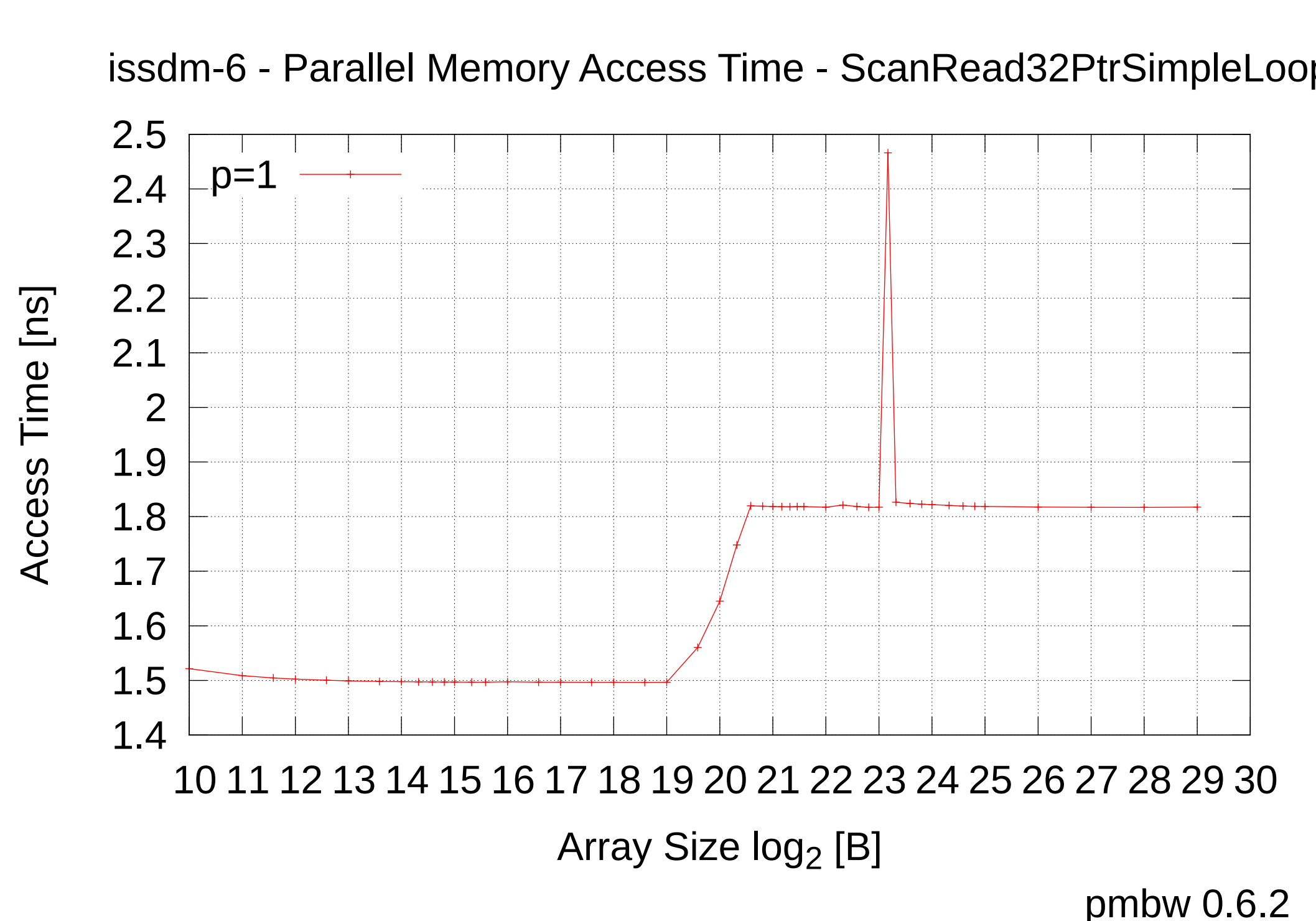

issdm-6 - Parallel Memory Bandwidth - ScanWrite32PtrUnrollLoop
Bandwidth [GiB/s]
0
2
4
6
8
10
12
14
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

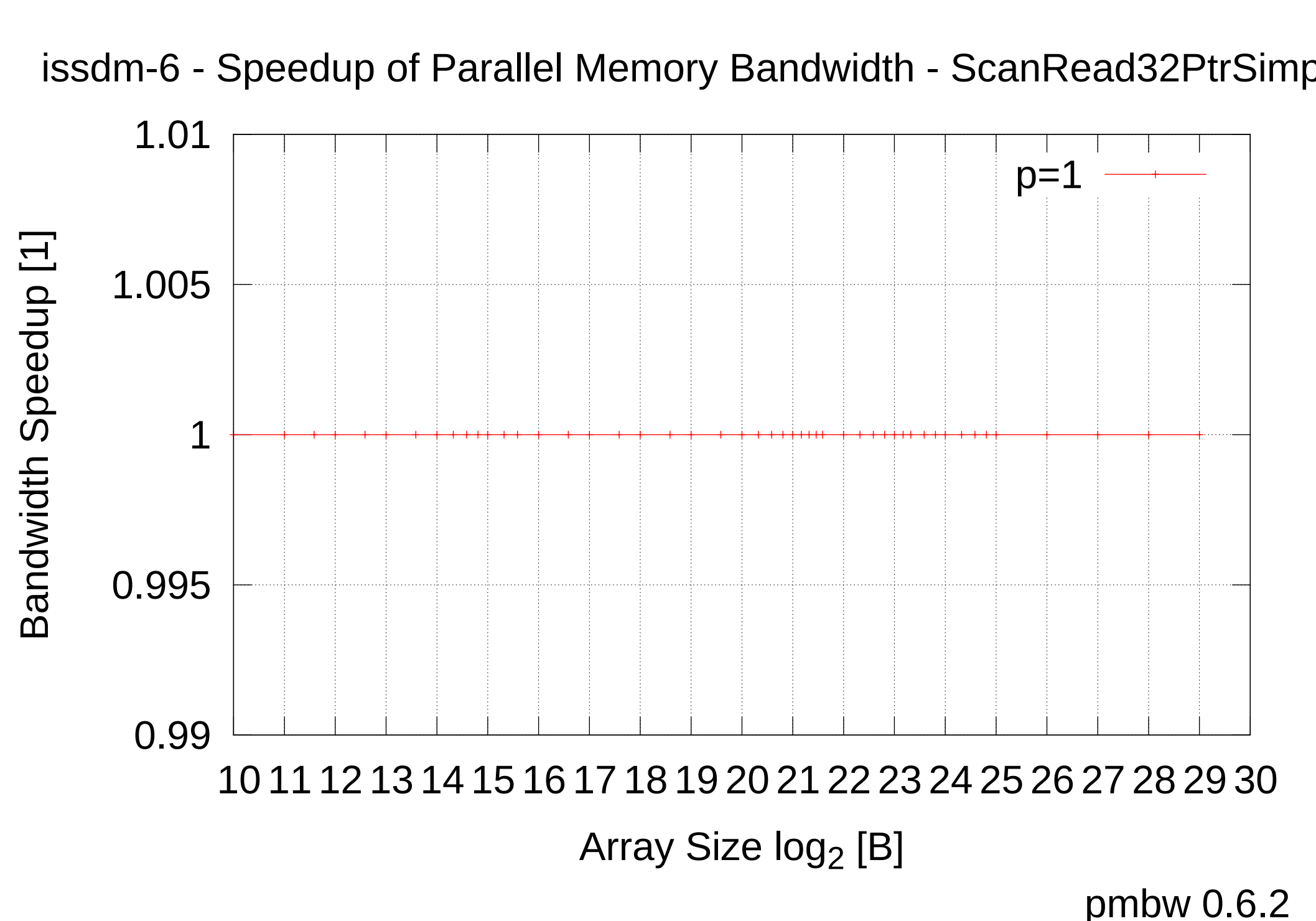

issdm-6 - Parallel Memory Access Time - ScanWrite32PtrUnrollLoop
p=1
Access Time [ns]
0
0.5
1
1.5
2
2.5
3
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

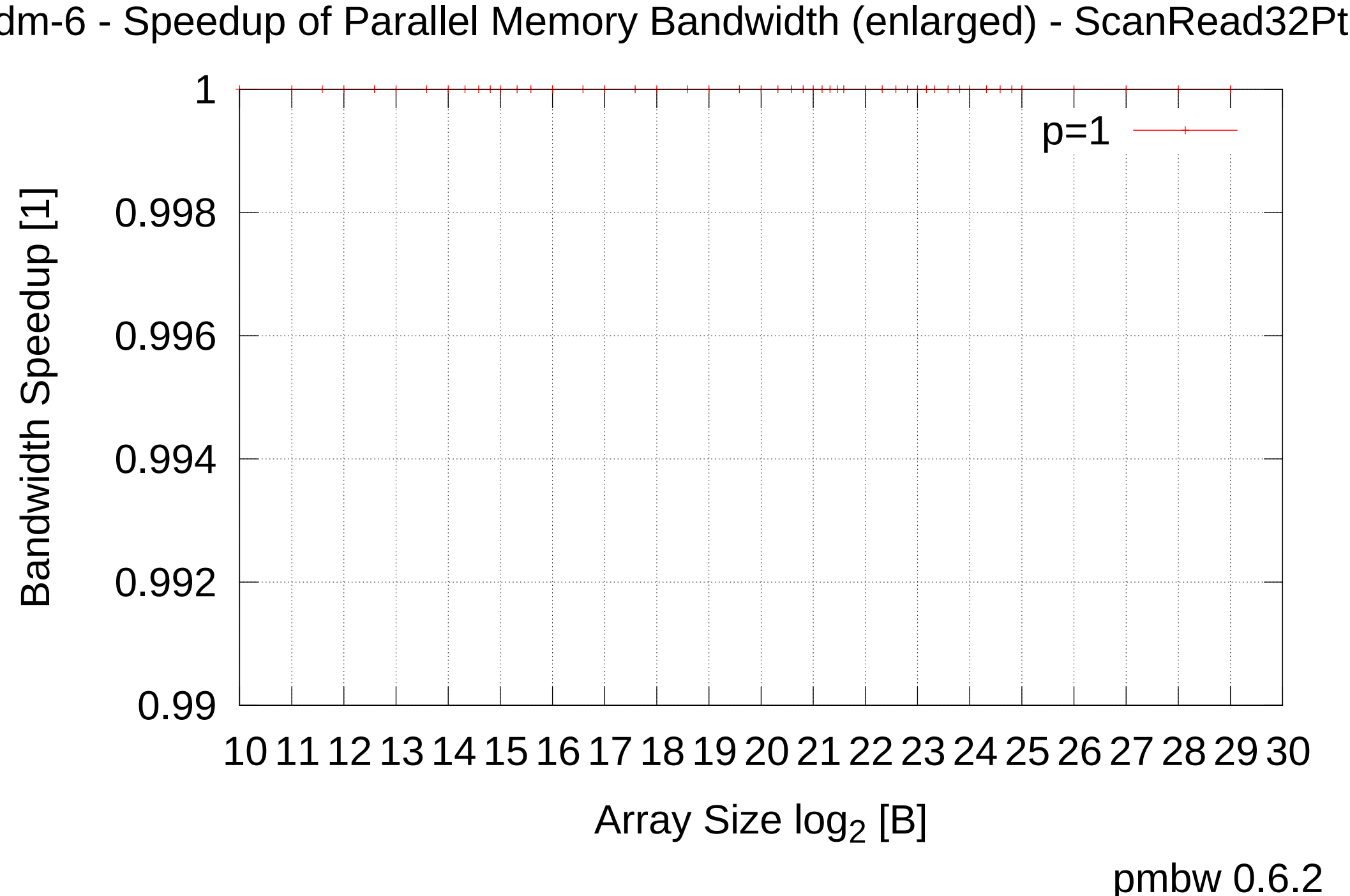

issdm-6 - Speedup of Parallel Memory Bandwidth - ScanWrite32PtrUnro
Bandwidth Speedup [1]
1.01
1.005
1
0.995
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

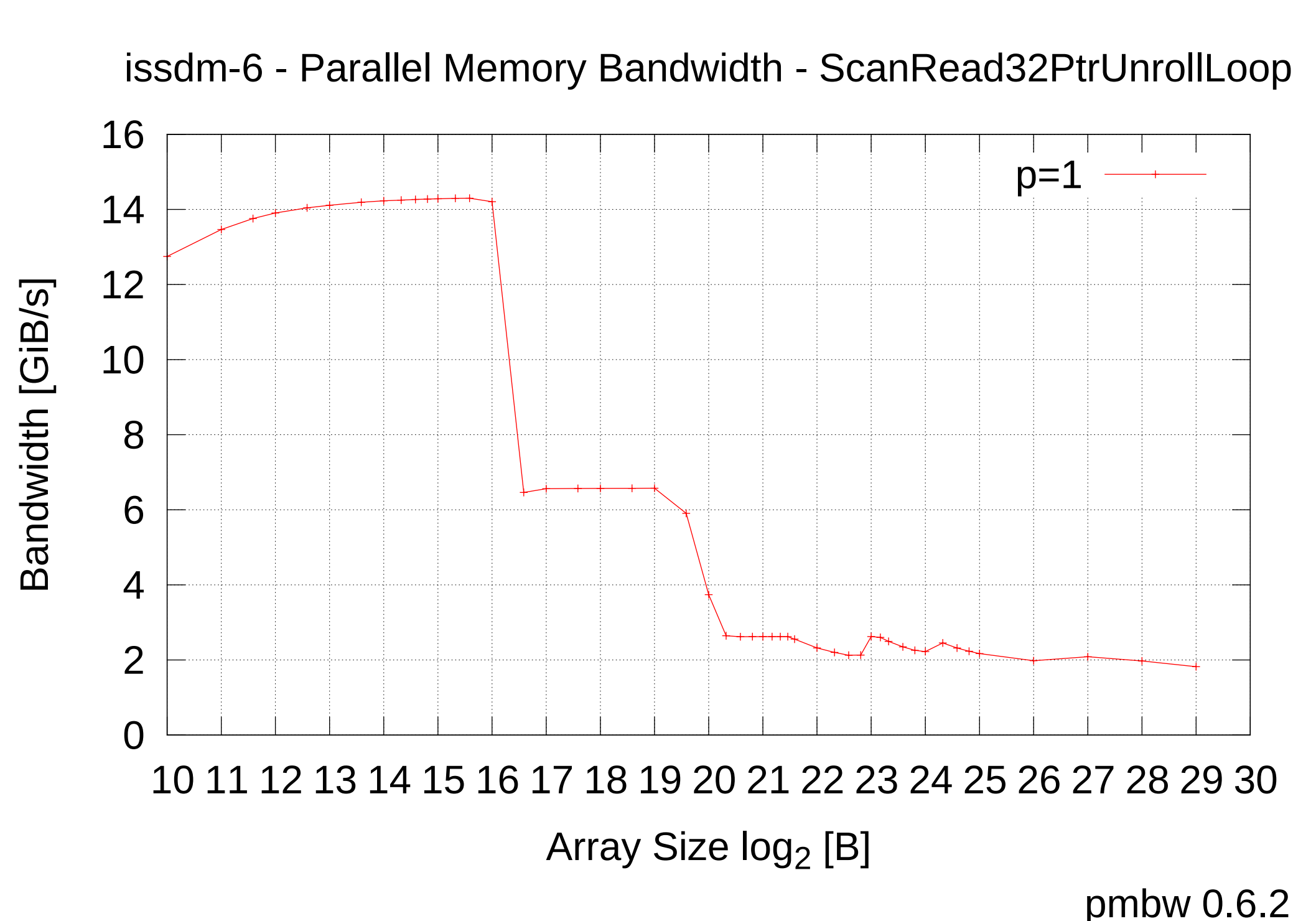

sdm-6 - Speedup of Parallel Memory Bandwidth (enlarged) - ScanWrite32Pt
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

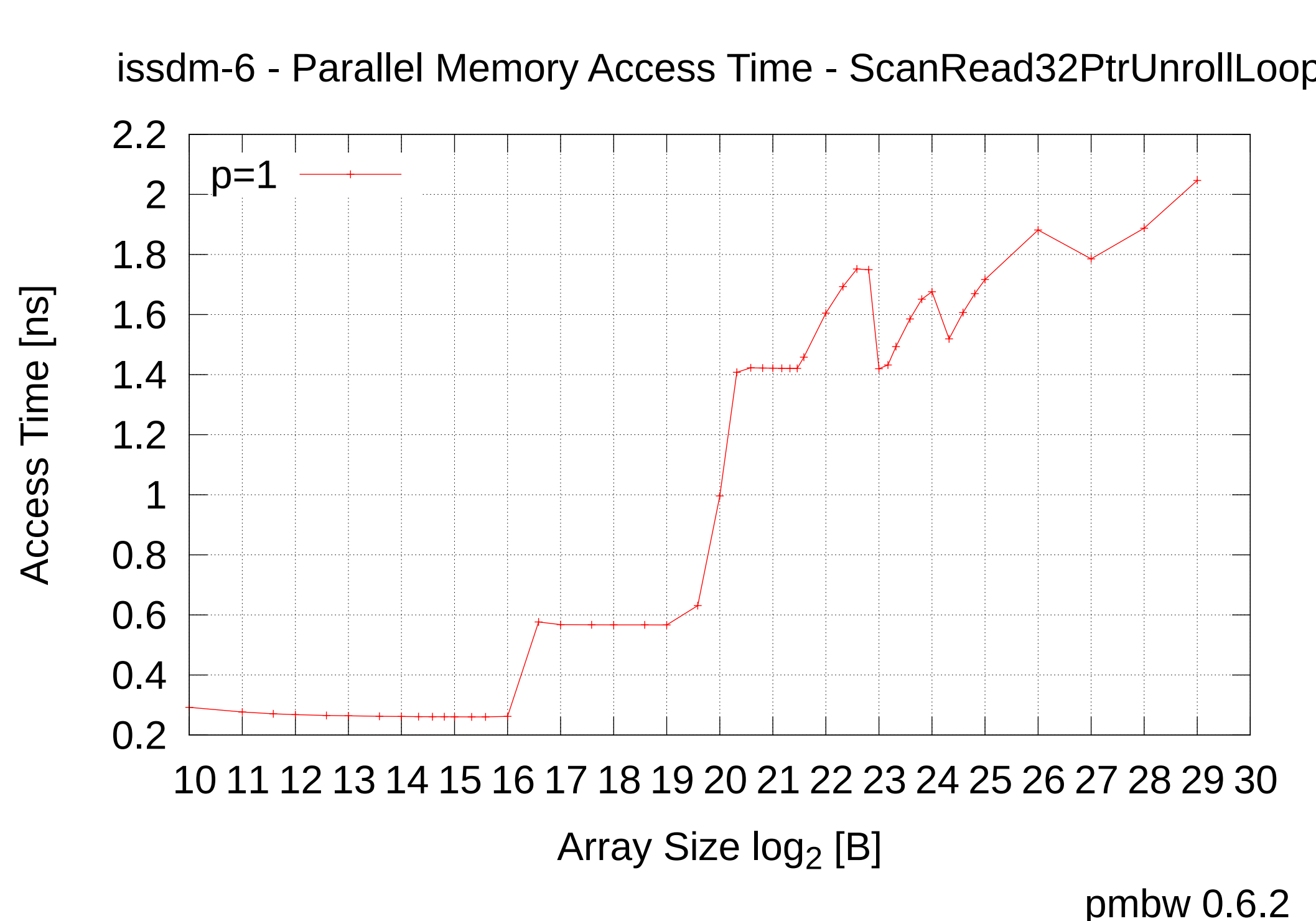

issdm-6 - Parallel Memory Bandwidth - ScanRead32PtrSimpleLoop
Bandwidth [GiB/s]
2.5
2.4
2.3
2.2
2.1
2
1.9
1.8
1.7
1.6
1.5
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

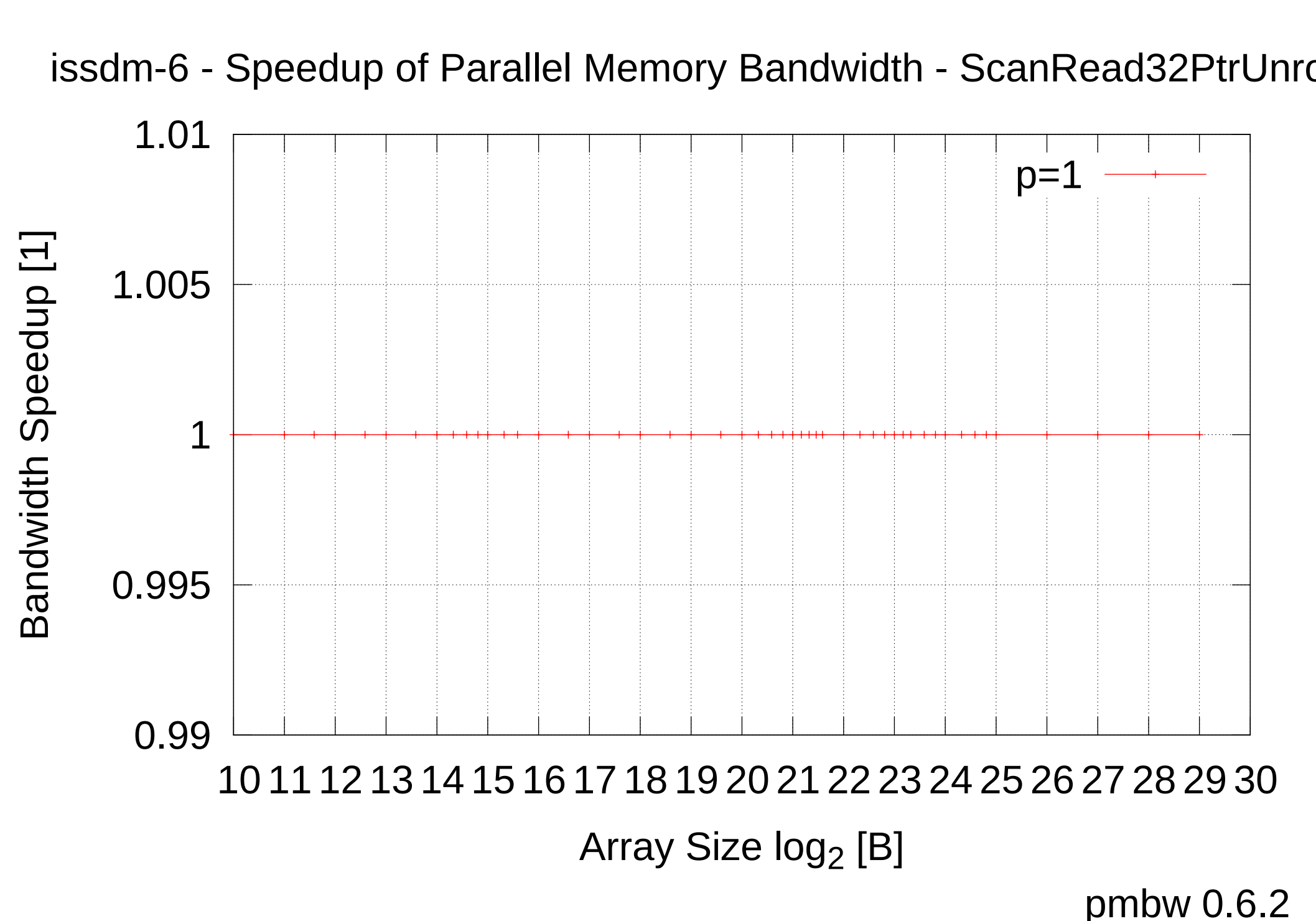

issdm-6 - Parallel Memory Access Time - ScanRead32PtrSimpleLoop
p=1
Access Time [ns]
2.5
2.4
2.3
2.2
2.1
2
1.9
1.8
1.7
1.6
1.5
1.4
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

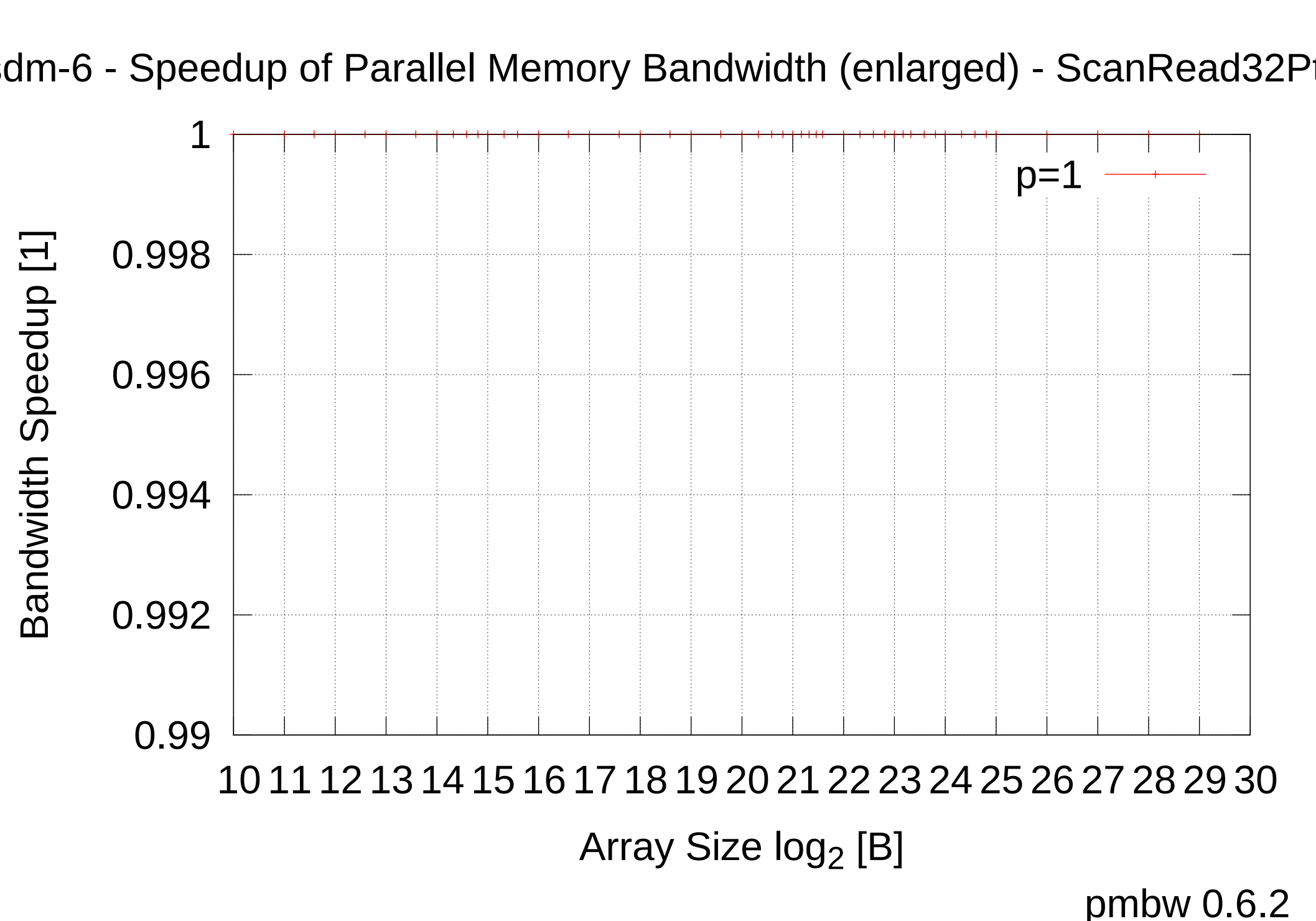

issdm-6 - Speedup of Parallel Memory Bandwidth - ScanRead32PtrSimp
Bandwidth Speedup [1]
1.01
1.005
1
0.995
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

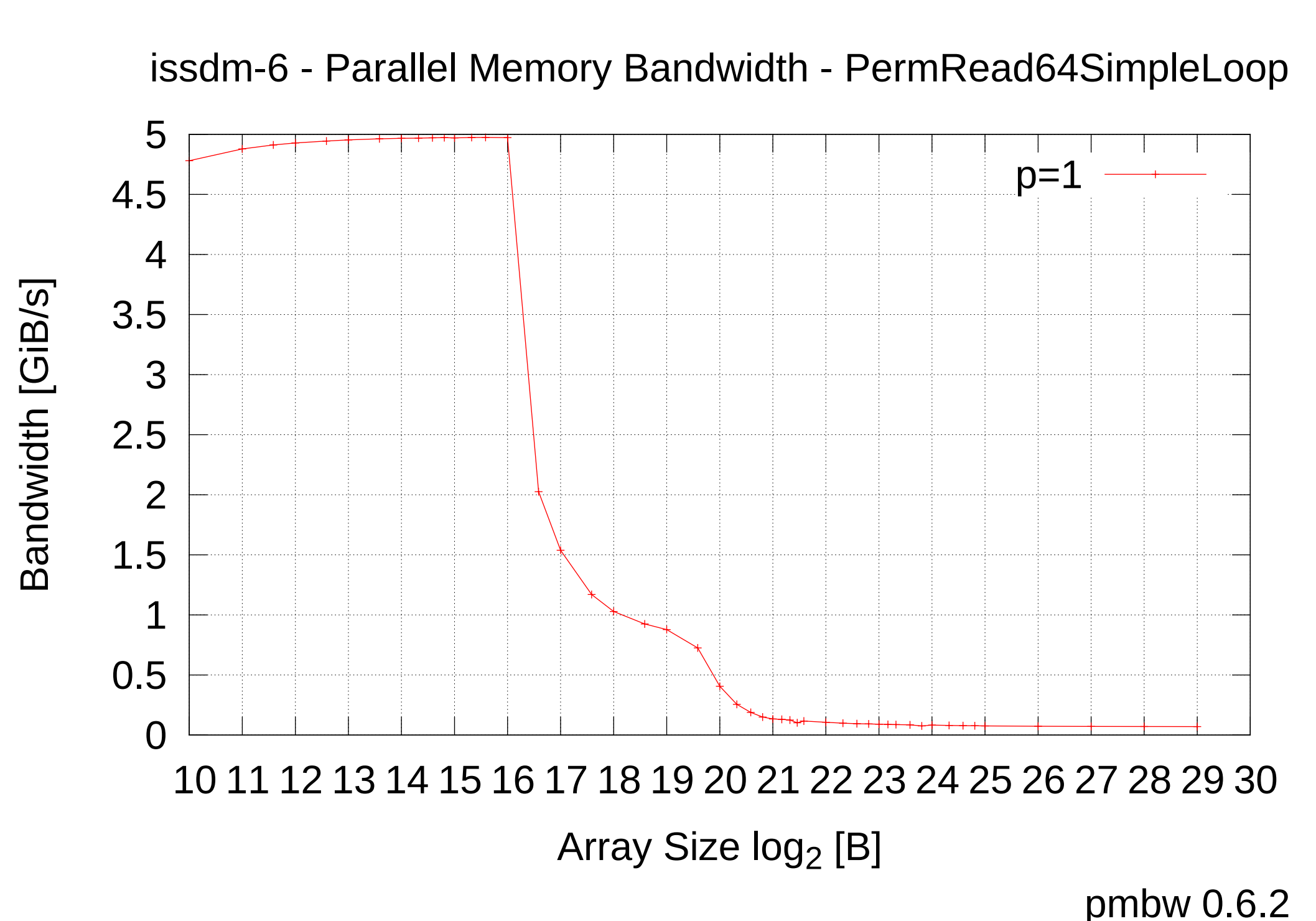

dm-6 - Speedup of Parallel Memory Bandwidth (enlarged) - ScanRead32Pt
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

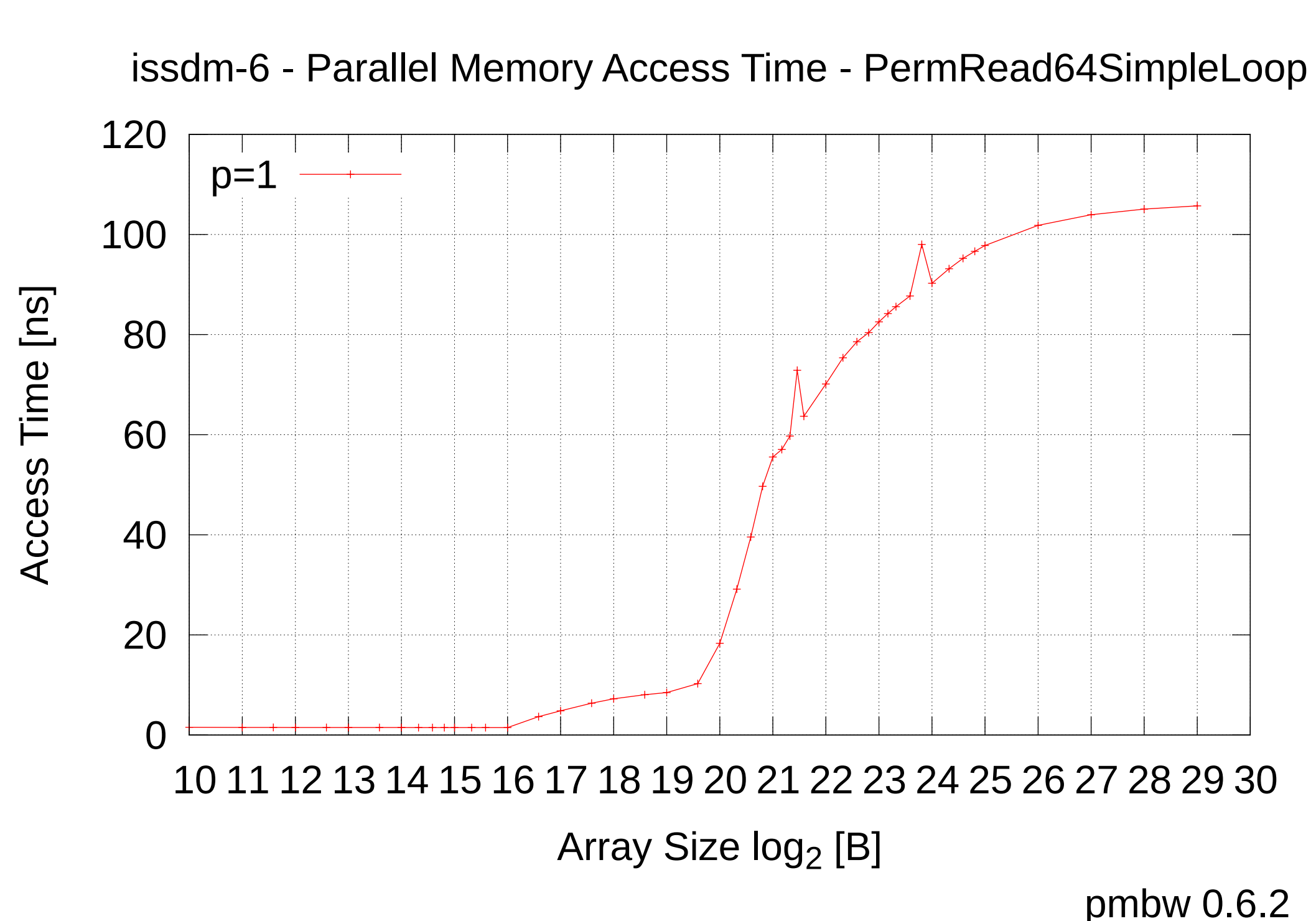

issdm-6 - Parallel Memory Bandwidth - ScanRead32PtrUnrollLoop
Bandwidth [GiB/s]
0
2
4
6
8
10
12
14
16
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

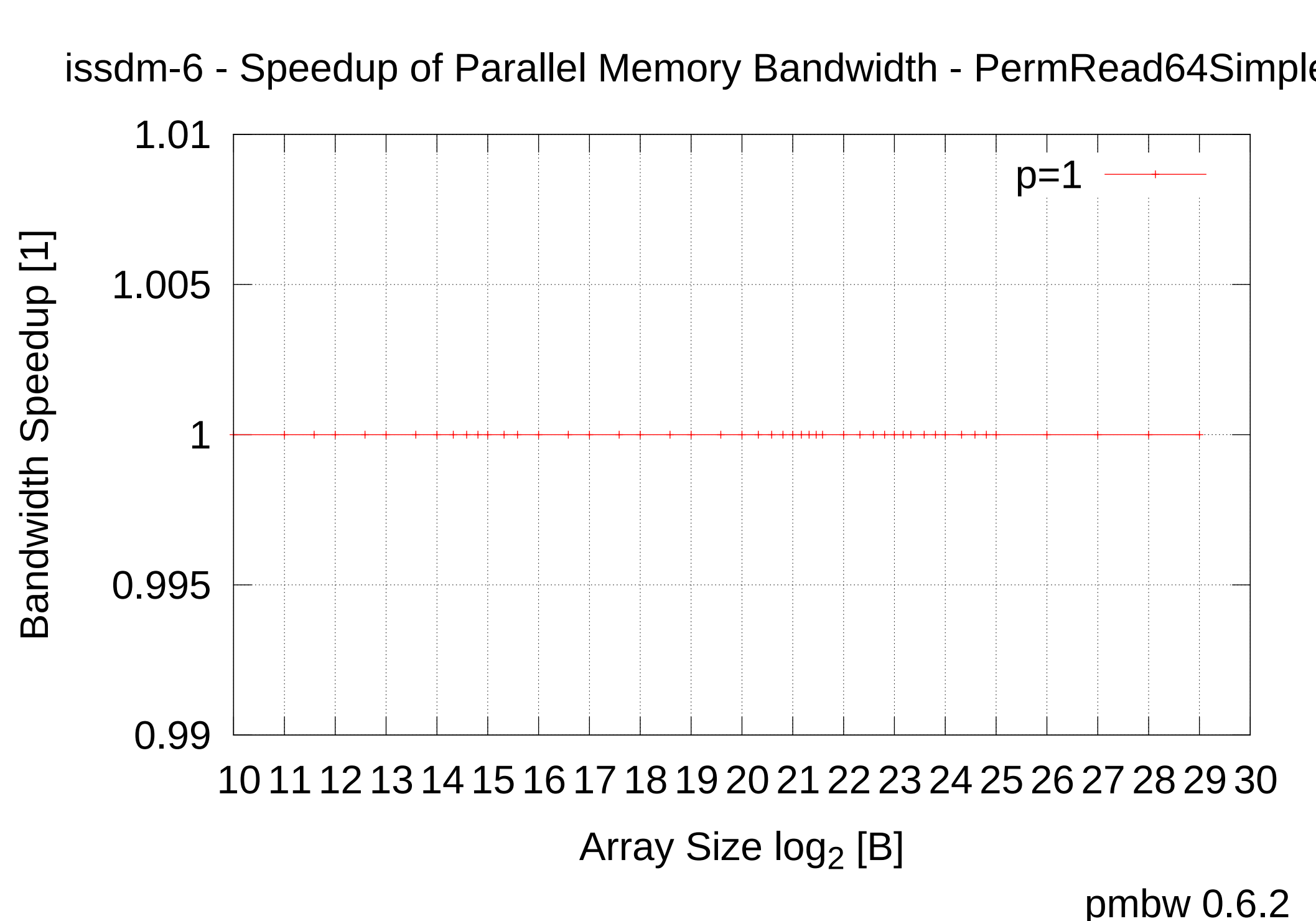

issdm-6 - Parallel Memory Access Time - ScanRead32PtrUnrollLoop
p=1
Access Time [ns]
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

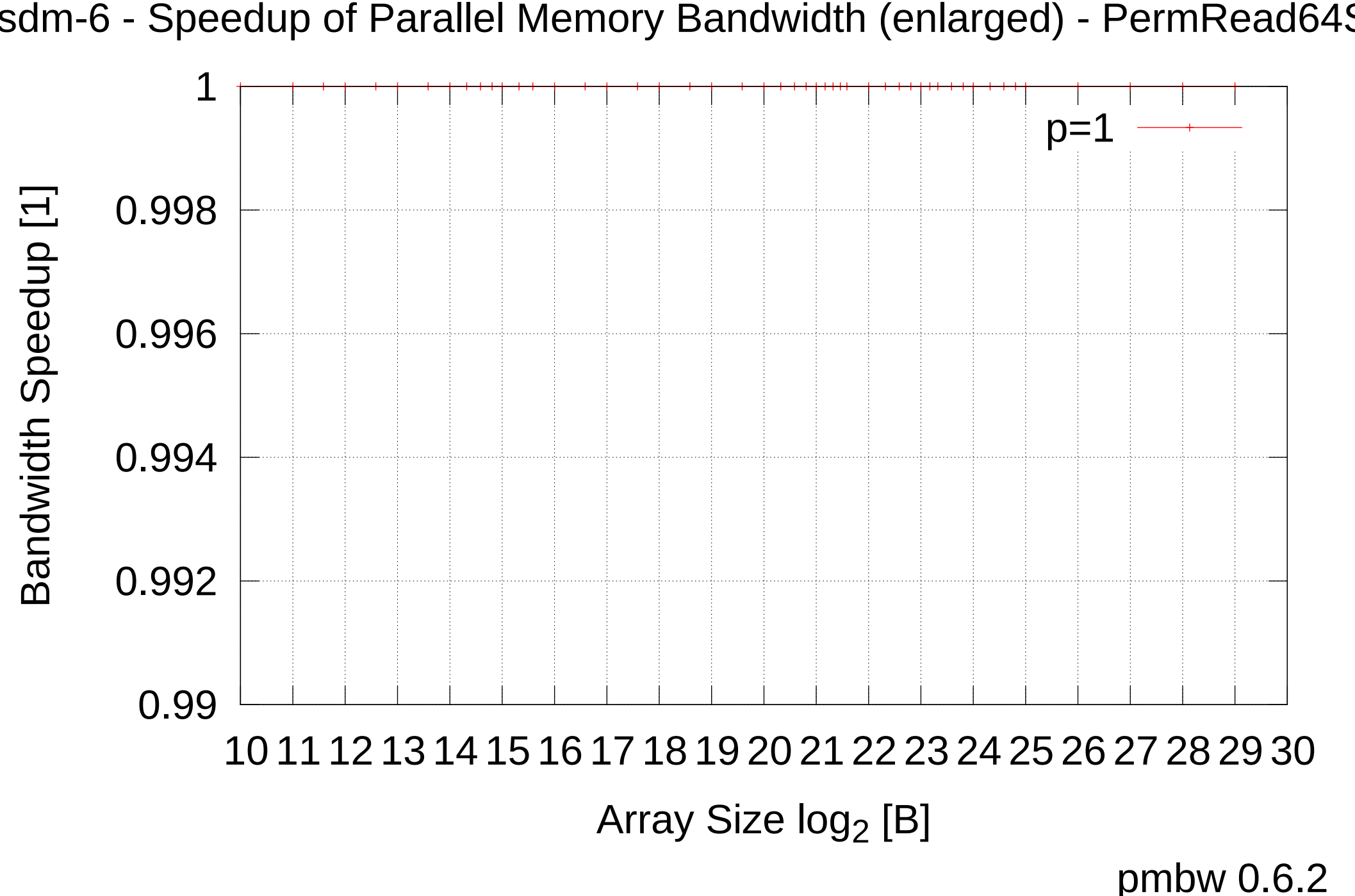

issdm-6 - Speedup of Parallel Memory Bandwidth - ScanRead32PtrUnro
Bandwidth Speedup [1]
1.01
1.005
1
0.995
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

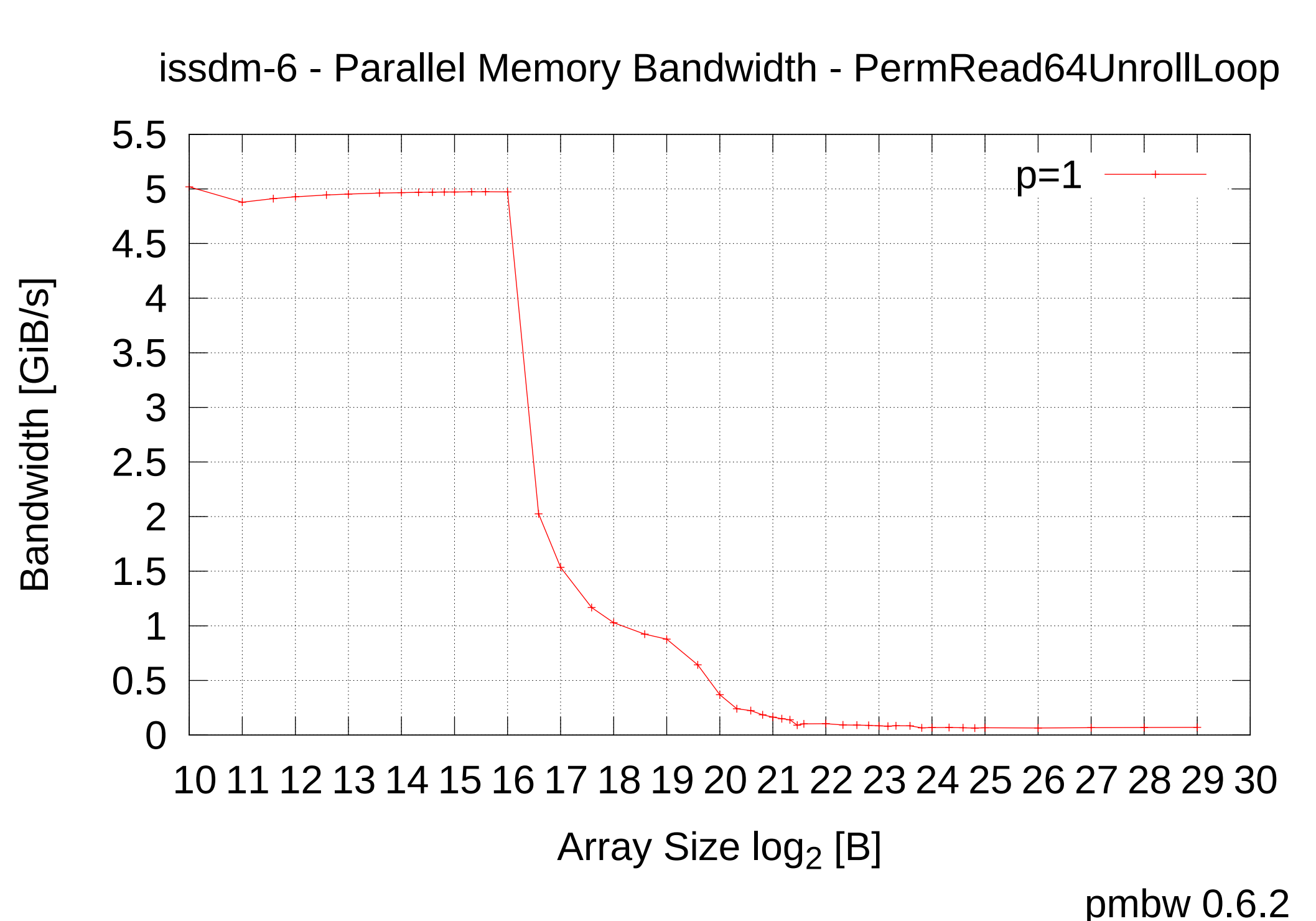

sdm-6 - Speedup of Parallel Memory Bandwidth (enlarged) - ScanRead32P
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

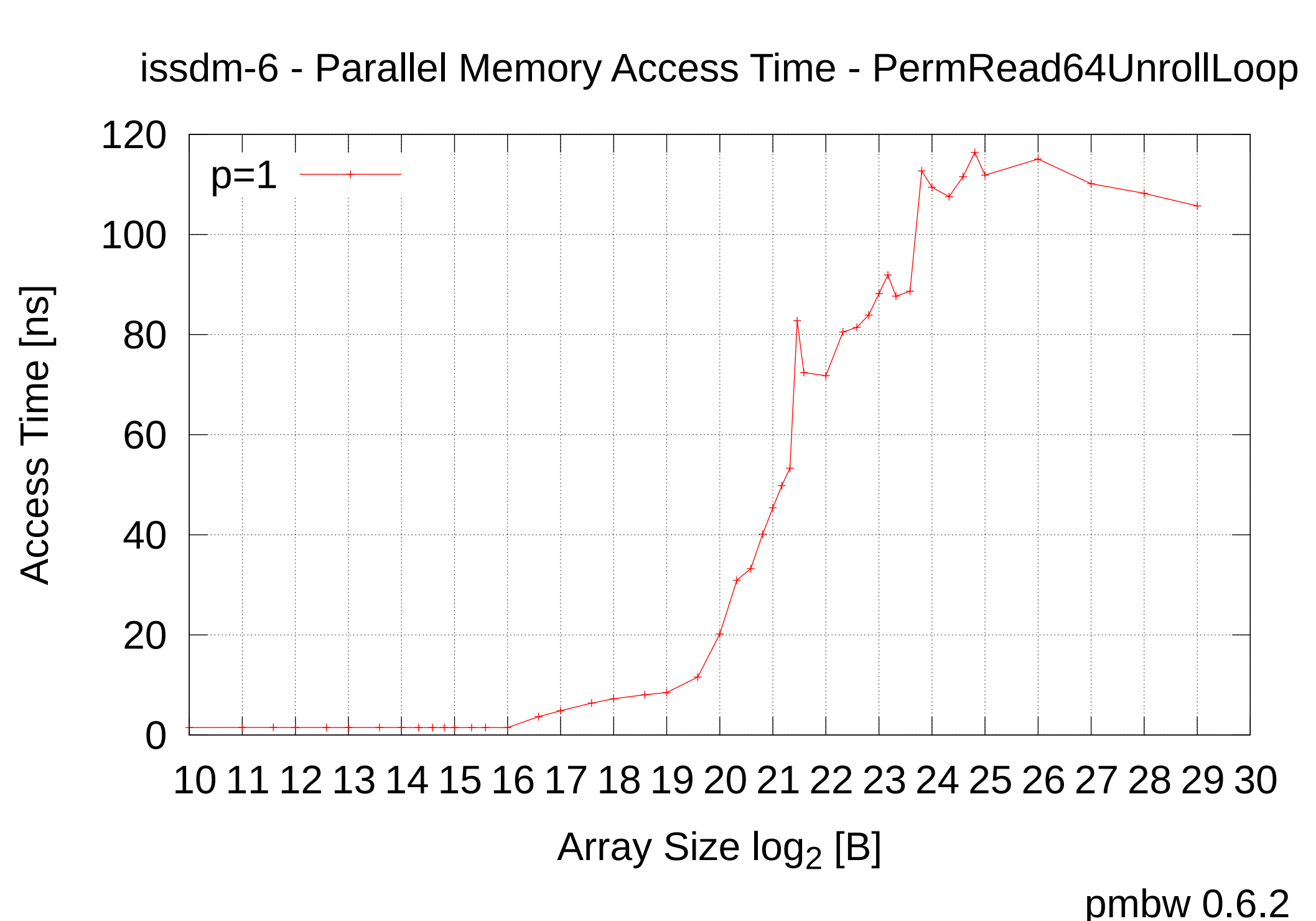

issdm-6 - Parallel Memory Bandwidth - PermRead64SimpleLoop
Bandwidth [GiB/s]
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

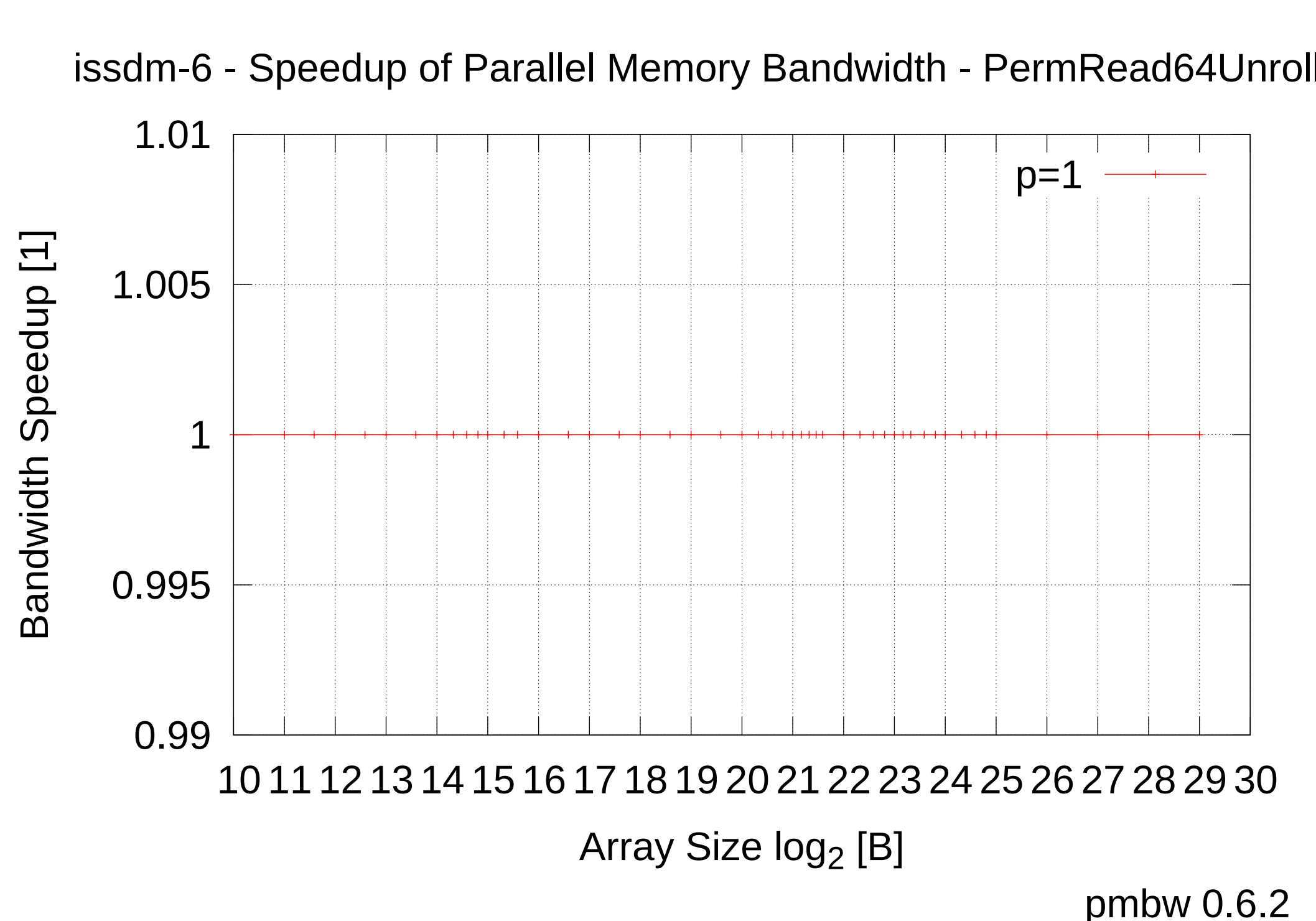

issdm-6 - Parallel Memory Access Time - PermRead64SimpleLoop
p=1
Access Time [ns]
0
20
40
60
80
100
120
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

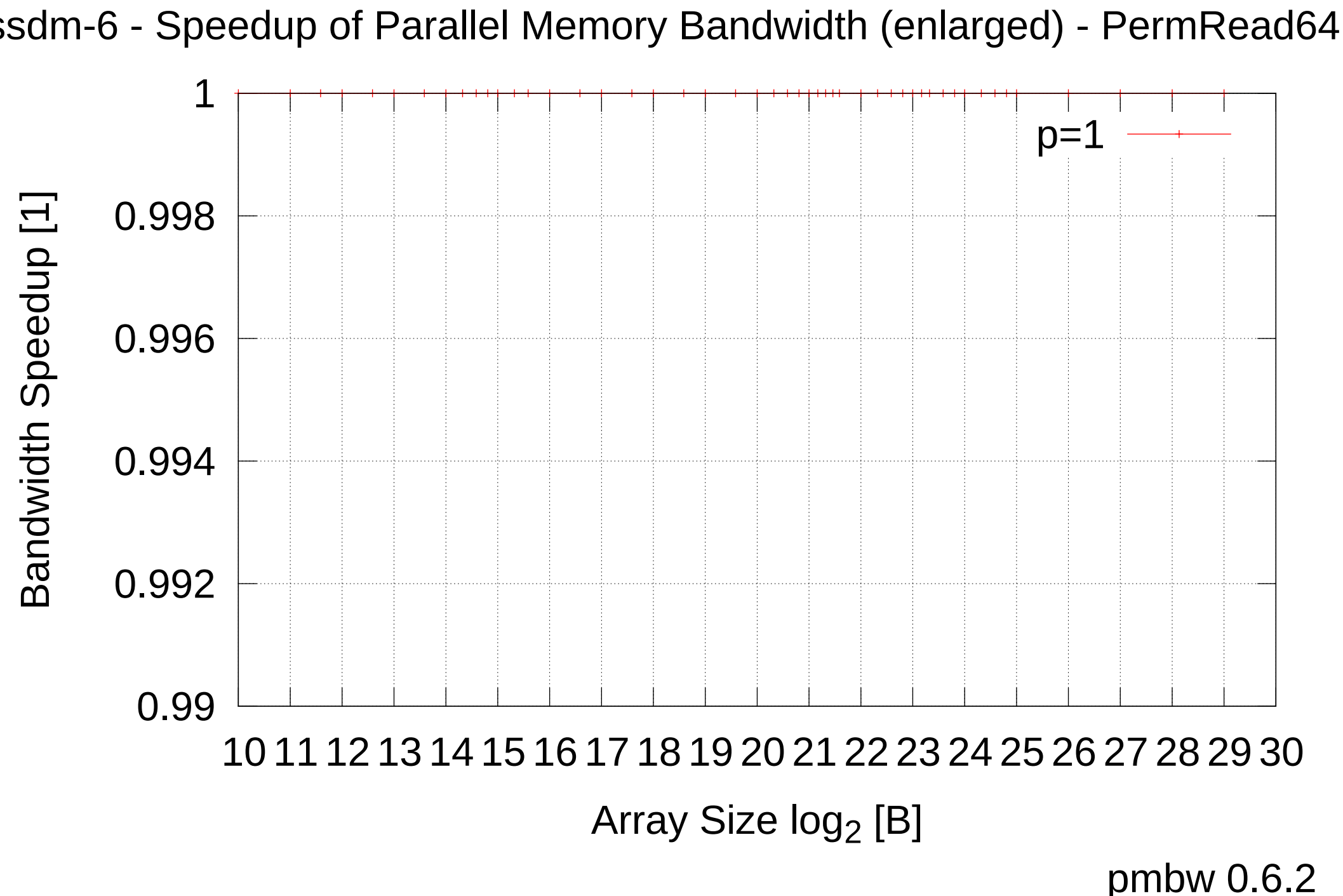

issdm-6 - Speedup of Parallel Memory Bandwidth - PermRead64Simple
Bandwidth Speedup [1]
1.01
1.005
1
0.995
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2


sdm-6 - Speedup of Parallel Memory Bandwidth (enlarged) - PermRead64
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2


issdm-6 - Parallel Memory Bandwidth - PermRead64UnrollLoop
Bandwidth [GiB/s]
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2


issdm-6 - Parallel Memory Access Time - PermRead64UnrollLoop
p=1
Access Time [ns]
0
20
40
60
80
100
120
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2


issdm-6 - Speedup of Parallel Memory Bandwidth - PermRead64Unroll
Bandwidth Speedup [1]
1.01
1.005
1
0.995
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2


ssdm-6 - Speedup of Parallel Memory Bandwidth (enlarged) - PermRead64
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2