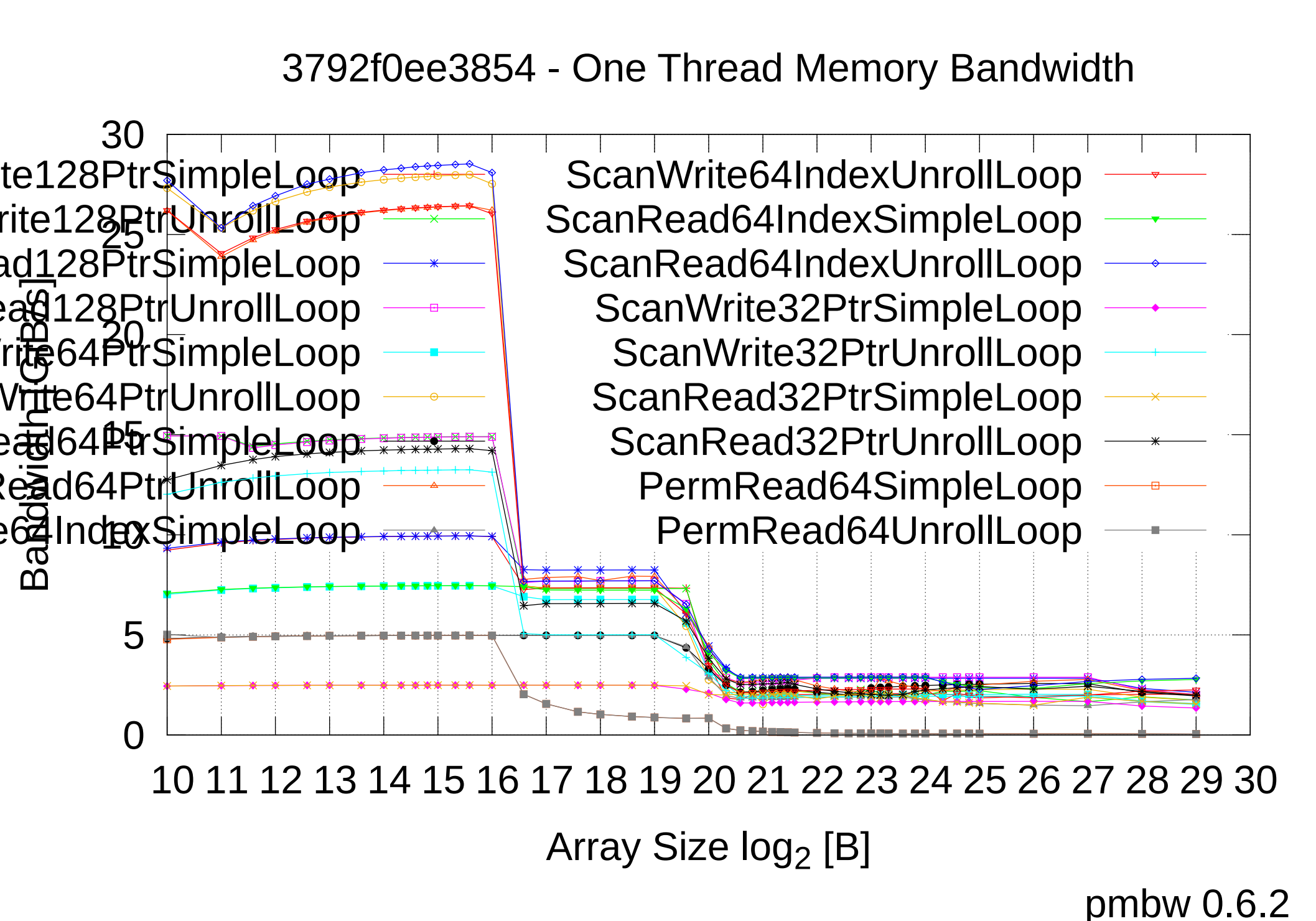
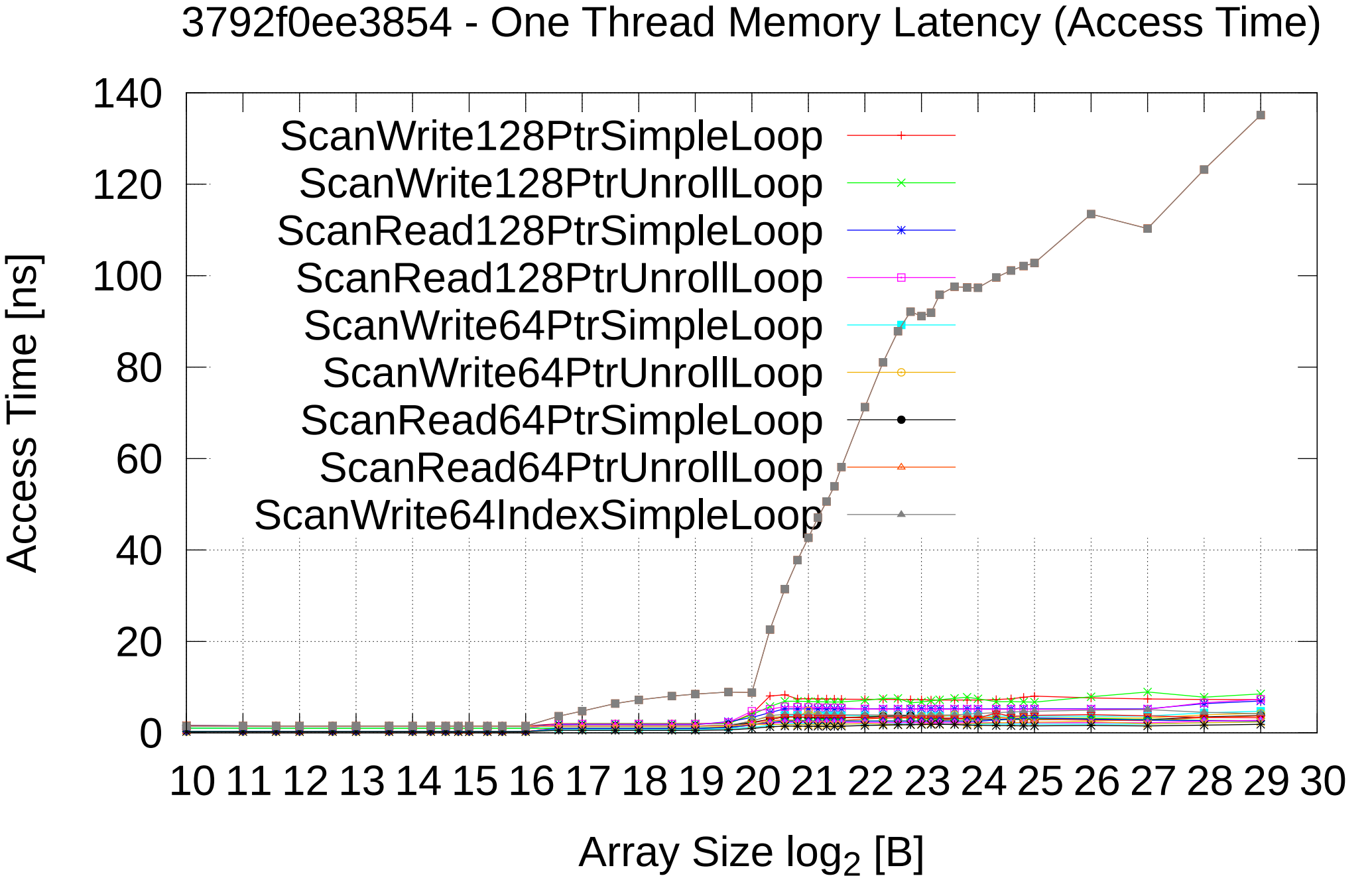
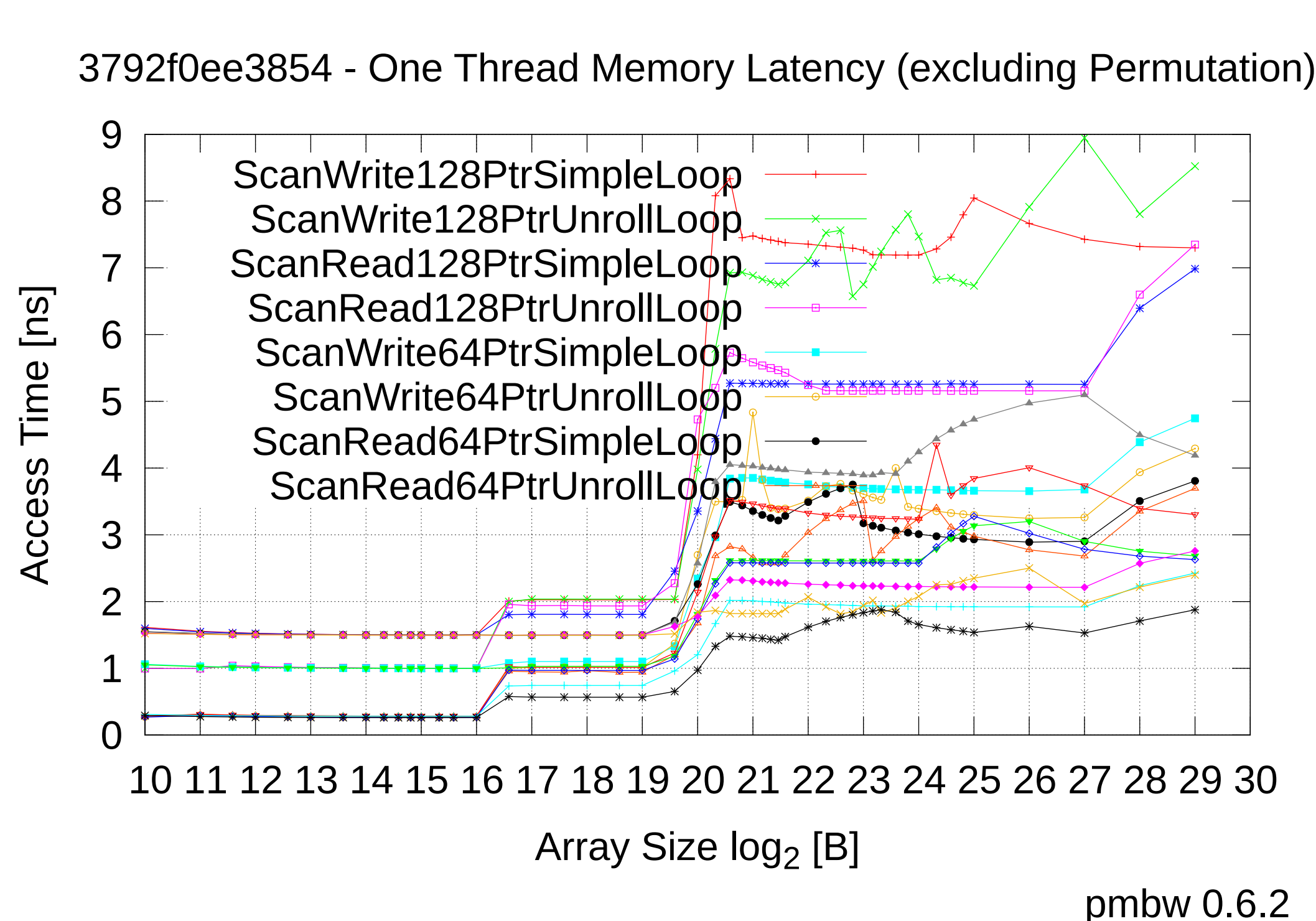
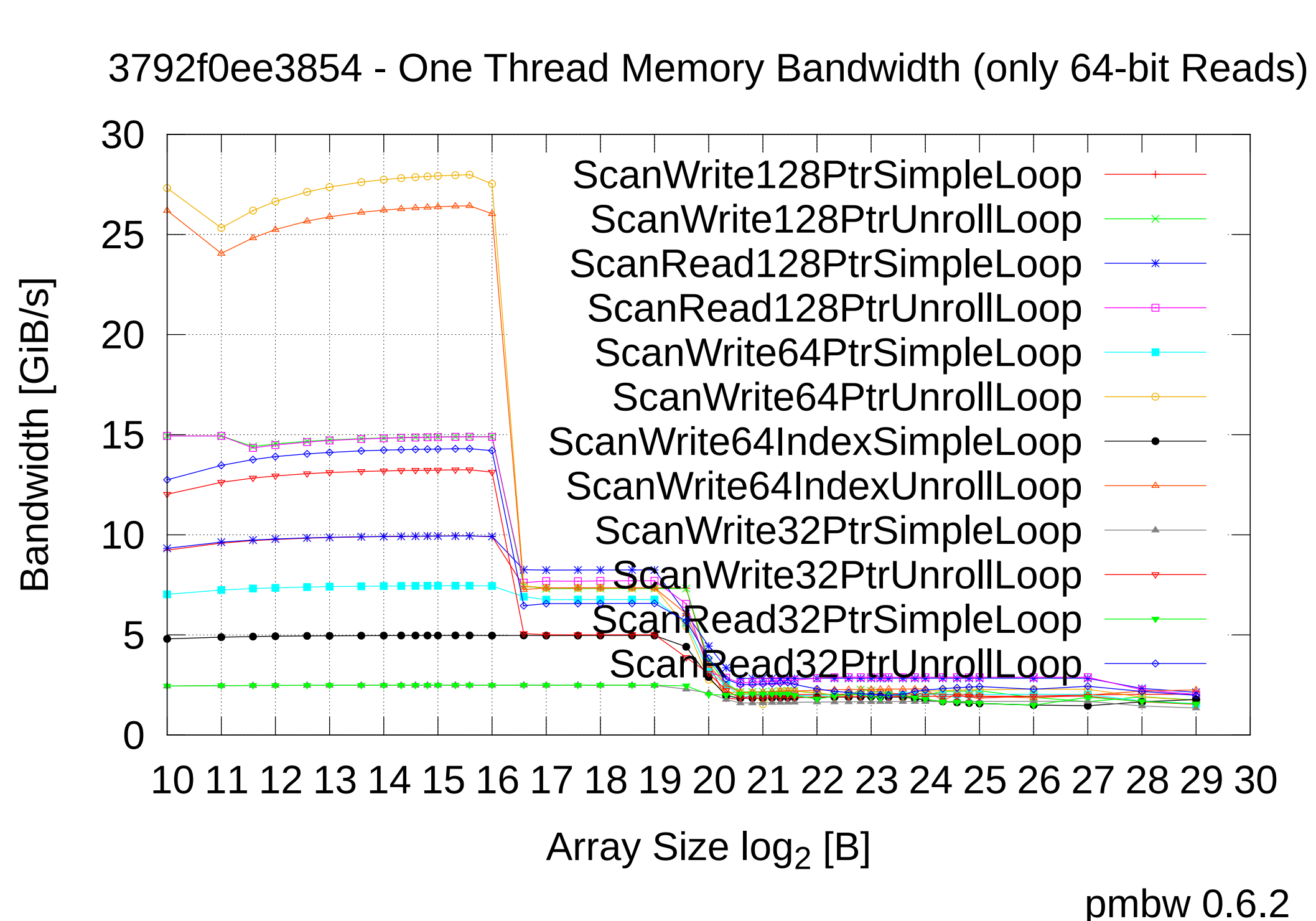
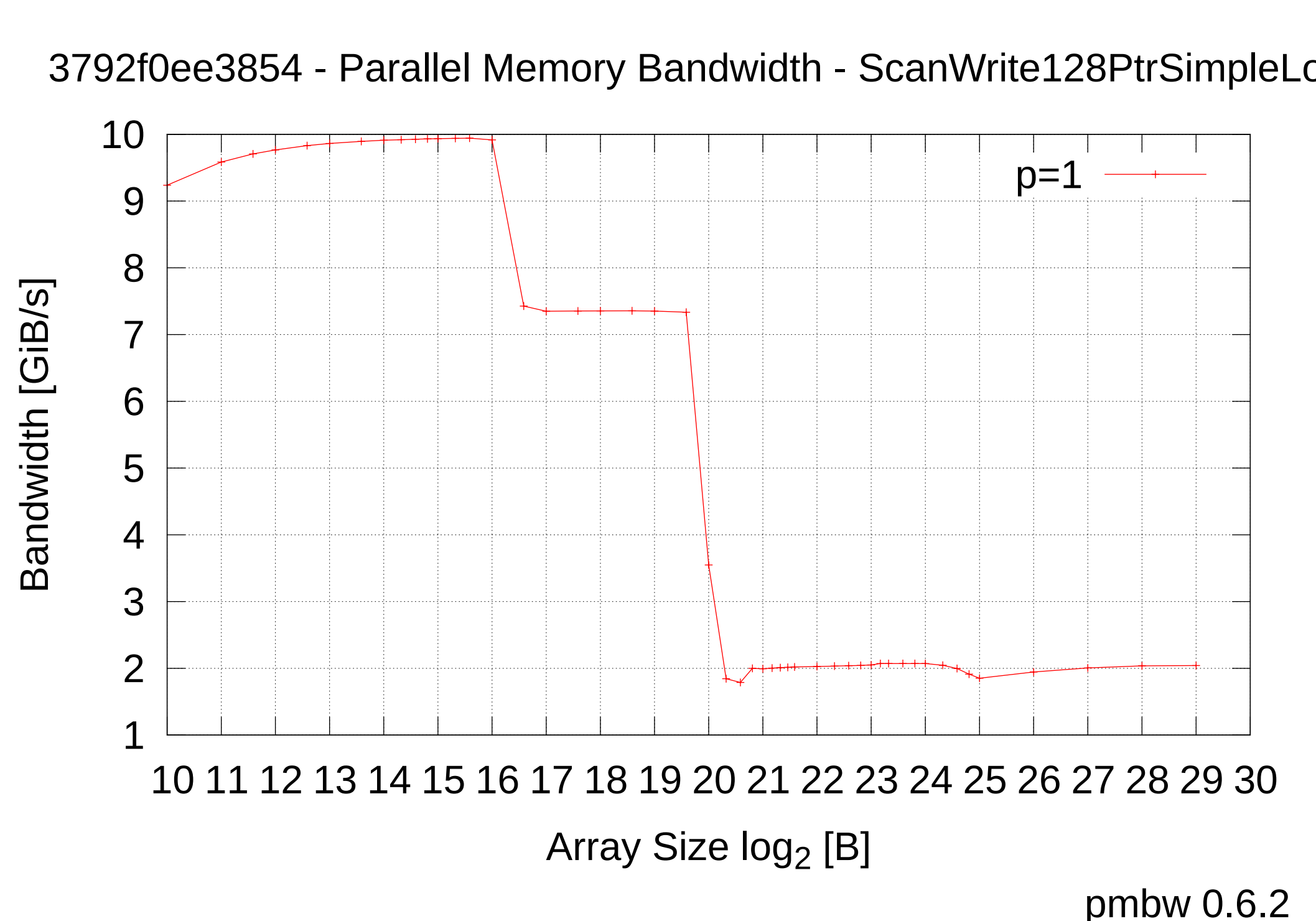
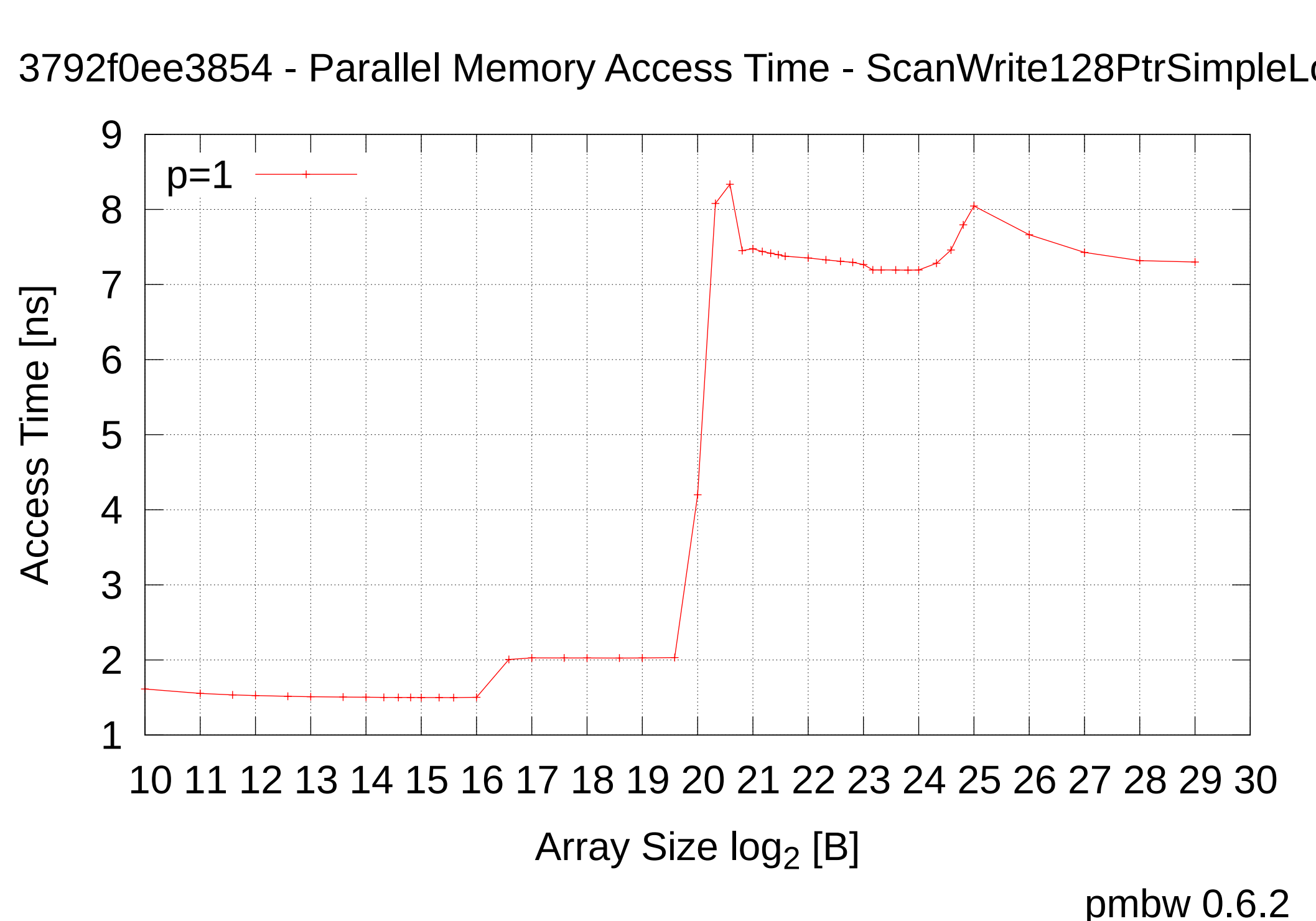

3792f0ee3854 - One Thread Memory Bandwidth
Bandwidth [GiB/s]
Array Size log2 [B]
ScanWrite64IndexUnrollLoop
ScanRead64IndexSimpleLoop
ScanRead64IndexUnrollLoop
ScanWrite32PtrSimpleLoop
ScanWrite32PtrUnrollLoop
ScanRead32PtrSimpleLoop
ScanRead32PtrUnrollLoop
PermRead64SimpleLoop
PermRead64UnrollLoop
te128PtrSimpleLoop
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

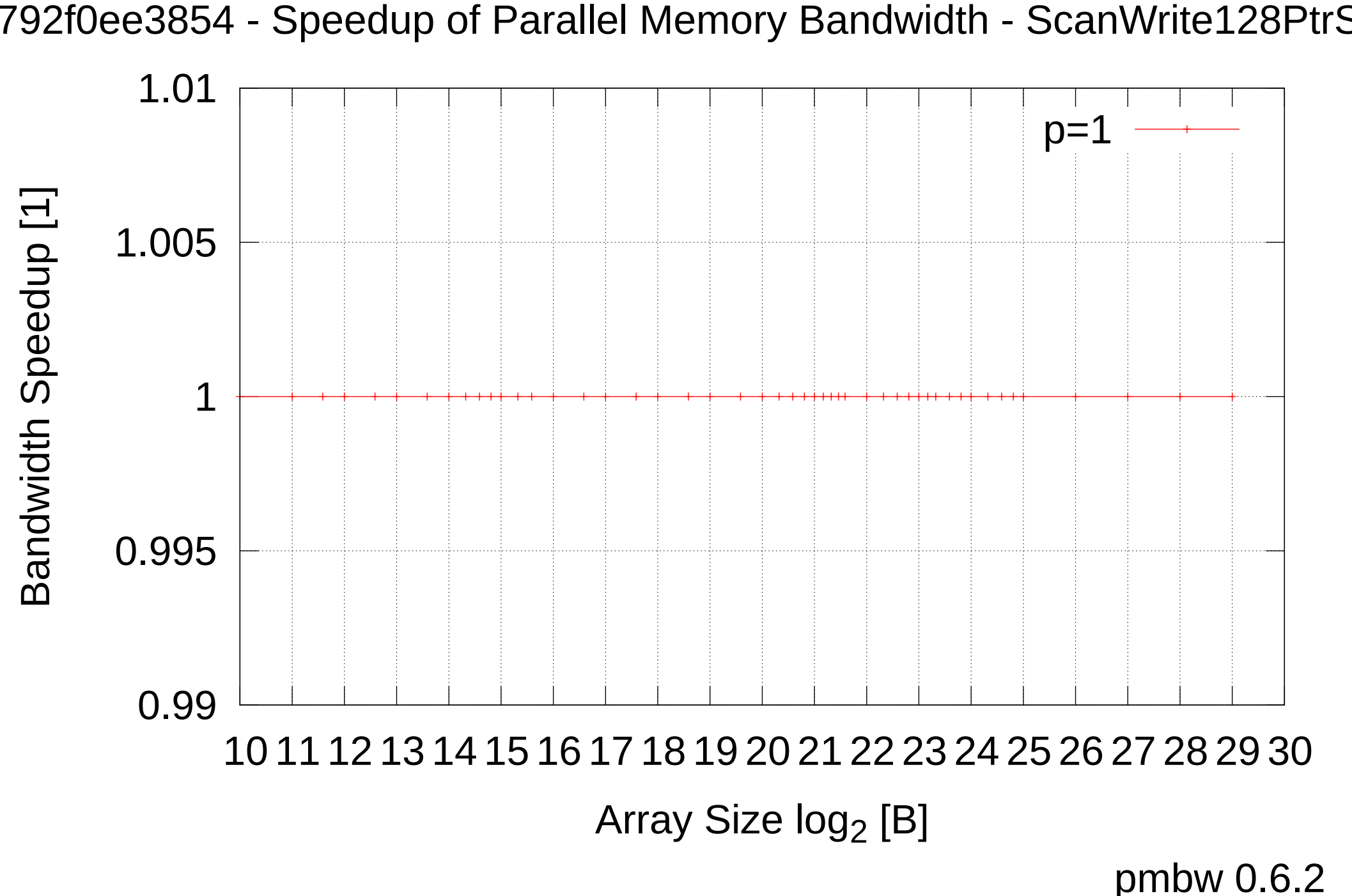

3792f0ee3854 - One Thread Memory Latency (Access Time)
ScanWrite128PtrSimpleLoop
ScanWrite128PtrUnrollLoop
ScanRead128PtrSimpleLoop
ScanRead128PtrUnrollLoop
ScanWrite64PtrSimpleLoop
ScanWrite64PtrUnrollLoop
ScanRead64PtrSimpleLoop
ScanRead64PtrUnrollLoop
ScanWrite64IndexSimpleLoop
Access Time [ns]
0
20
40
60
80
100
120
140
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

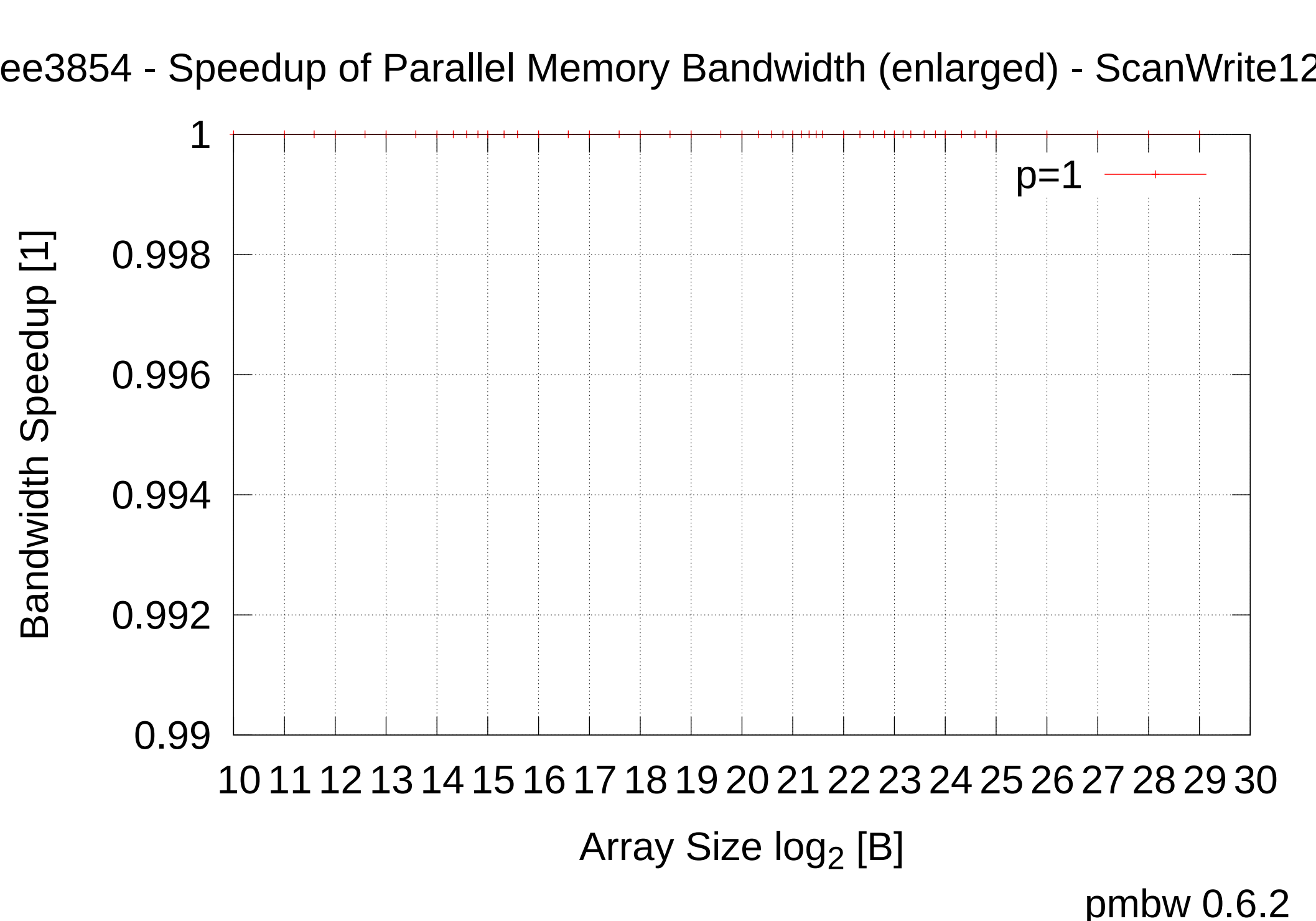

3792f0ee3854 - One Thread Memory Latency (excluding Permutation)
ScanWrite128PtrSimpleLoop
ScanWrite128PtrUnrollLoop
ScanRead128PtrSimpleLoop
ScanRead128PtrUnrollLoop
ScanWrite64PtrSimpleLoop
ScanWrite64PtrUnrollLoop
ScanRead64PtrSimpleLoop
ScanRead64PtrUnrollLoop
Access Time [ns]
0 1 2 3 4 5 6 7 8 9
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

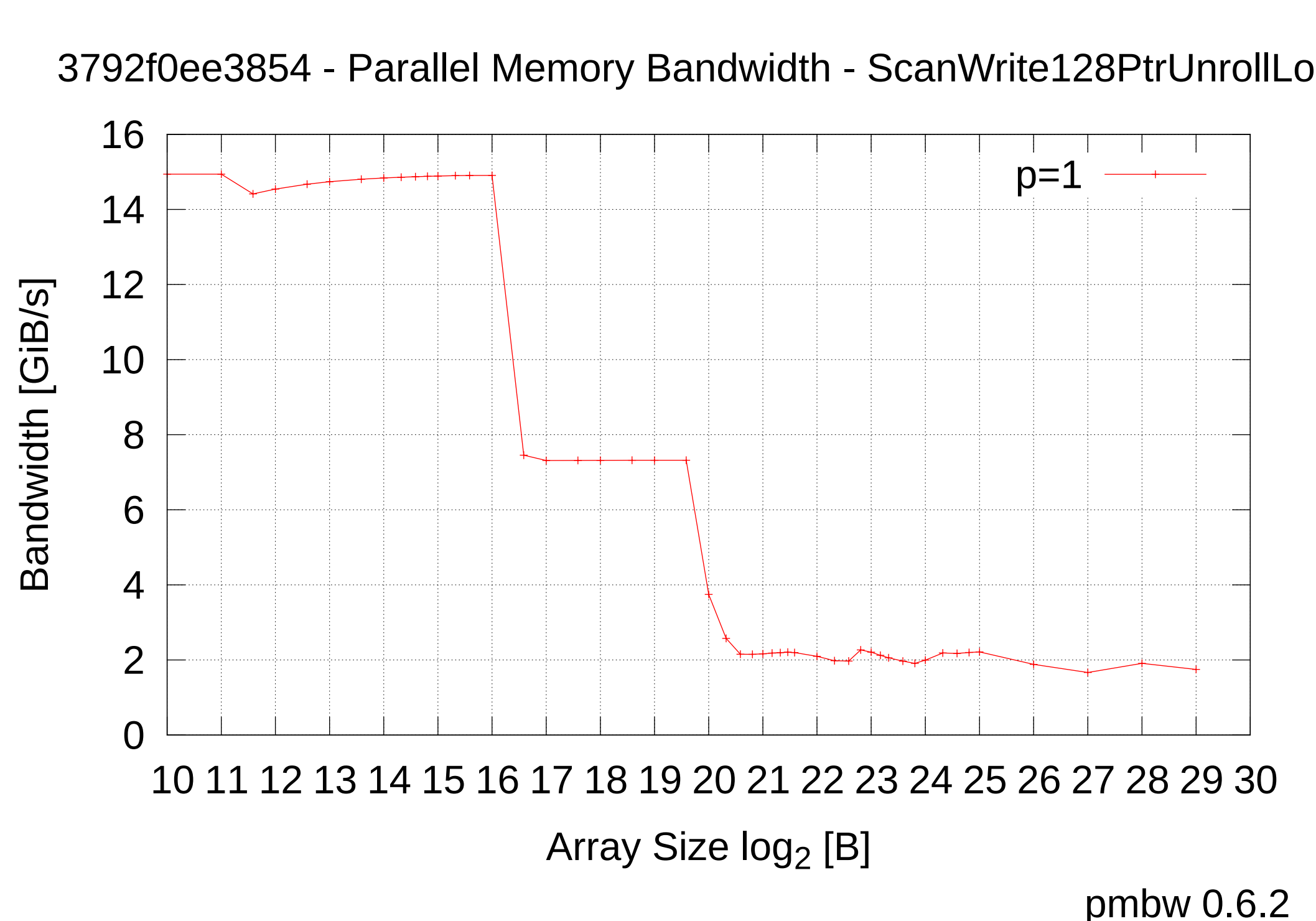

3792f0ee3854 - One Thread Memory Bandwidth (only 64-bit Reads)
Bandwidth [GiB/s]
0
5
10
15
20
25
30
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
ScanWrite128PtrSimpleLoop
ScanWrite128PtrUnrollLoop
ScanRead128PtrSimpleLoop
ScanRead128PtrUnrollLoop
ScanWrite64PtrSimpleLoop
ScanWrite64PtrUnrollLoop
ScanWrite64IndexSimpleLoop
ScanWrite64IndexUnrollLoop
ScanWrite32PtrSimpleLoop
ScanWrite32PtrUnrollLoop
ScanRead32PtrSimpleLoop
ScanRead32PtrUnrollLoop
pmbw 0.6.2

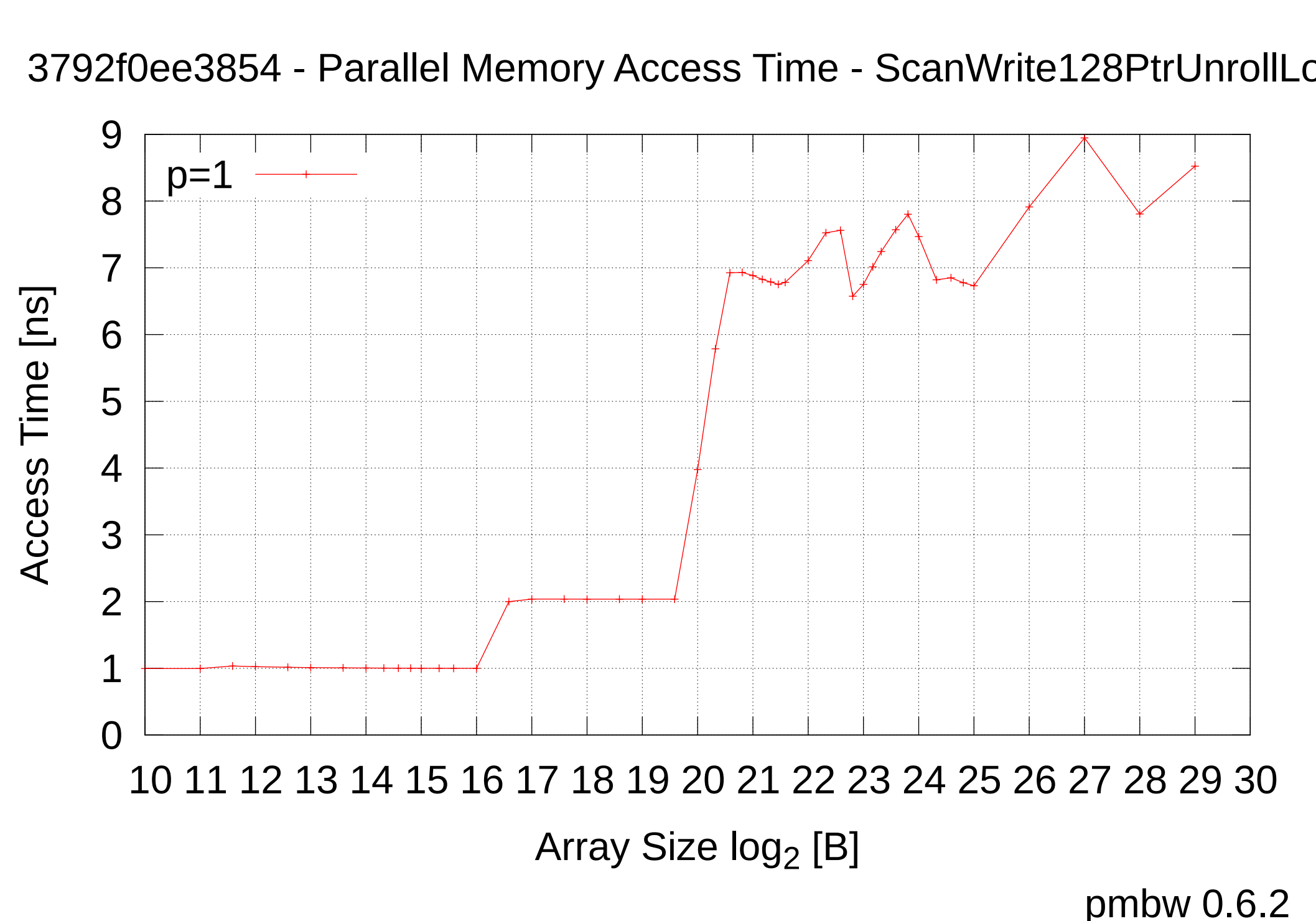

3792f0ee3854 - Parallel Memory Bandwidth - ScanWrite128PtrSimpleLo
Bandwidth [GiB/s]
10
9
8
7
6
5
4
3
2
1
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

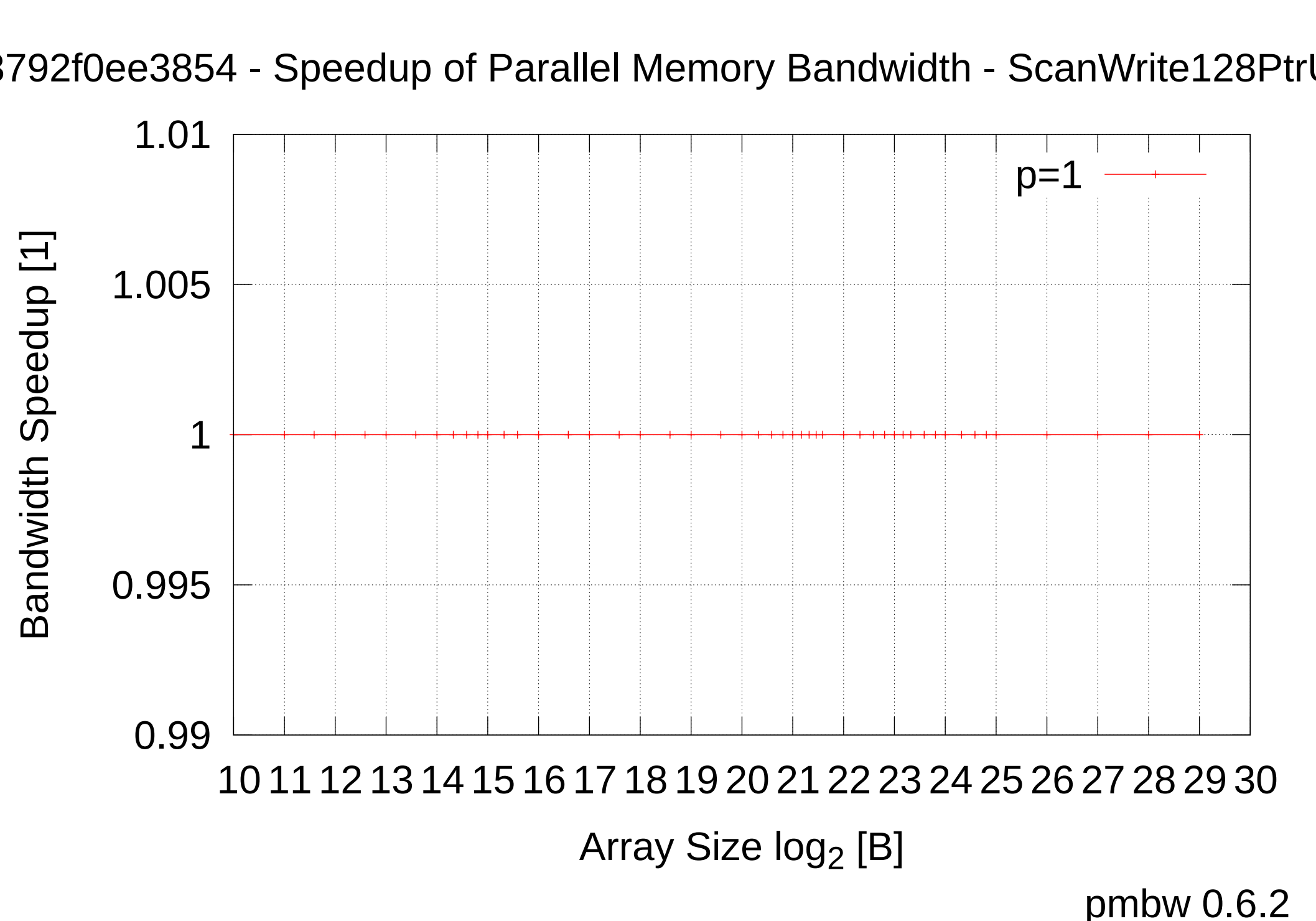

3792f0ee3854 - Parallel Memory Access Time - ScanWrite128PtrSimpleL
p=1
Access Time [ns]
1
2
3
4
5
6
7
8
9
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

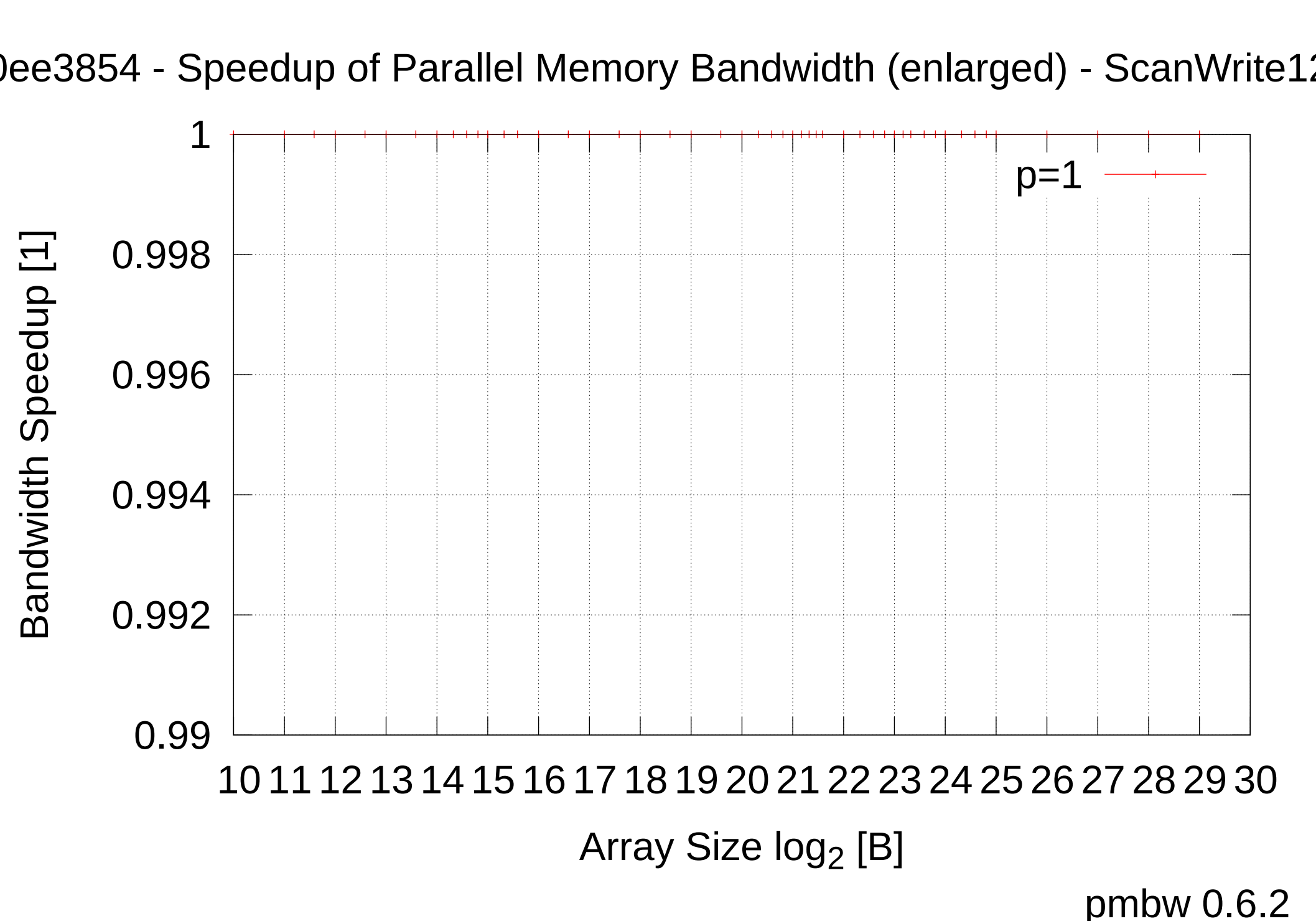

792f0ee3854 - Speedup of Parallel Memory Bandwidth - ScanWrite128PtrS
Bandwidth Speedup [1]
1.01
1.005
1
0.995
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

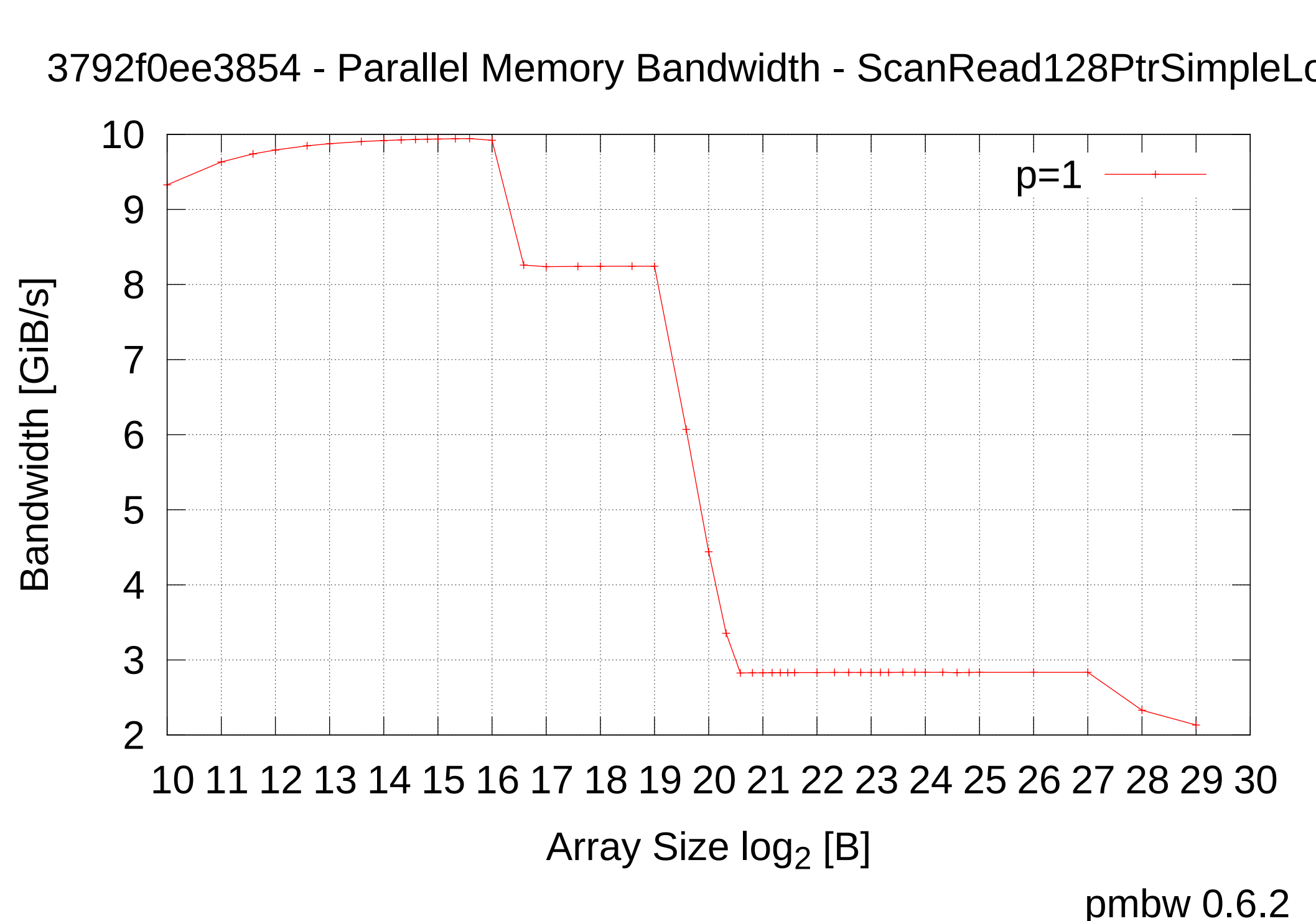

ee3854 - Speedup of Parallel Memory Bandwidth (enlarged) - ScanWrite12
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

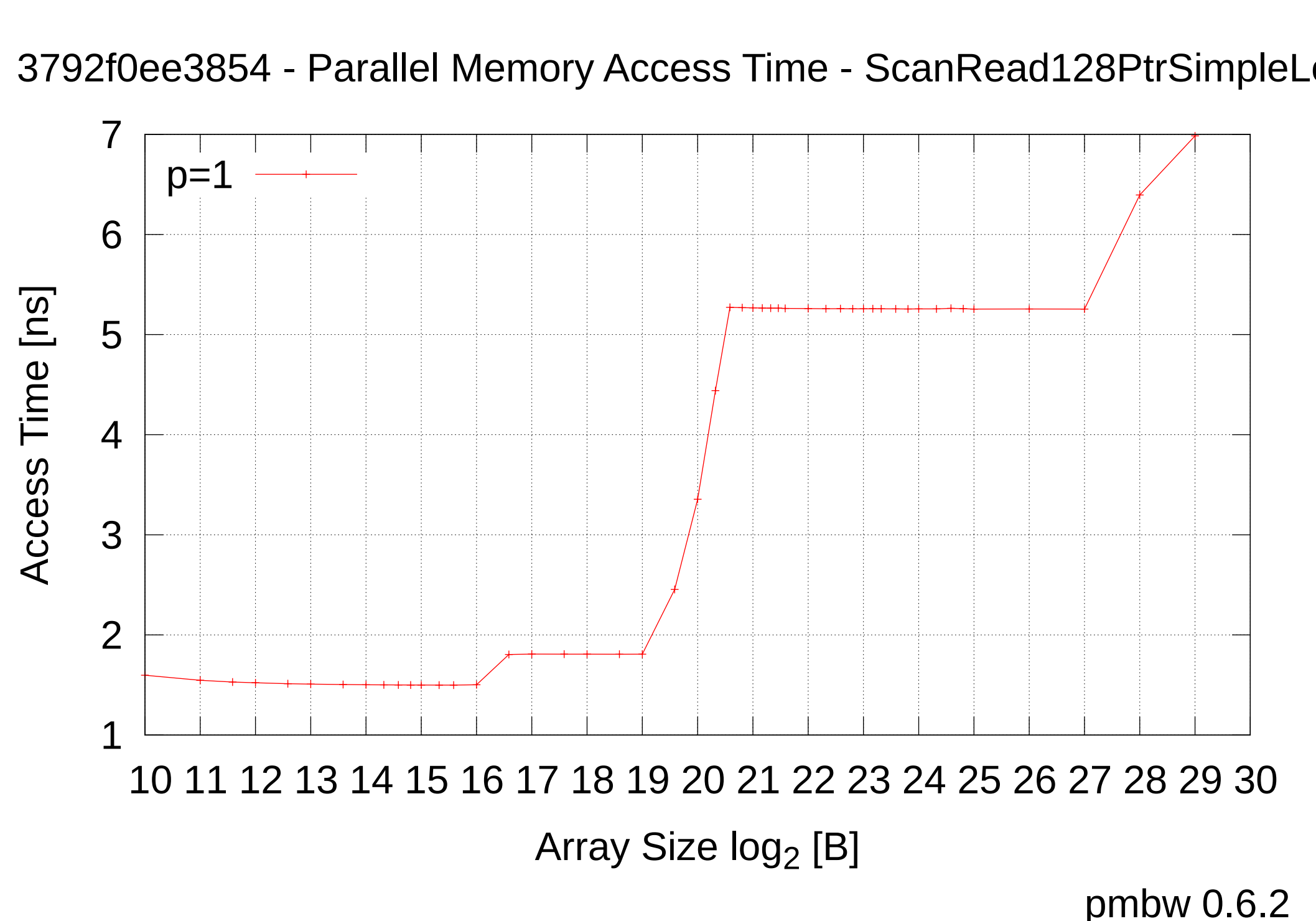

3792f0ee3854 - Parallel Memory Bandwidth - ScanWrite128PtrUnrollLo
Bandwidth [GiB/s]
0
2
4
6
8
10
12
14
16
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

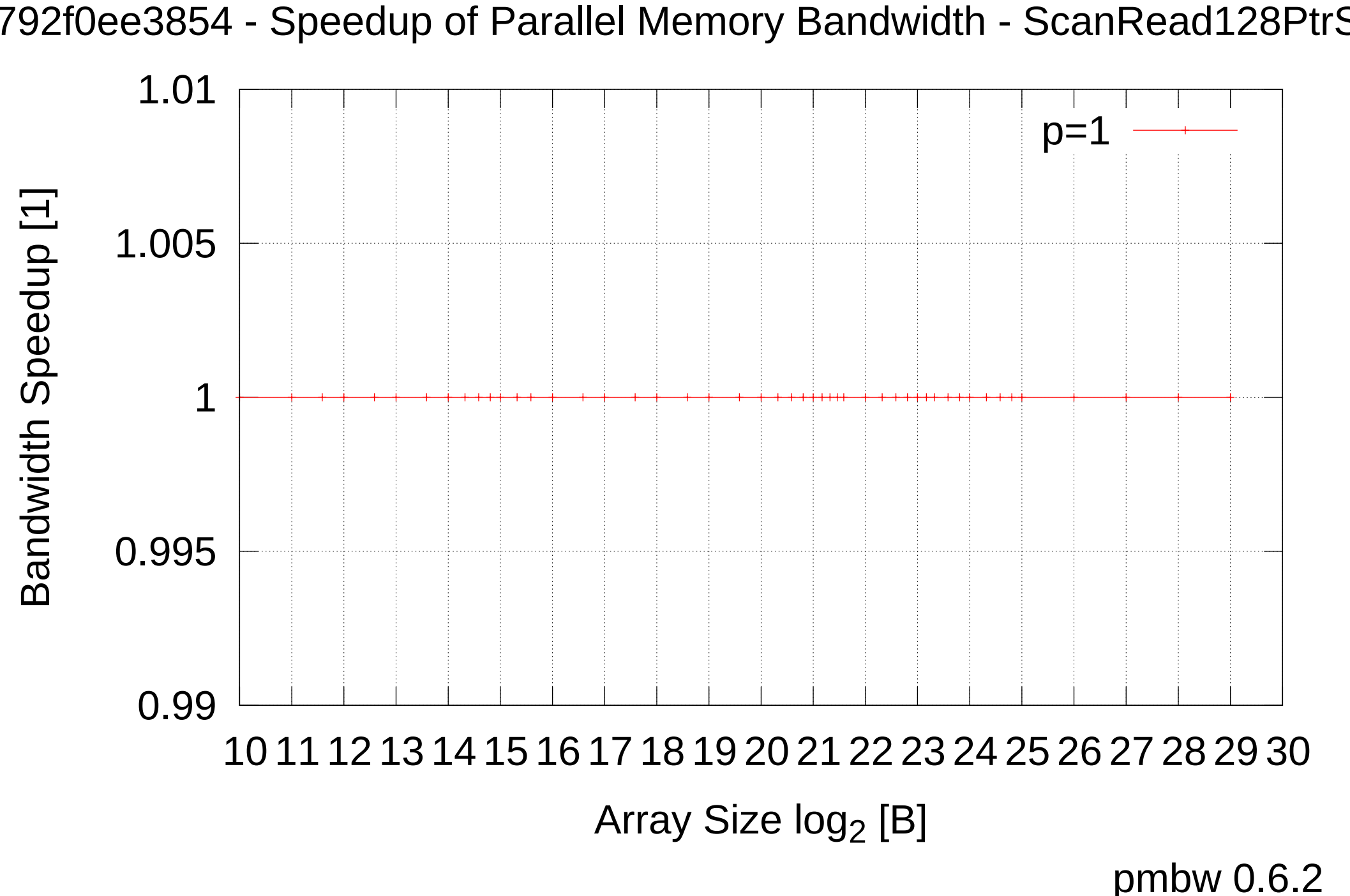

3792f0ee3854 - Parallel Memory Access Time - ScanWrite128PtrUnrollLo
p=1
Access Time [ns]
0
1
2
3
4
5
6
7
8
9
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

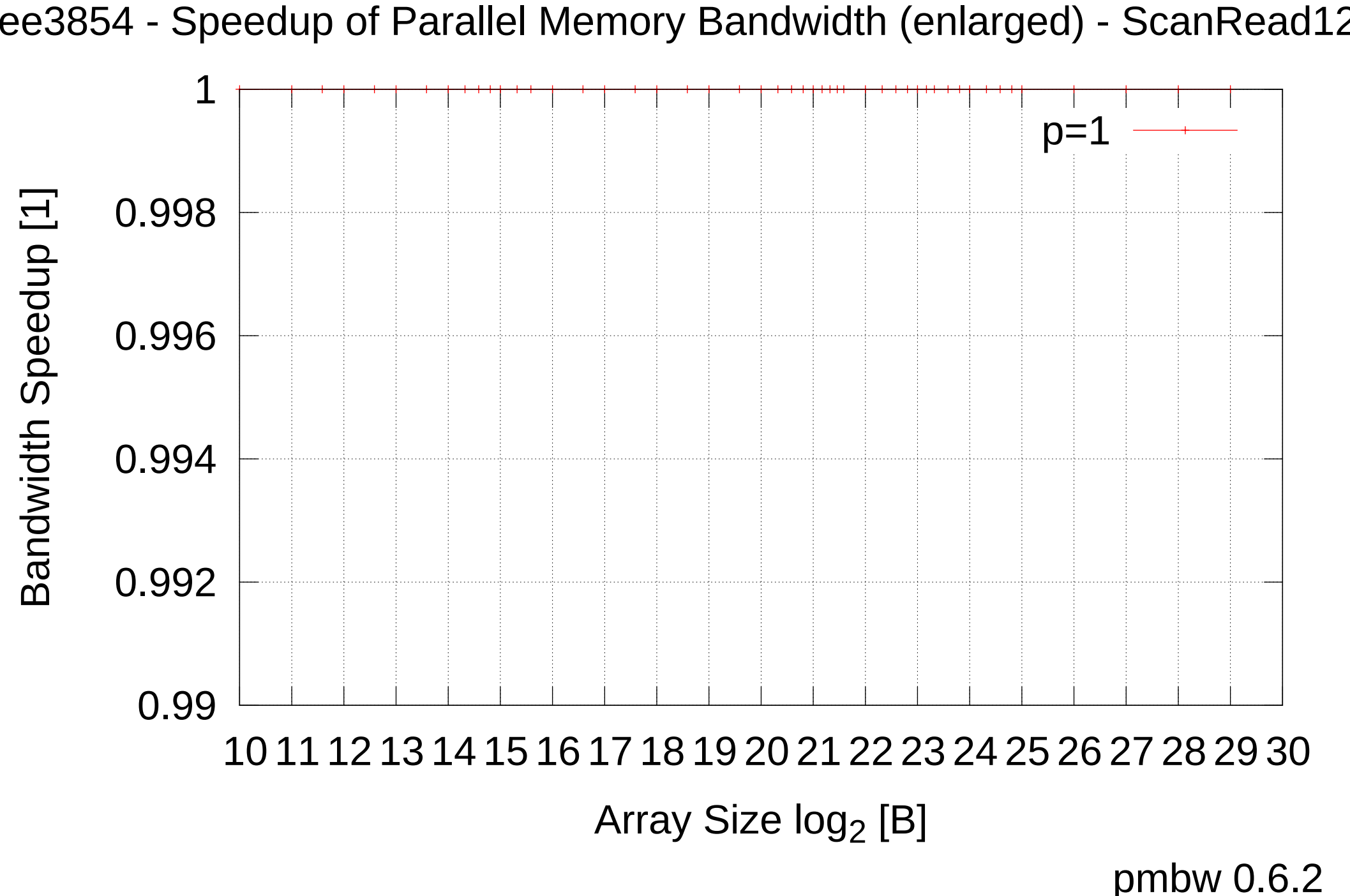

3792f0ee3854 - Speedup of Parallel Memory Bandwidth - ScanWrite128PtrU
Bandwidth Speedup [1]
1.01
1.005
1
0.995
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

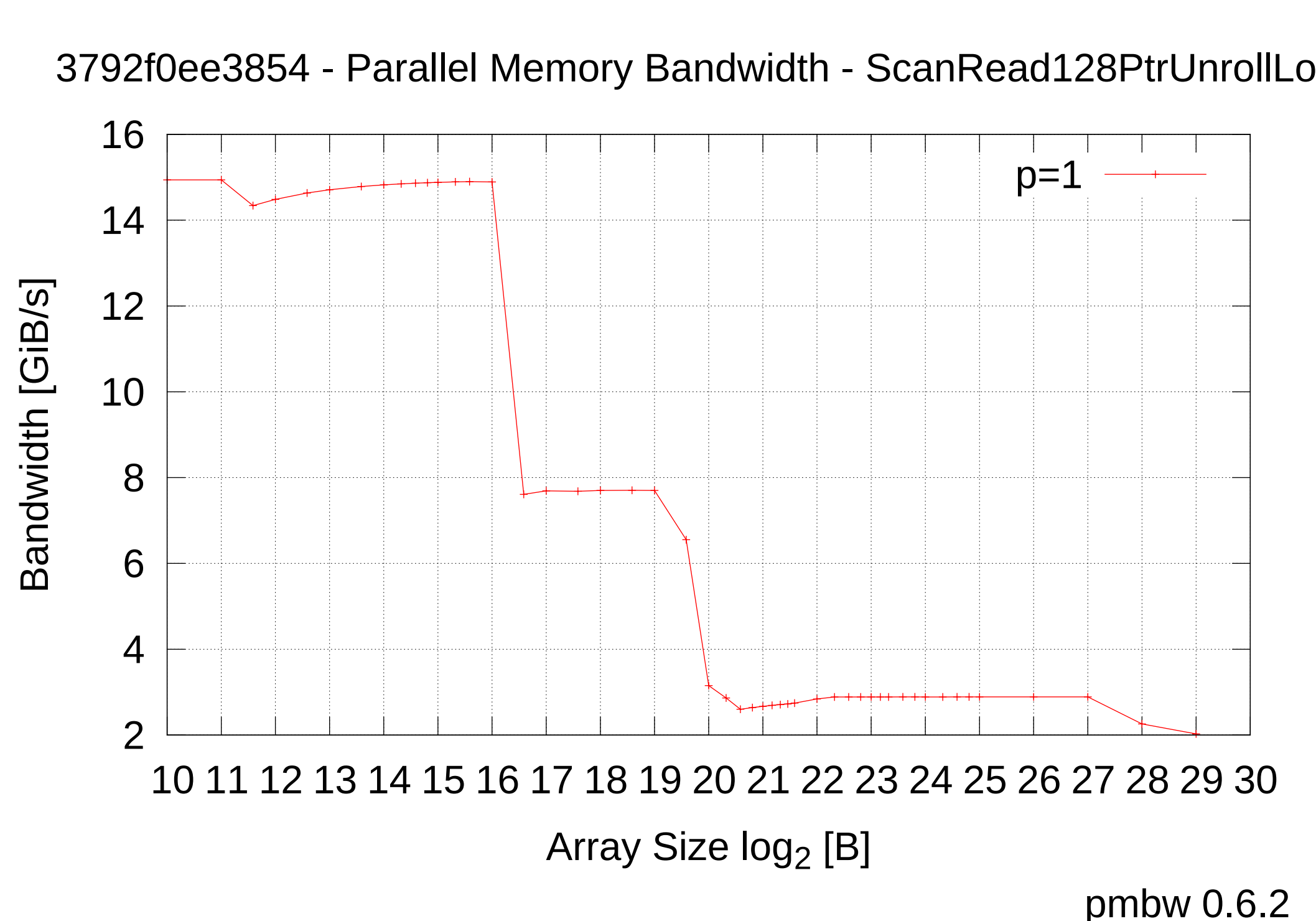

0ee3854 - Speedup of Parallel Memory Bandwidth (enlarged) - ScanWrite12
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

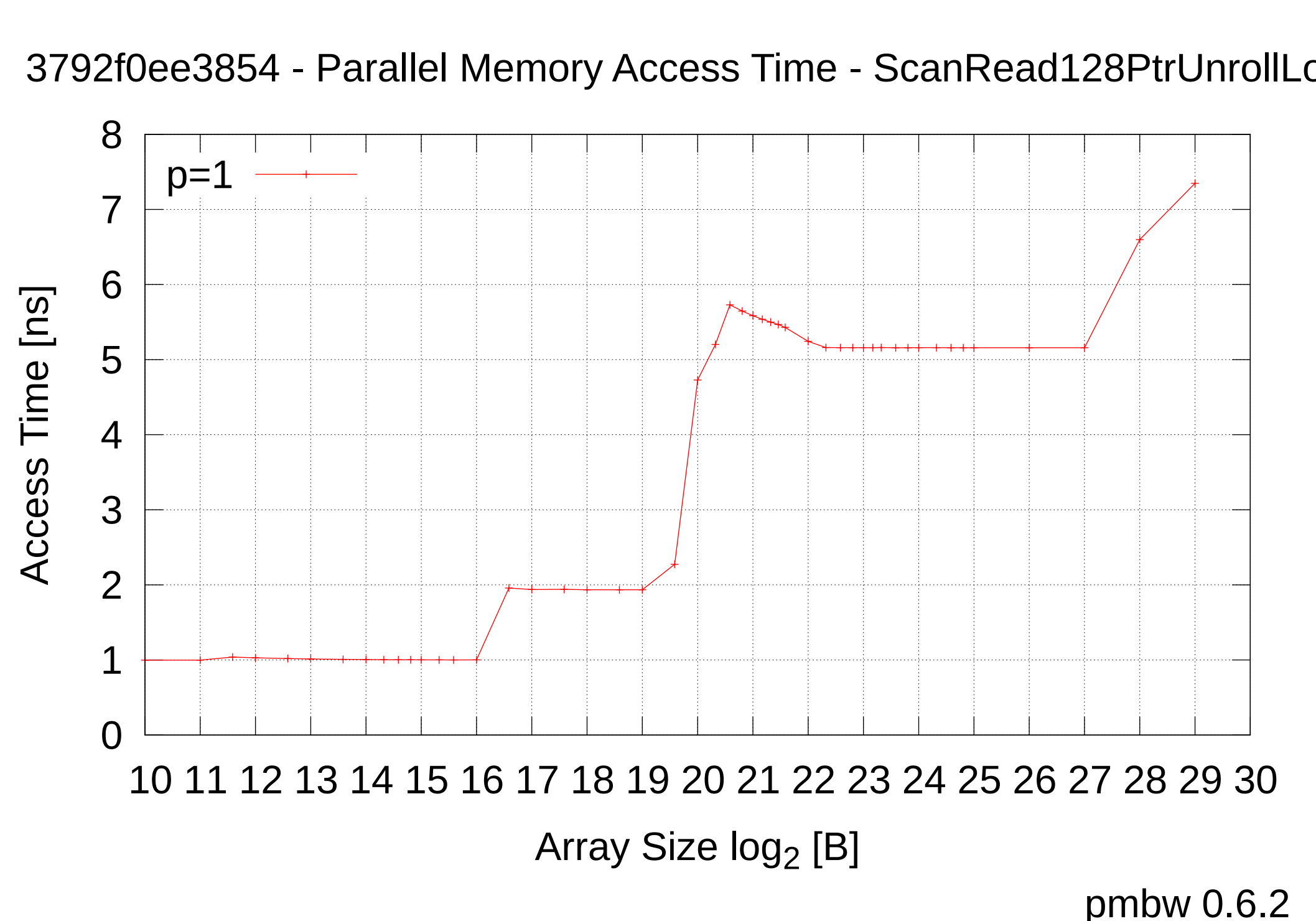

3792f0ee3854 - Parallel Memory Bandwidth - ScanRead128PtrSimpleLo
Bandwidth [GiB/s]
10
9
8
7
6
5
4
3
2
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

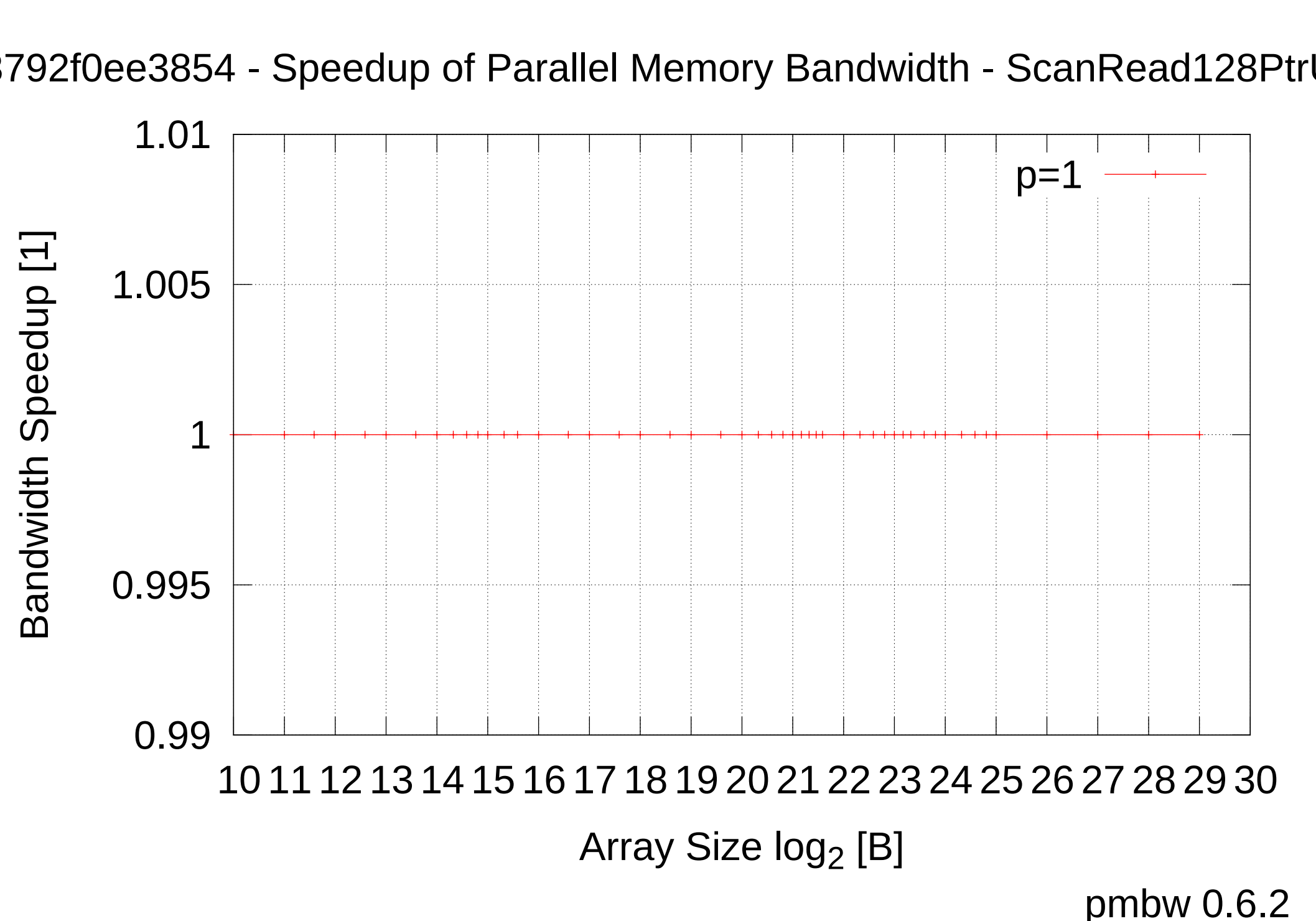

3792f0ee3854 - Parallel Memory Access Time - ScanRead128PtrSimpleL
p=1
Access Time [ns]
1
2
3
4
5
6
7
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

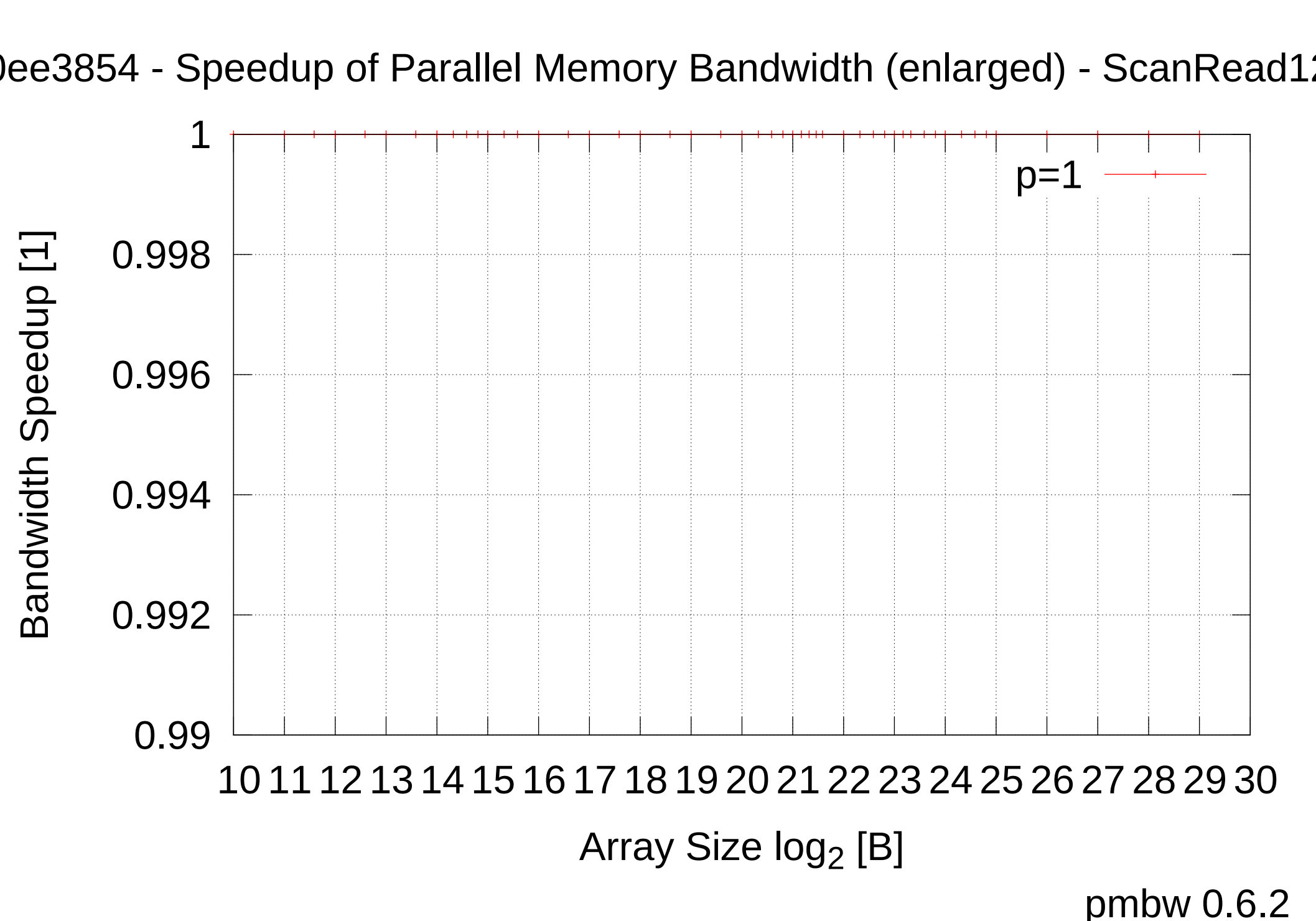

792f0ee3854 - Speedup of Parallel Memory Bandwidth - ScanRead128PtrS
Bandwidth Speedup [1]
1.01
1.005
1
0.995
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

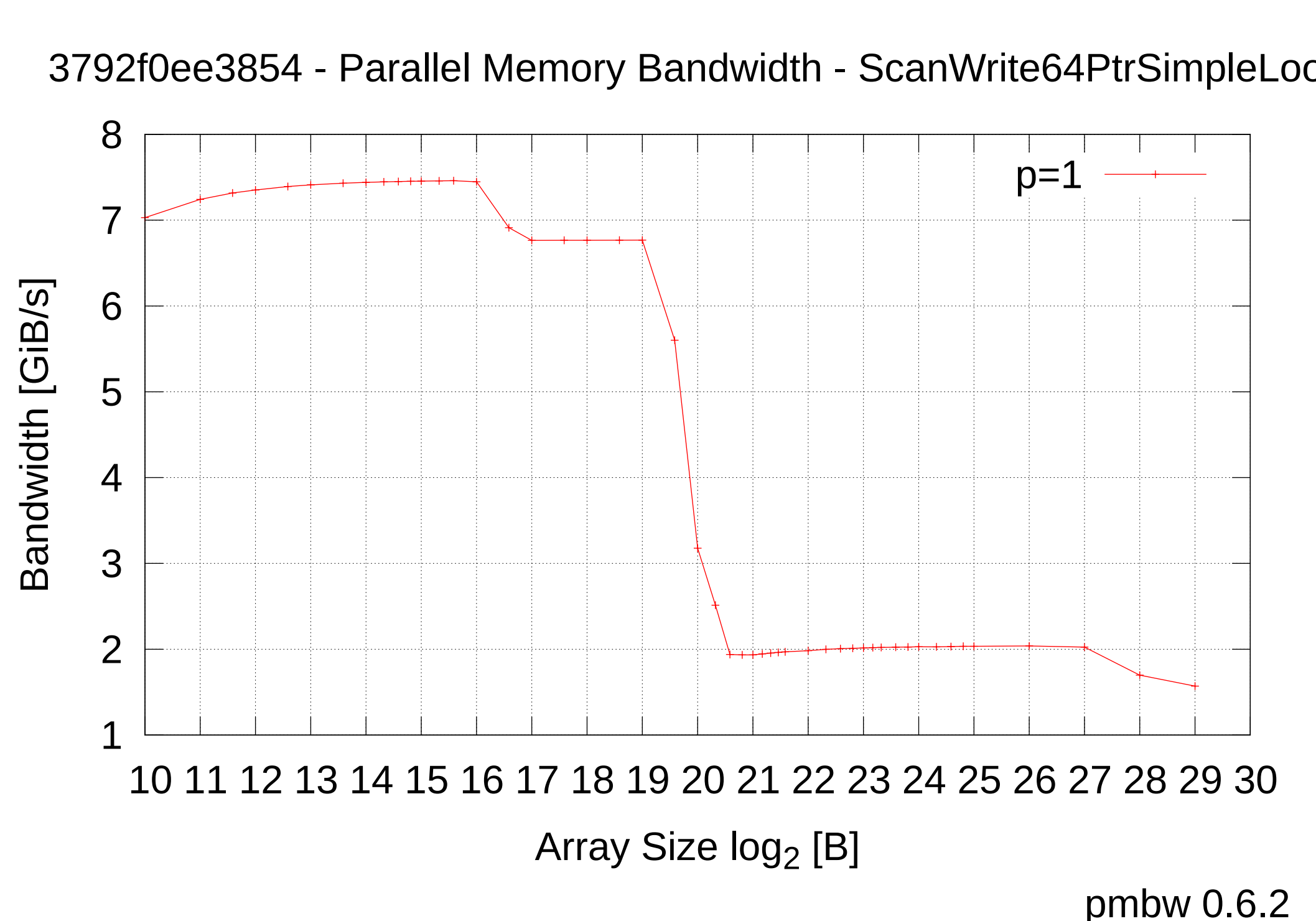

ee3854 - Speedup of Parallel Memory Bandwidth (enlarged) - ScanRead12
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

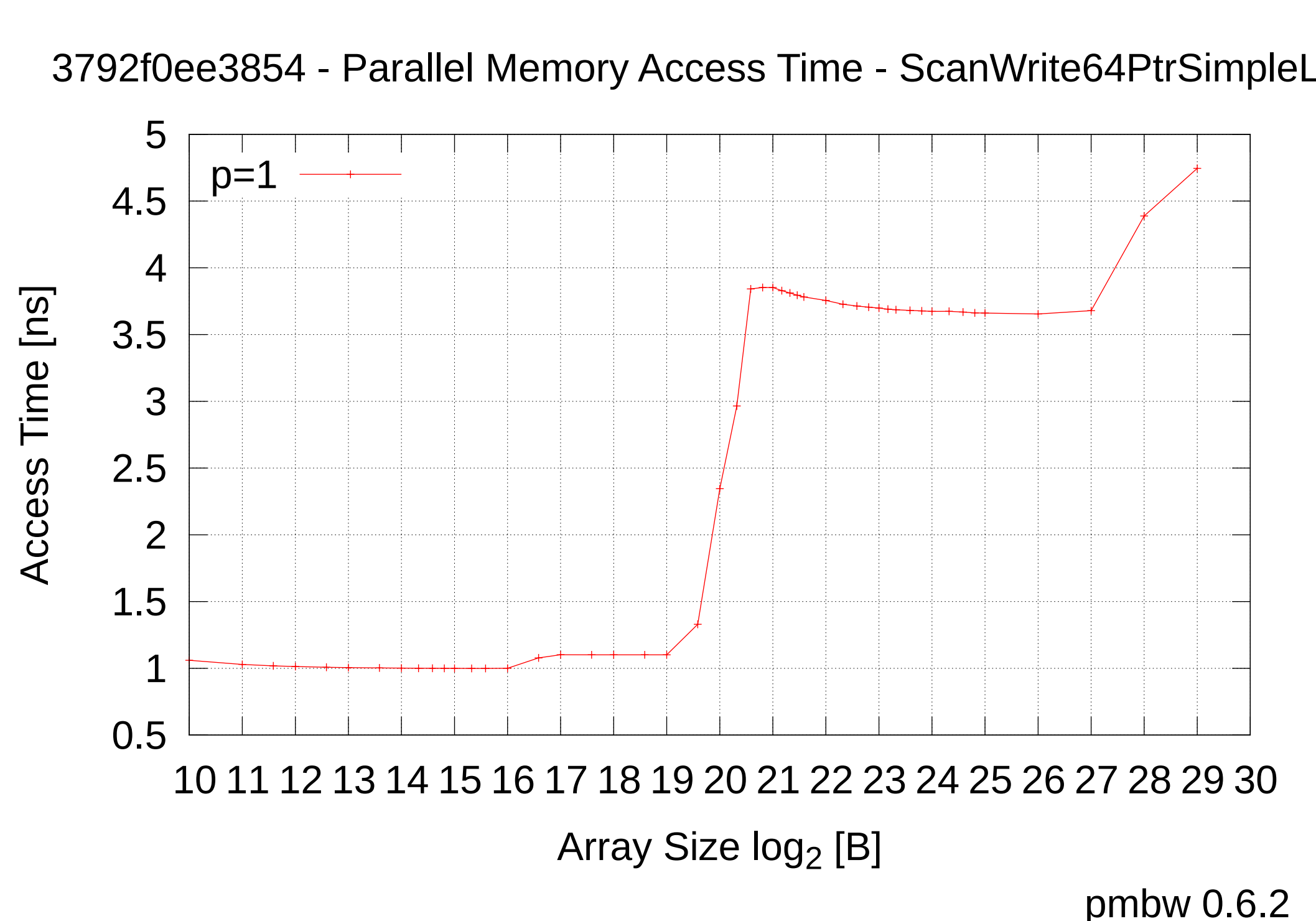

3792f0ee3854 - Parallel Memory Bandwidth - ScanRead128PtrUnrollLo
Bandwidth [GiB/s]
16
14
12
10
8
6
4
2
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

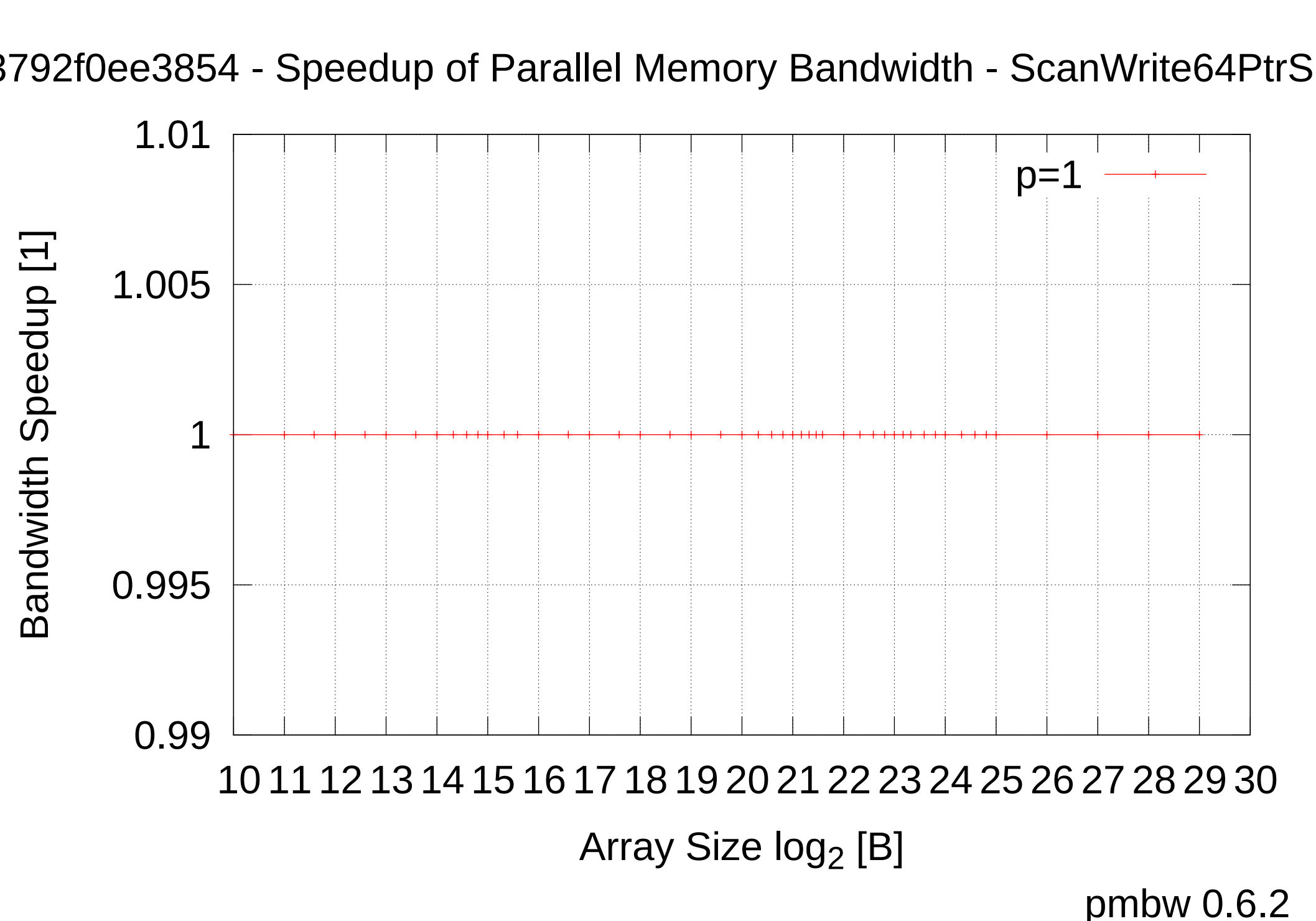

3792f0ee3854 - Parallel Memory Access Time - ScanRead128PtrUnrollLo
p=1
Access Time [ns]
0
1
2
3
4
5
6
7
8
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

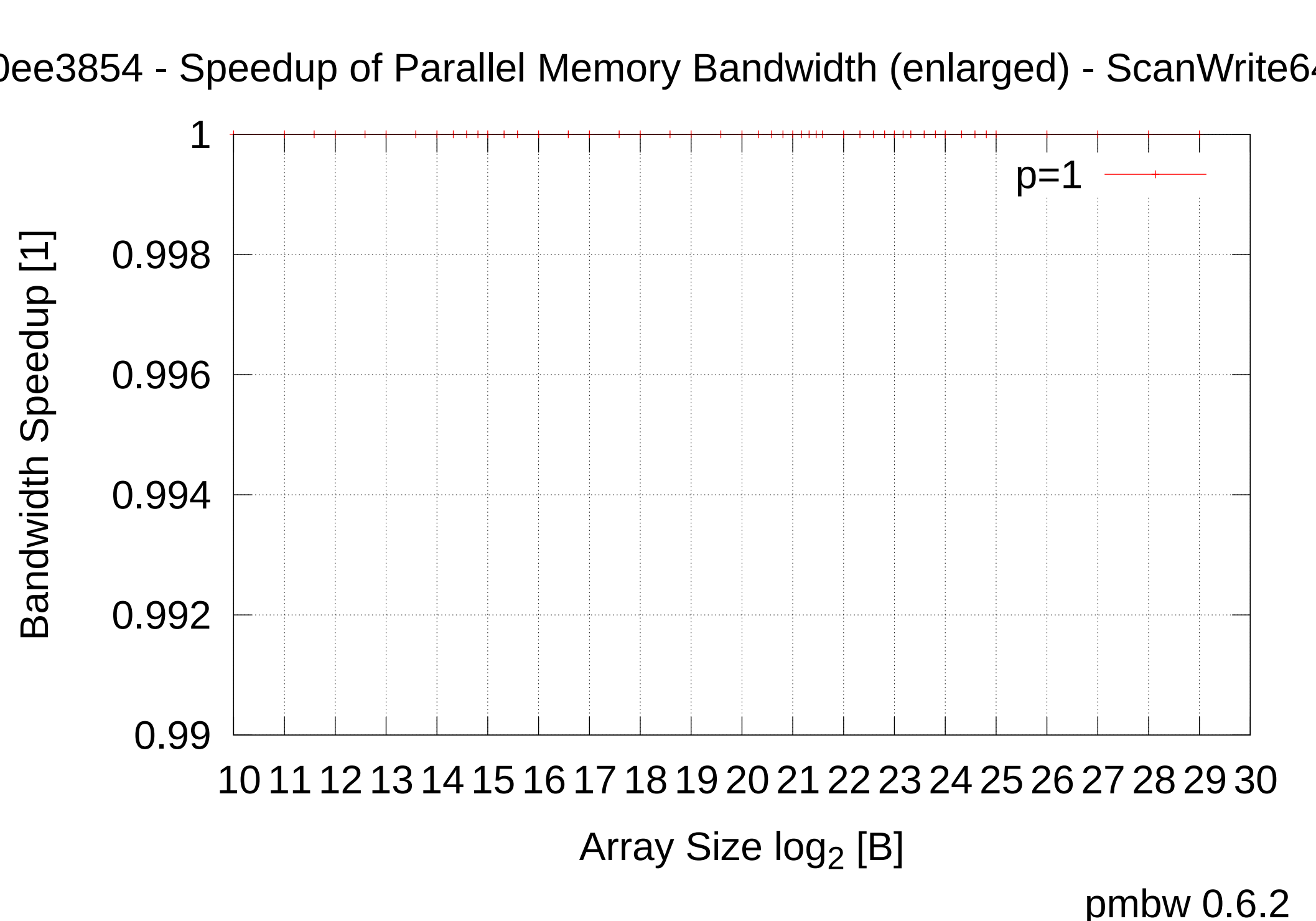

3792f0ee3854 - Speedup of Parallel Memory Bandwidth - ScanRead128PtrU
Bandwidth Speedup [1]
1.01
1.005
1
0.995
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

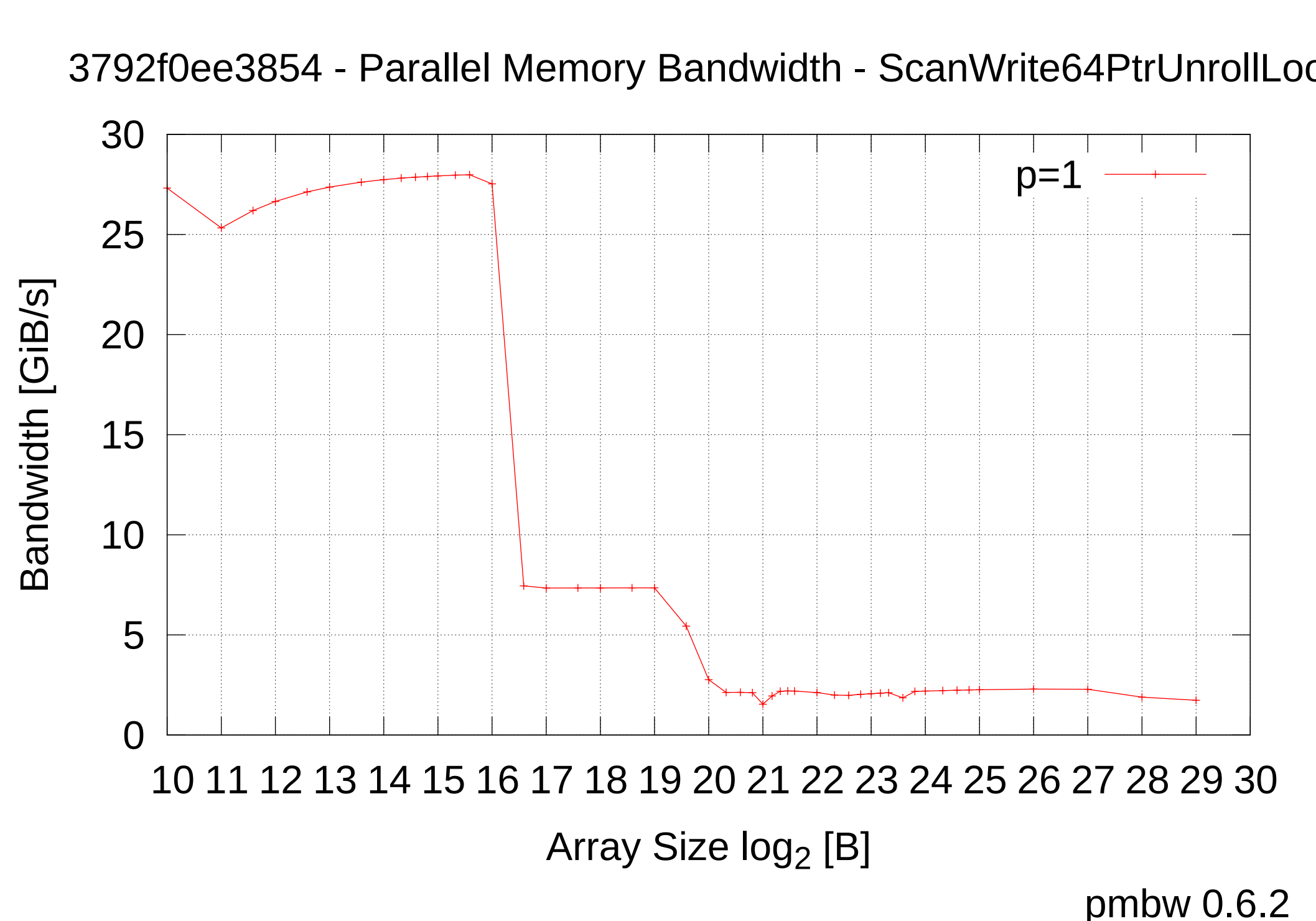

0ee3854 - Speedup of Parallel Memory Bandwidth (enlarged) - ScanRead1
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

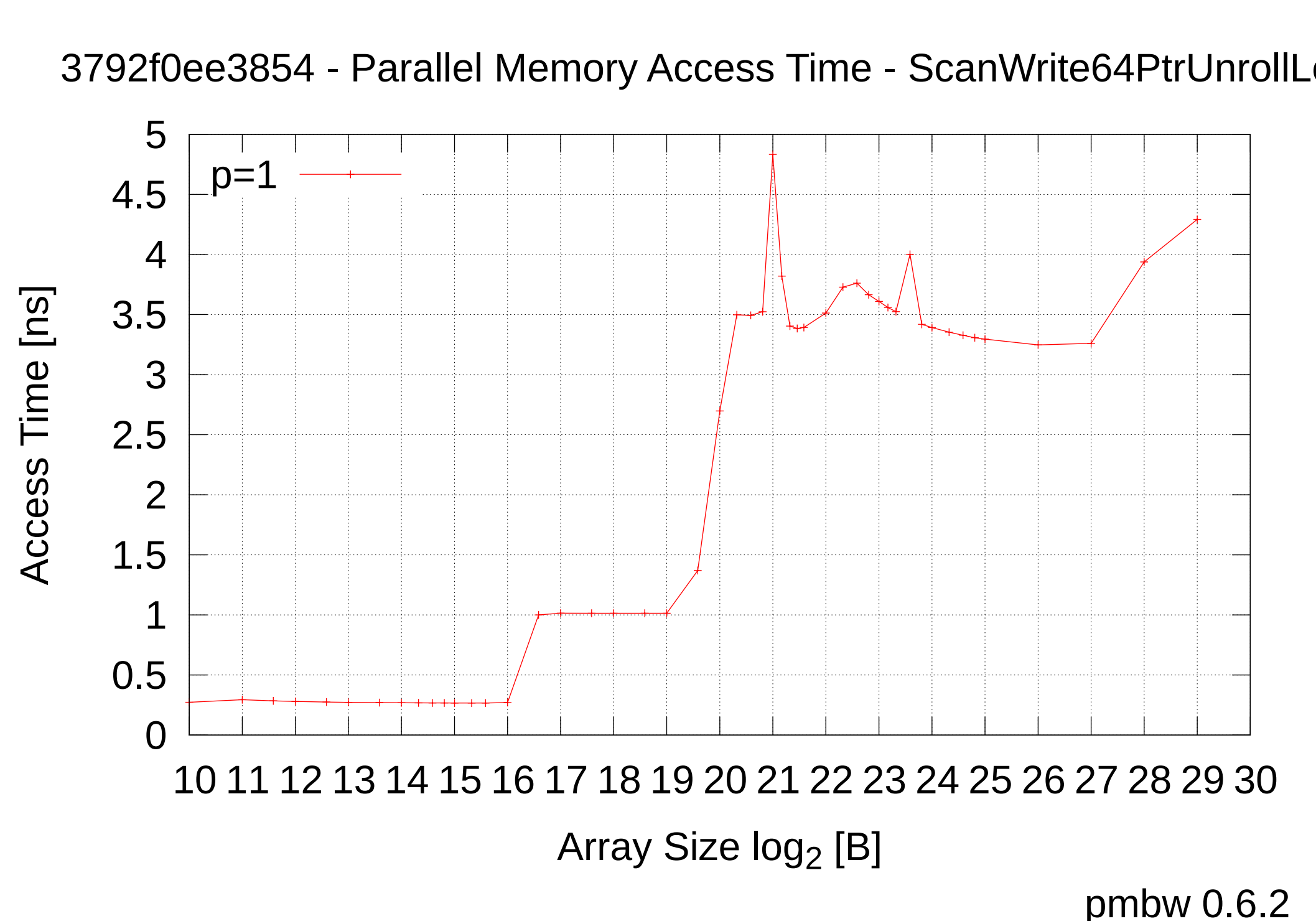

3792f0ee3854 - Parallel Memory Bandwidth - ScanWrite64PtrSimpleLoo
p=1
Bandwidth [GiB/s]
8
7
6
5
4
3
2
1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

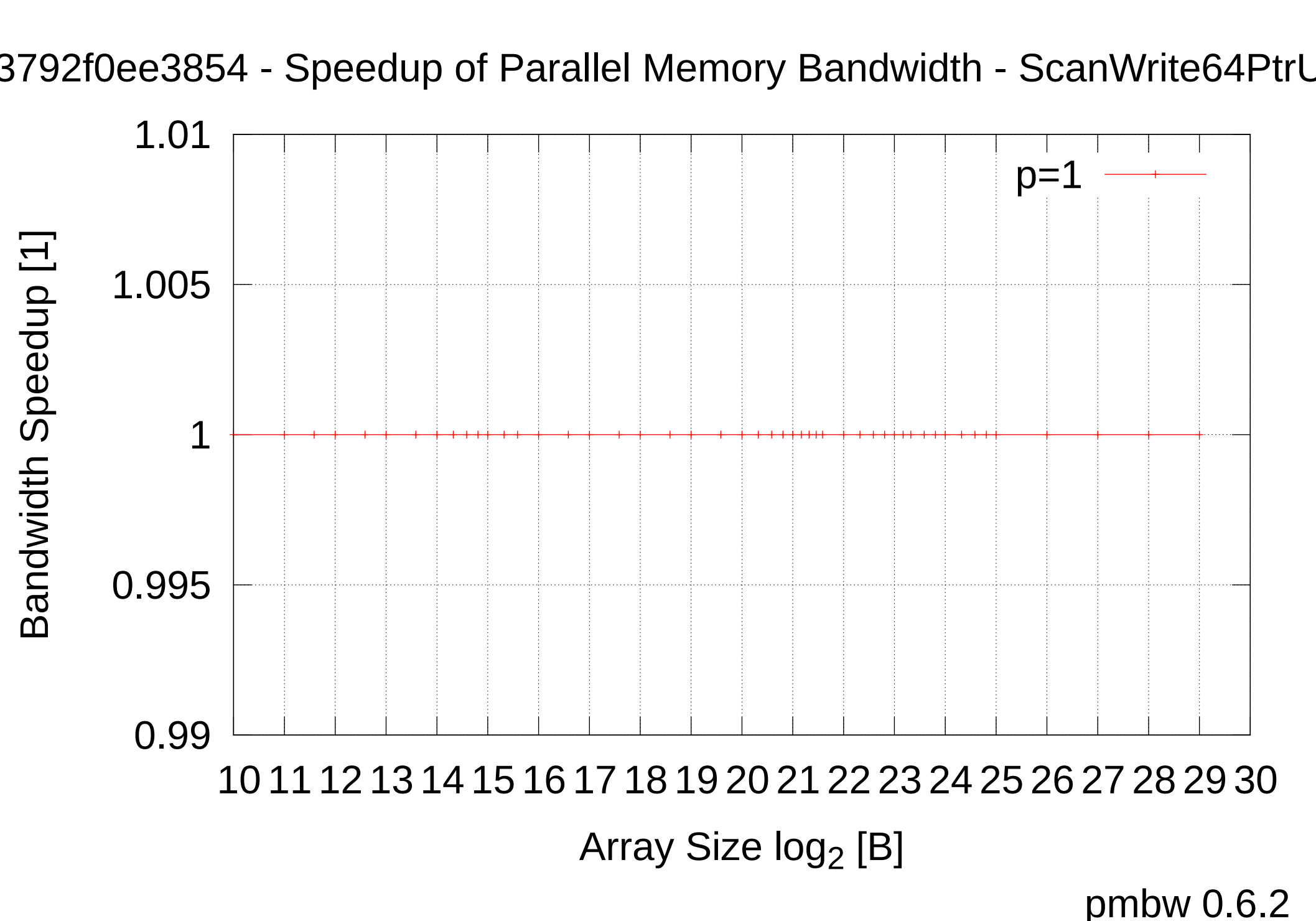

3792f0ee3854 - Parallel Memory Access Time - ScanWrite64PtrSimpleL
p=1
Access Time [ns]
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

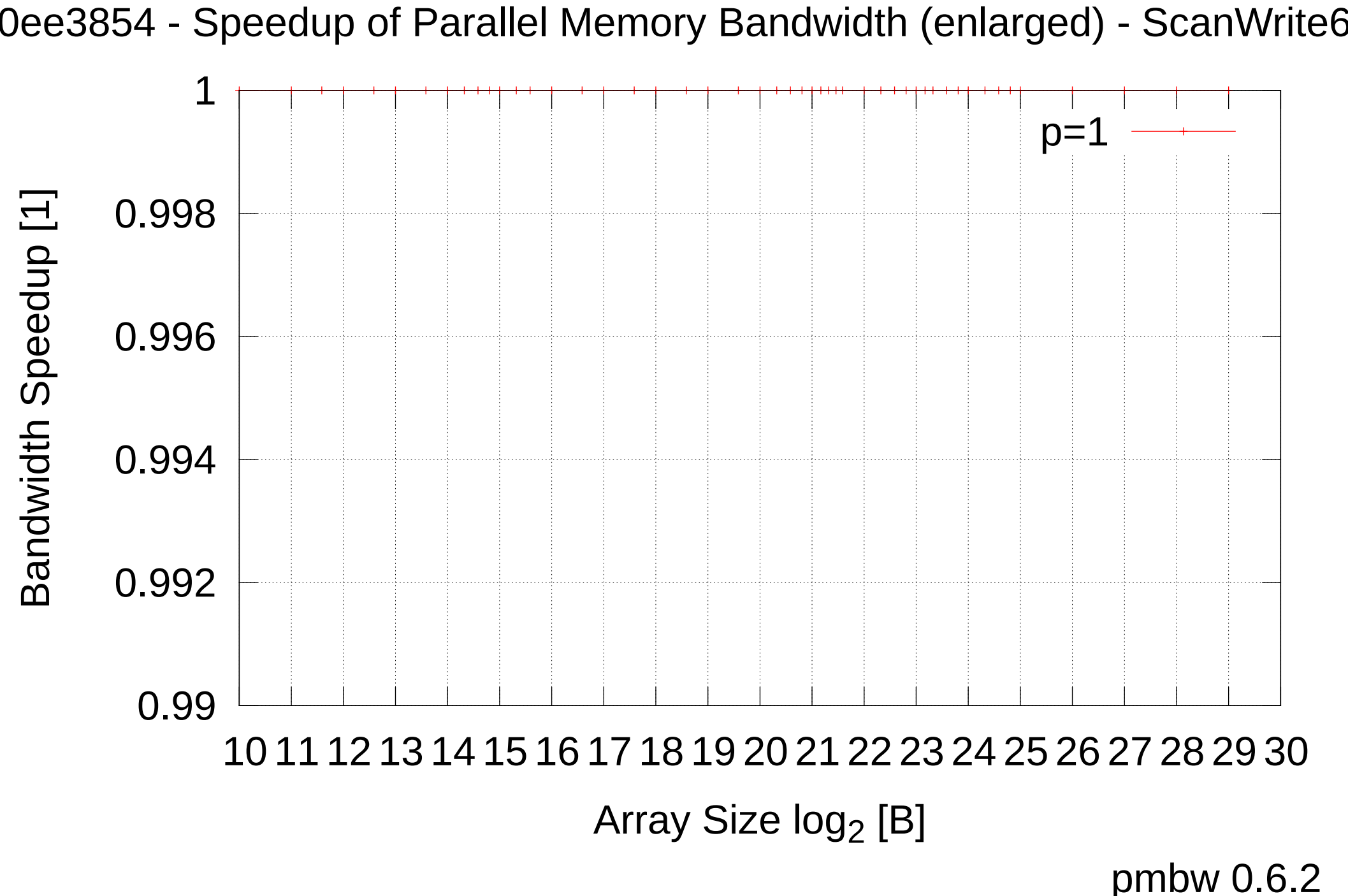

3792f0ee3854 - Speedup of Parallel Memory Bandwidth - ScanWrite64PtrS
Bandwidth Speedup [1]
1.01
1.005
1
0.995
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

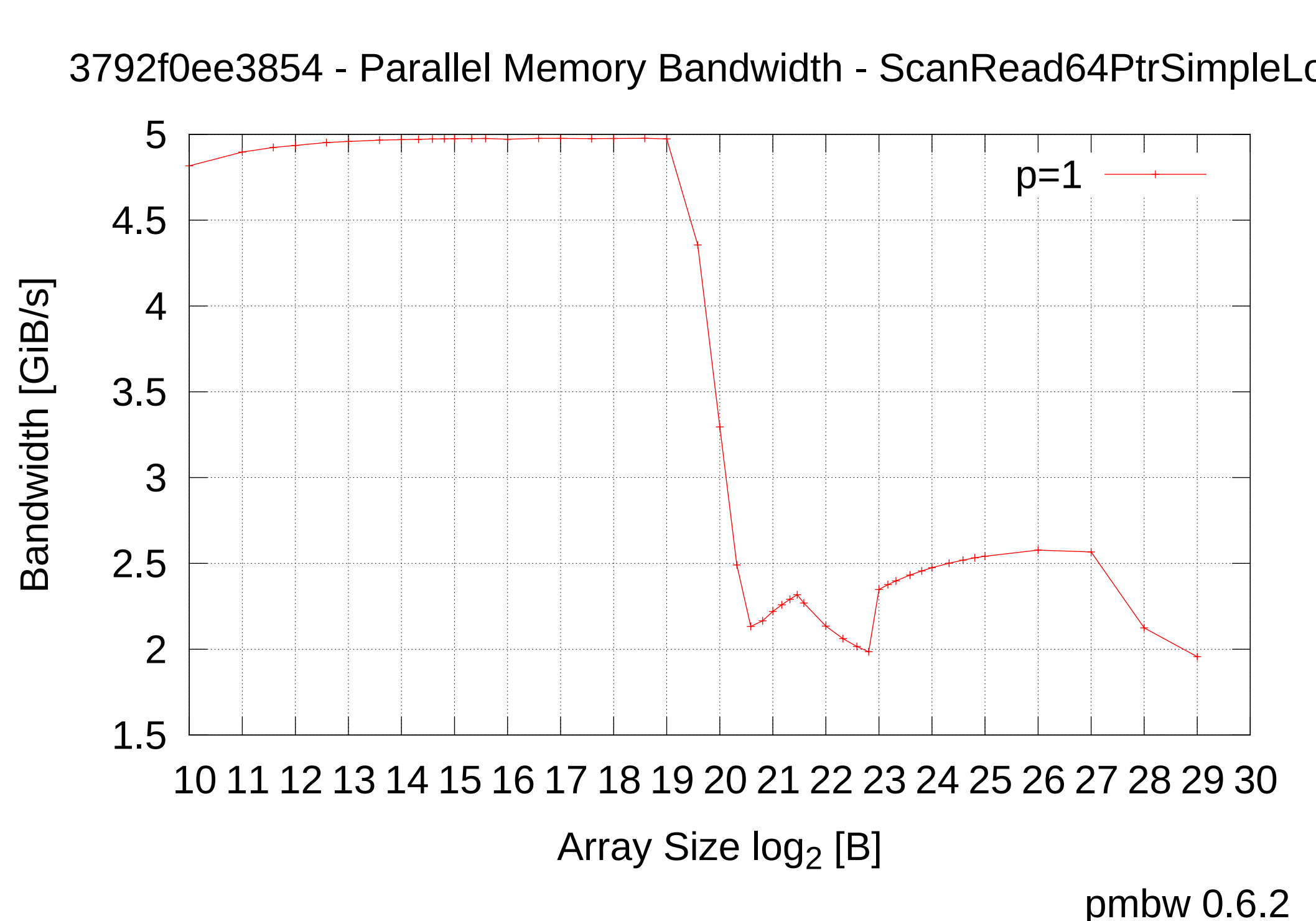

0ee3854 - Speedup of Parallel Memory Bandwidth (enlarged) - ScanWrite64
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

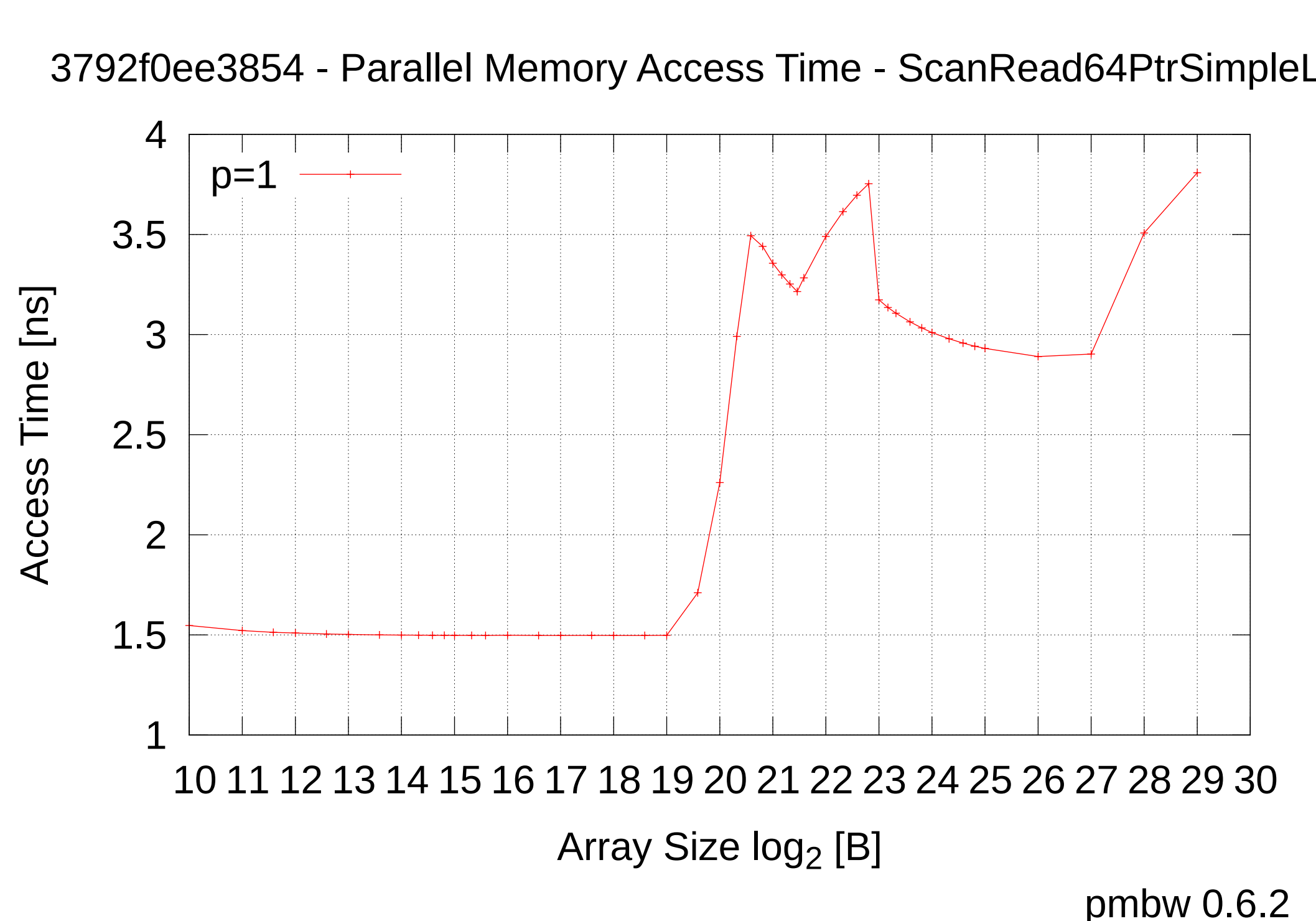

3792f0ee3854 - Parallel Memory Bandwidth - ScanWrite64PtrUnrollLoo
p=1
Bandwidth [GiB/s]
0
5
10
15
20
25
30
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

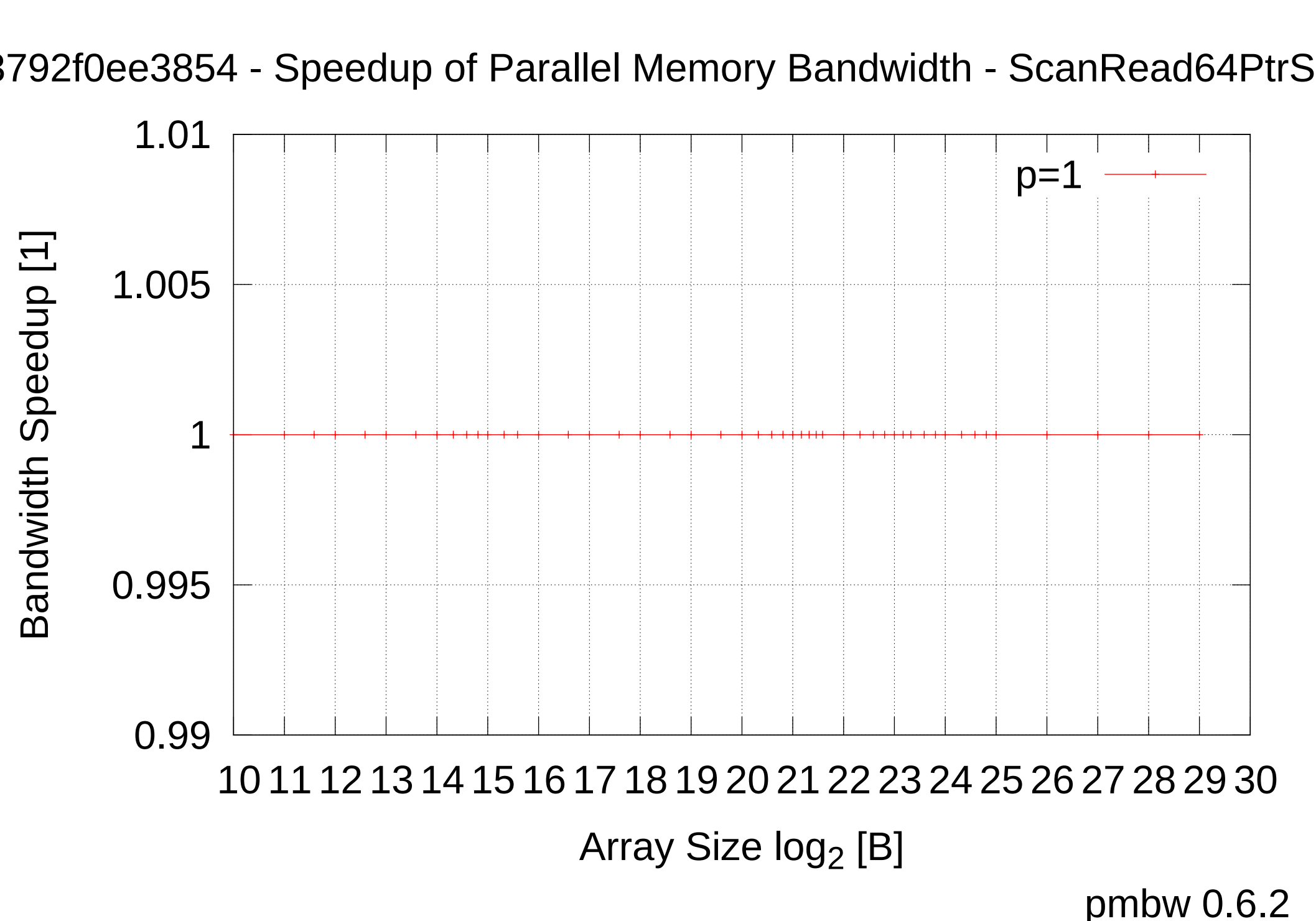

3792f0ee3854 - Parallel Memory Access Time - ScanWrite64PtrUnroll
p=1
Access Time [ns]
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

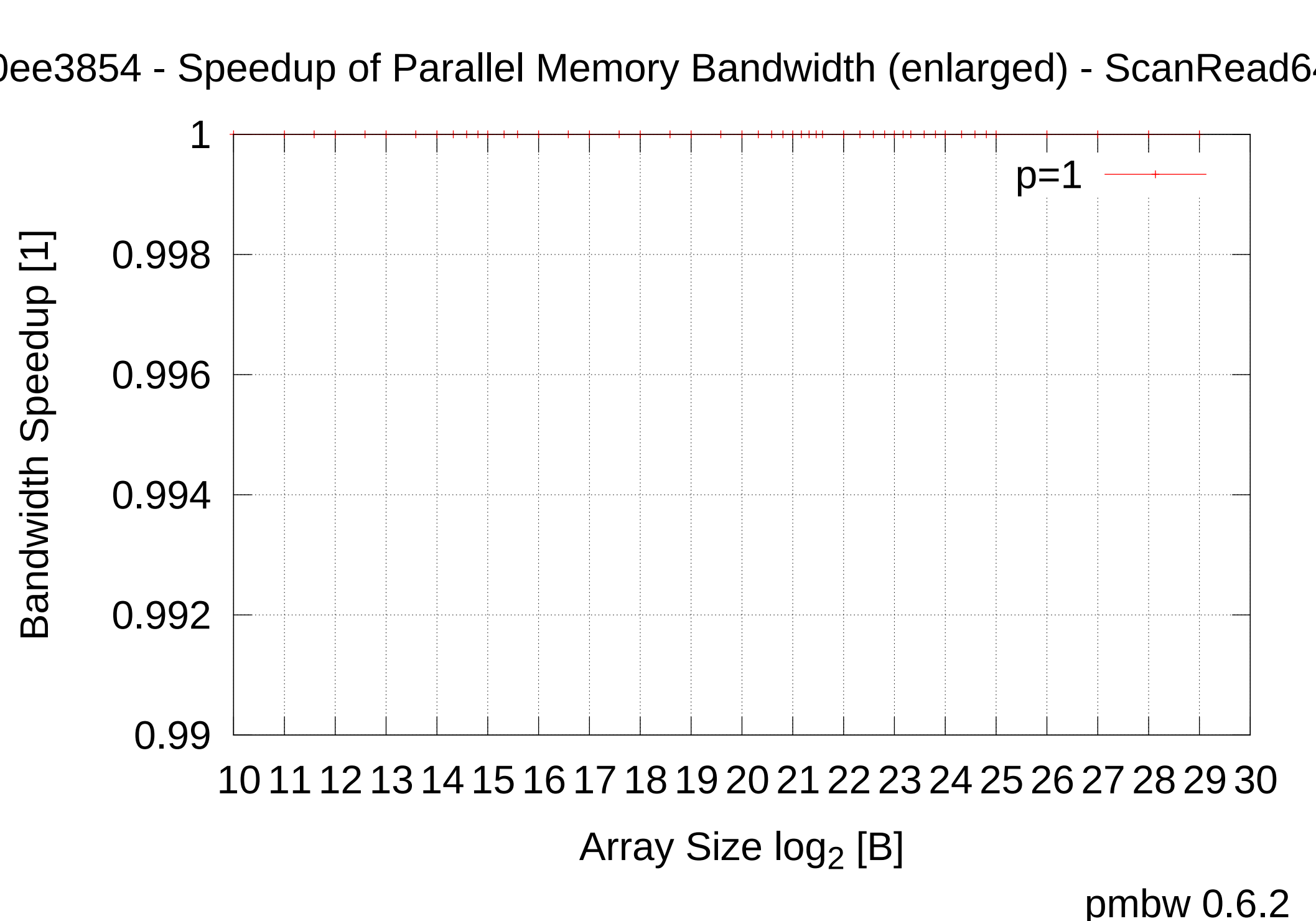

3792f0ee3854 - Speedup of Parallel Memory Bandwidth - ScanWrite64PtrU
Bandwidth Speedup [1]
1.01
1.005
1
0.995
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

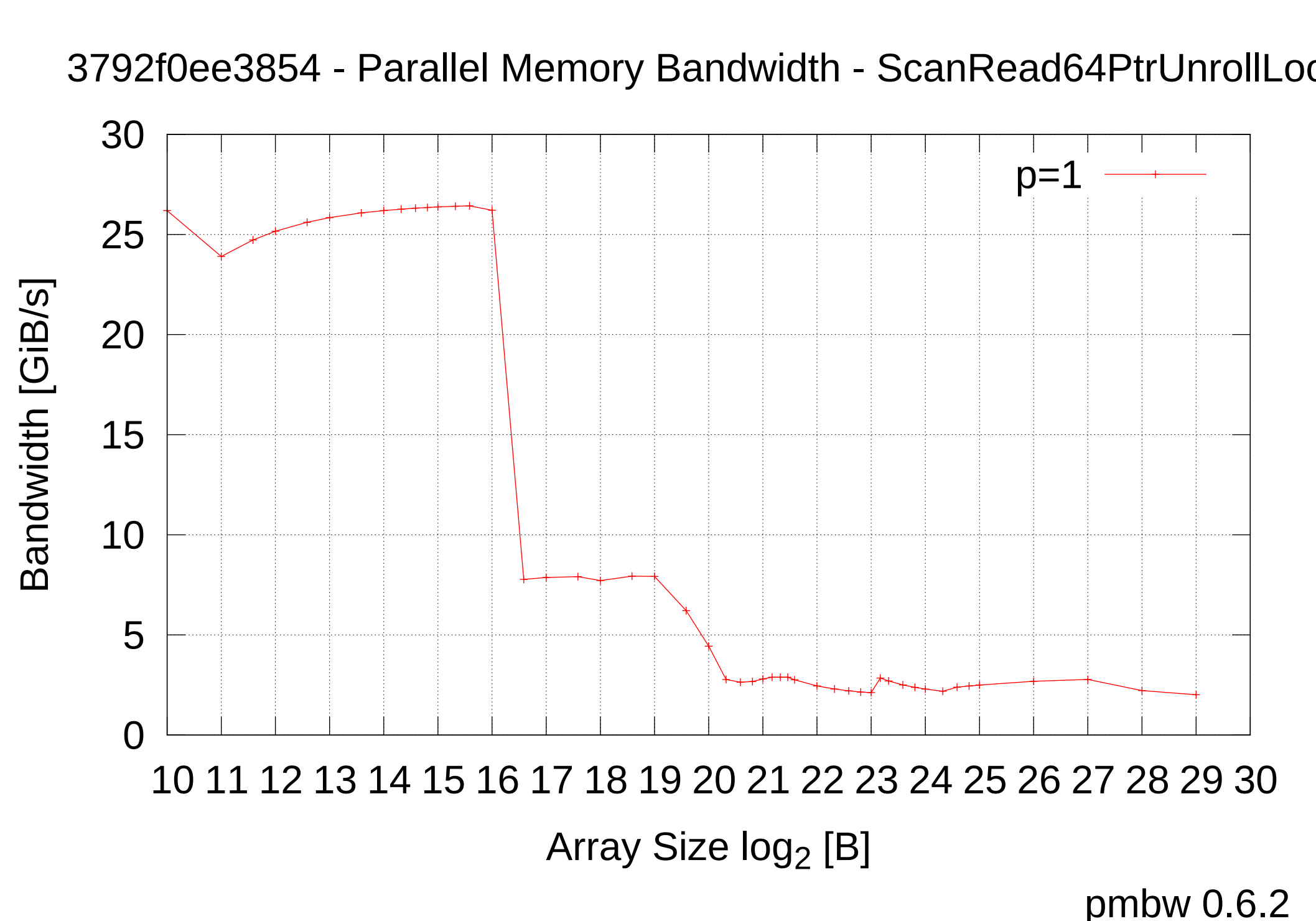

0ee3854 - Speedup of Parallel Memory Bandwidth (enlarged) - ScanWrite6
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

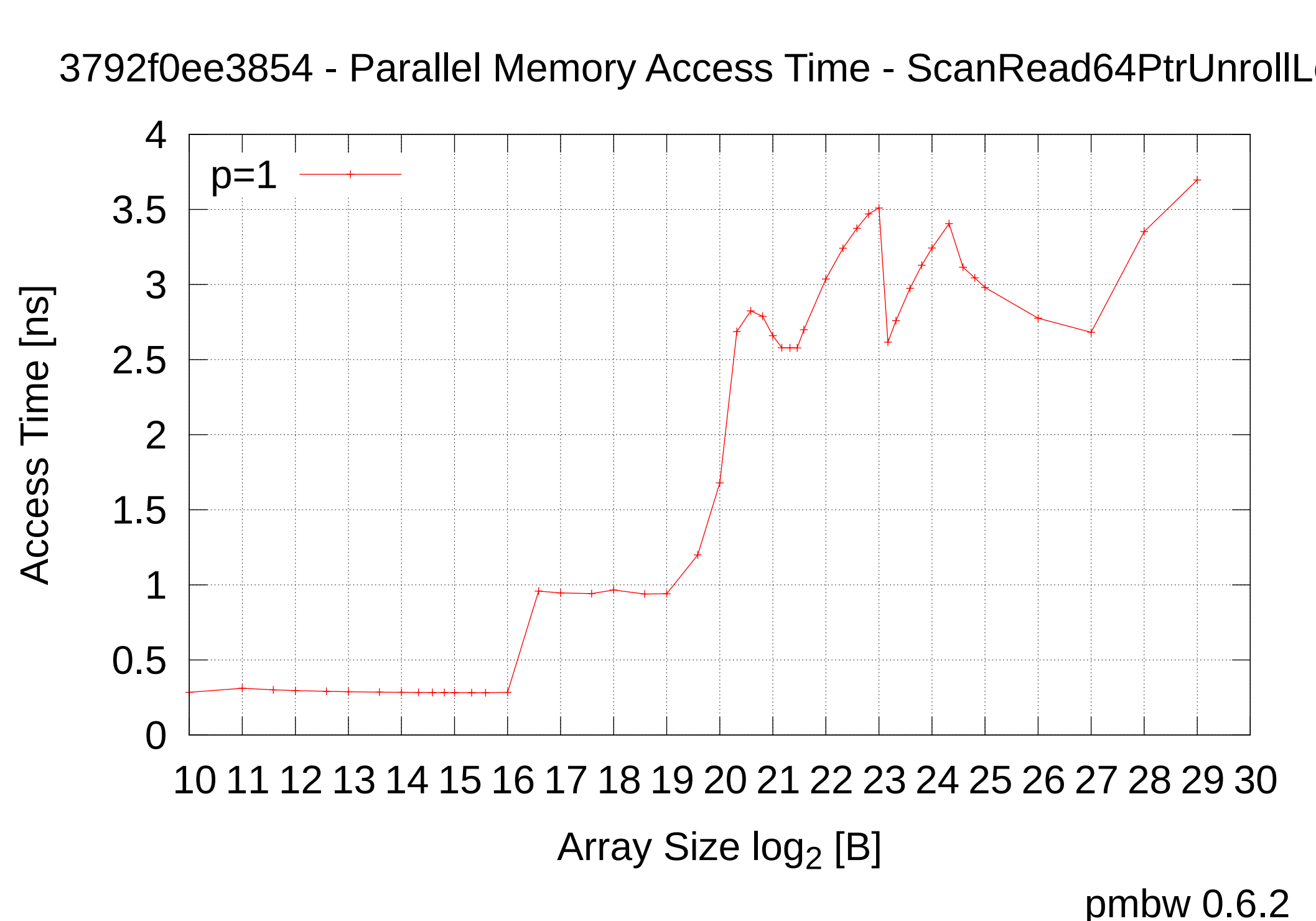

3792f0ee3854 - Parallel Memory Bandwidth - ScanRead64PtrSimpleLo
Bandwidth [GiB/s]
5
4.5
4
3.5
3
2.5
2
1.5
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

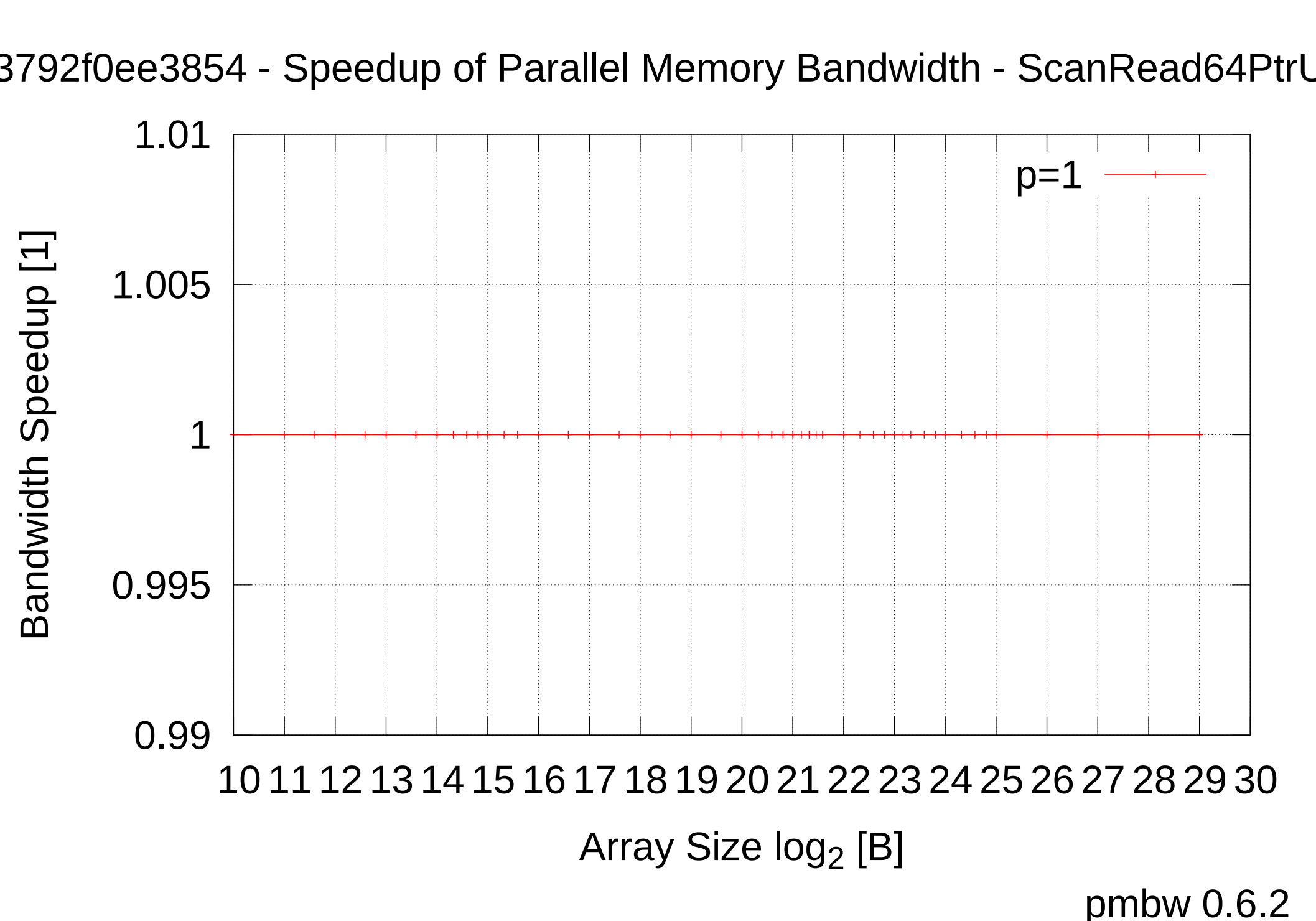

3792f0ee3854 - Parallel Memory Access Time - ScanRead64PtrSimpleL
p=1
Access Time [ns]
4
3.5
3
2.5
2
1.5
1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

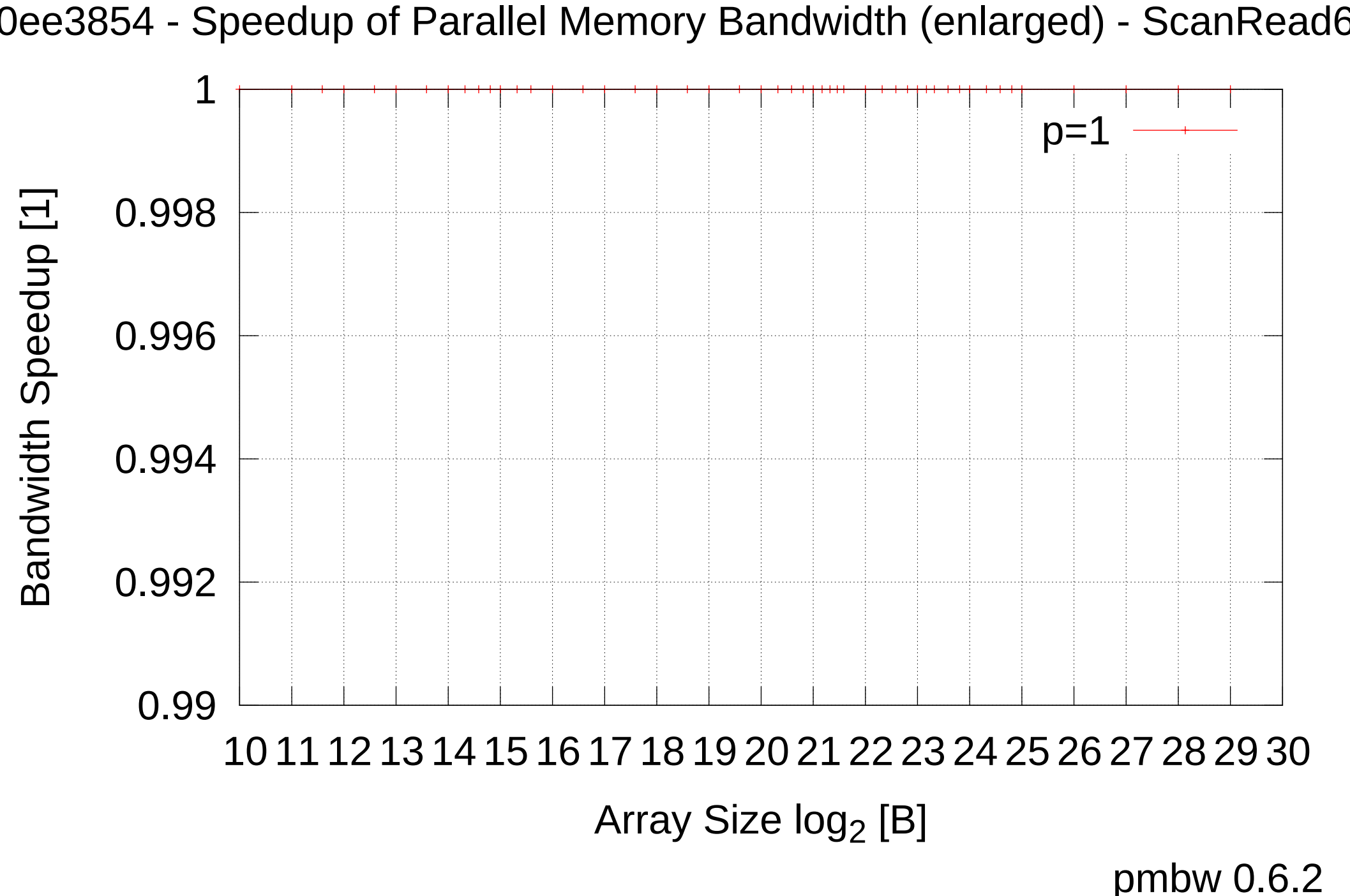

3792f0ee3854 - Speedup of Parallel Memory Bandwidth - ScanRead64PtrS
Bandwidth Speedup [1]
1.01
1.005
1
0.995
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

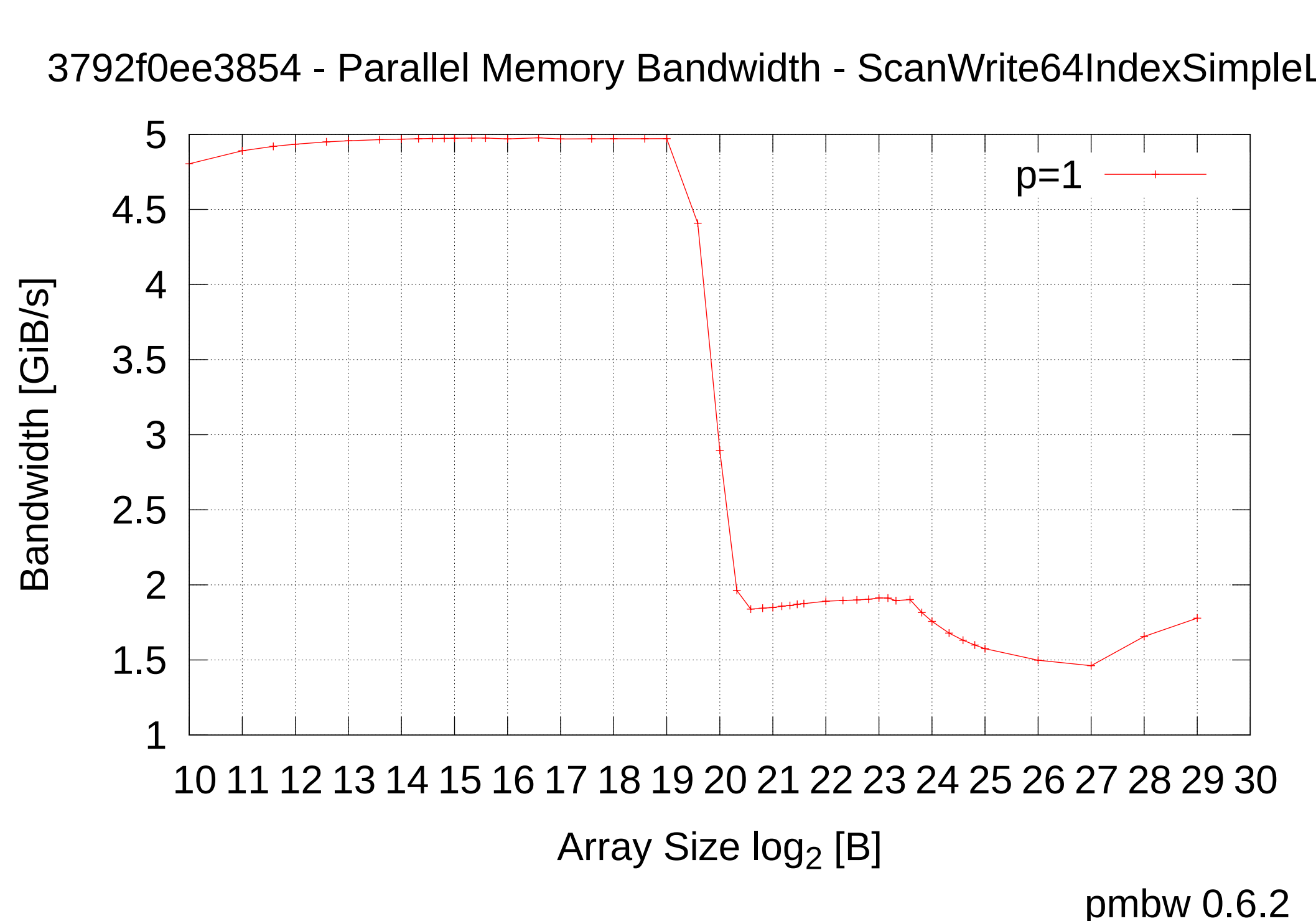

0ee3854 - Speedup of Parallel Memory Bandwidth (enlarged) - ScanRead6
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

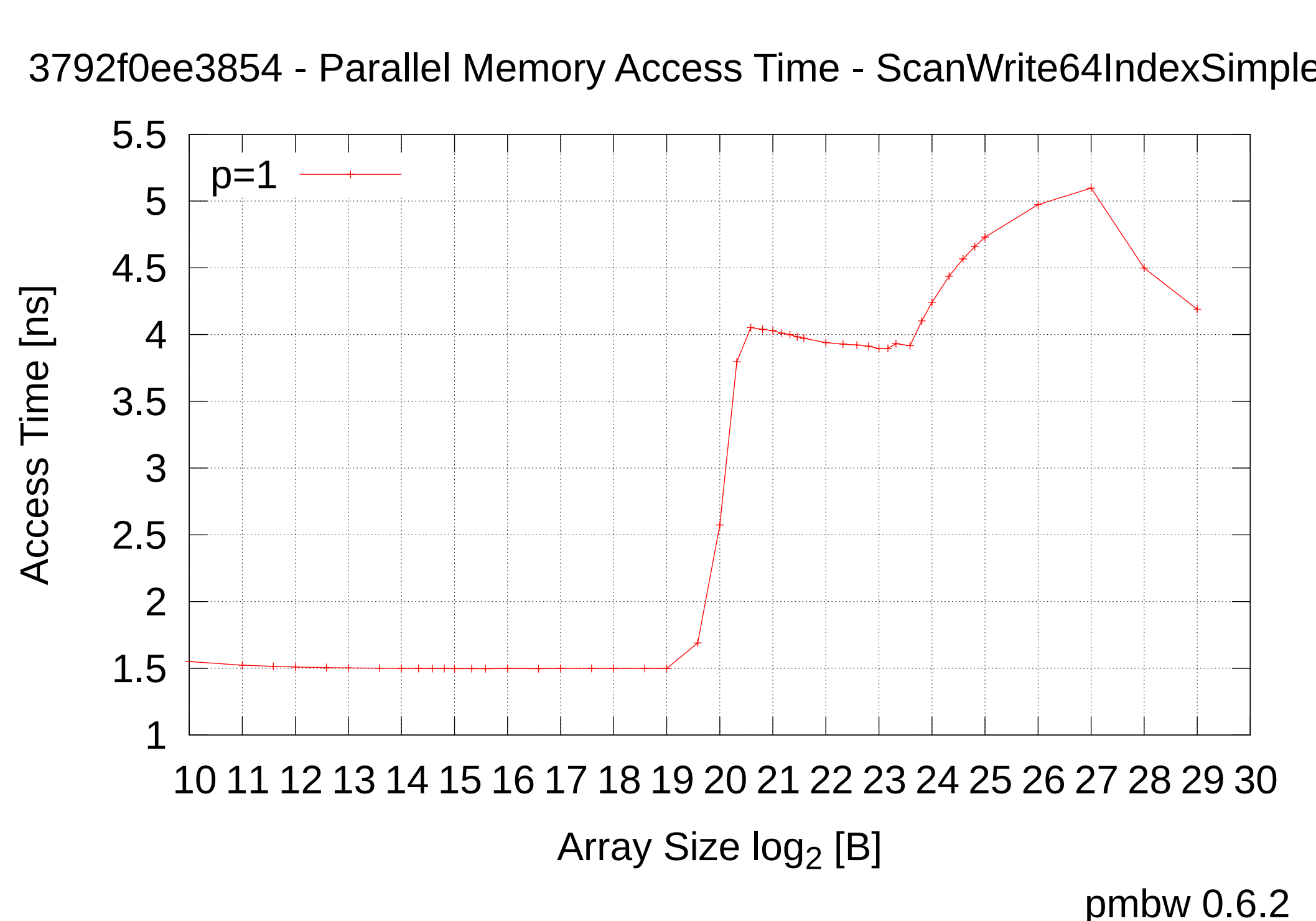

3792f0ee3854 - Parallel Memory Bandwidth - ScanRead64PtrUnrollLoo
p=1
Bandwidth [GiB/s]
0
5
10
15
20
25
30
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

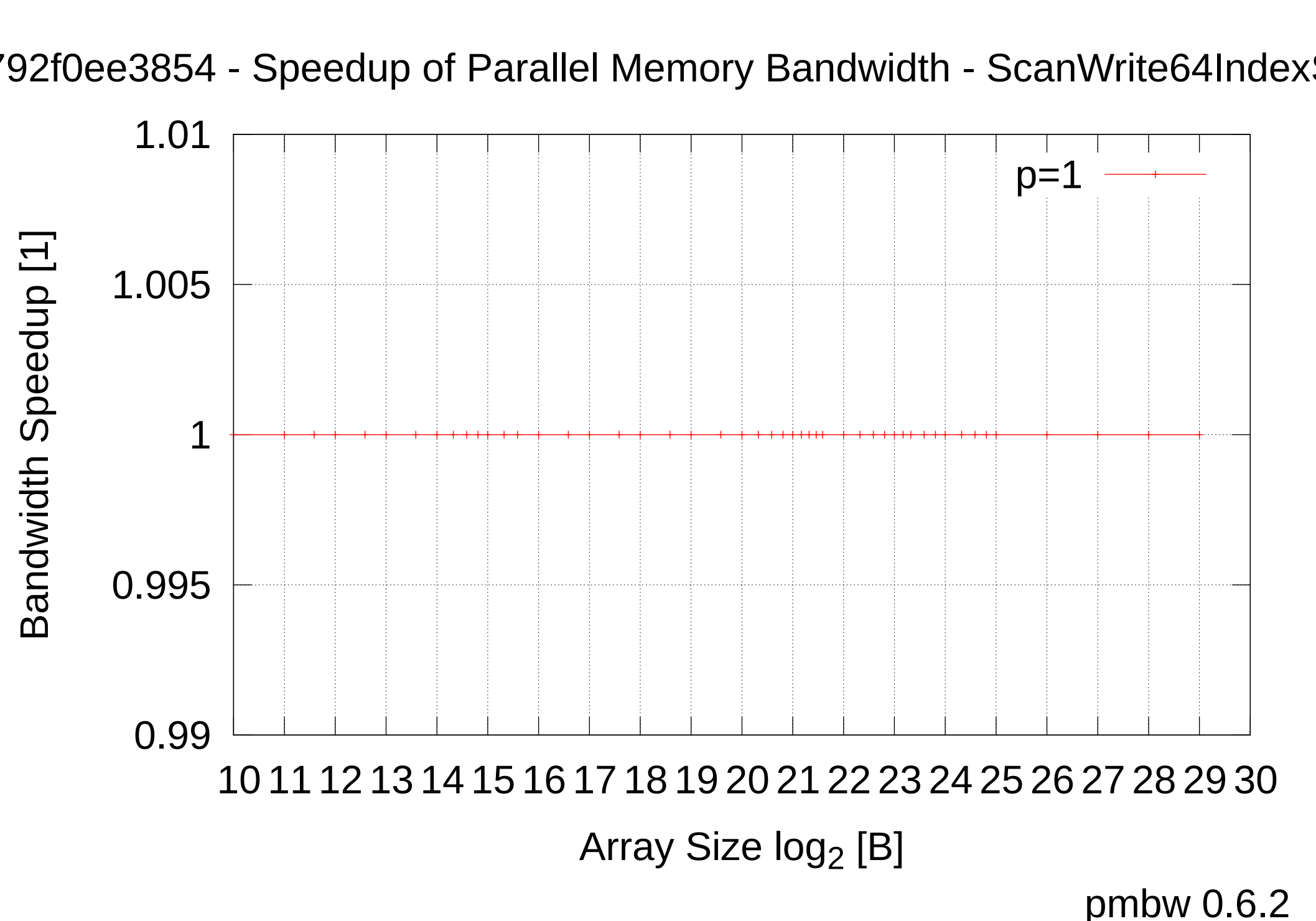

3792f0ee3854 - Parallel Memory Access Time - ScanRead64PtrUnroll
p=1
Access Time [ns]
0
0.5
1
1.5
2
2.5
3
3.5
4
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

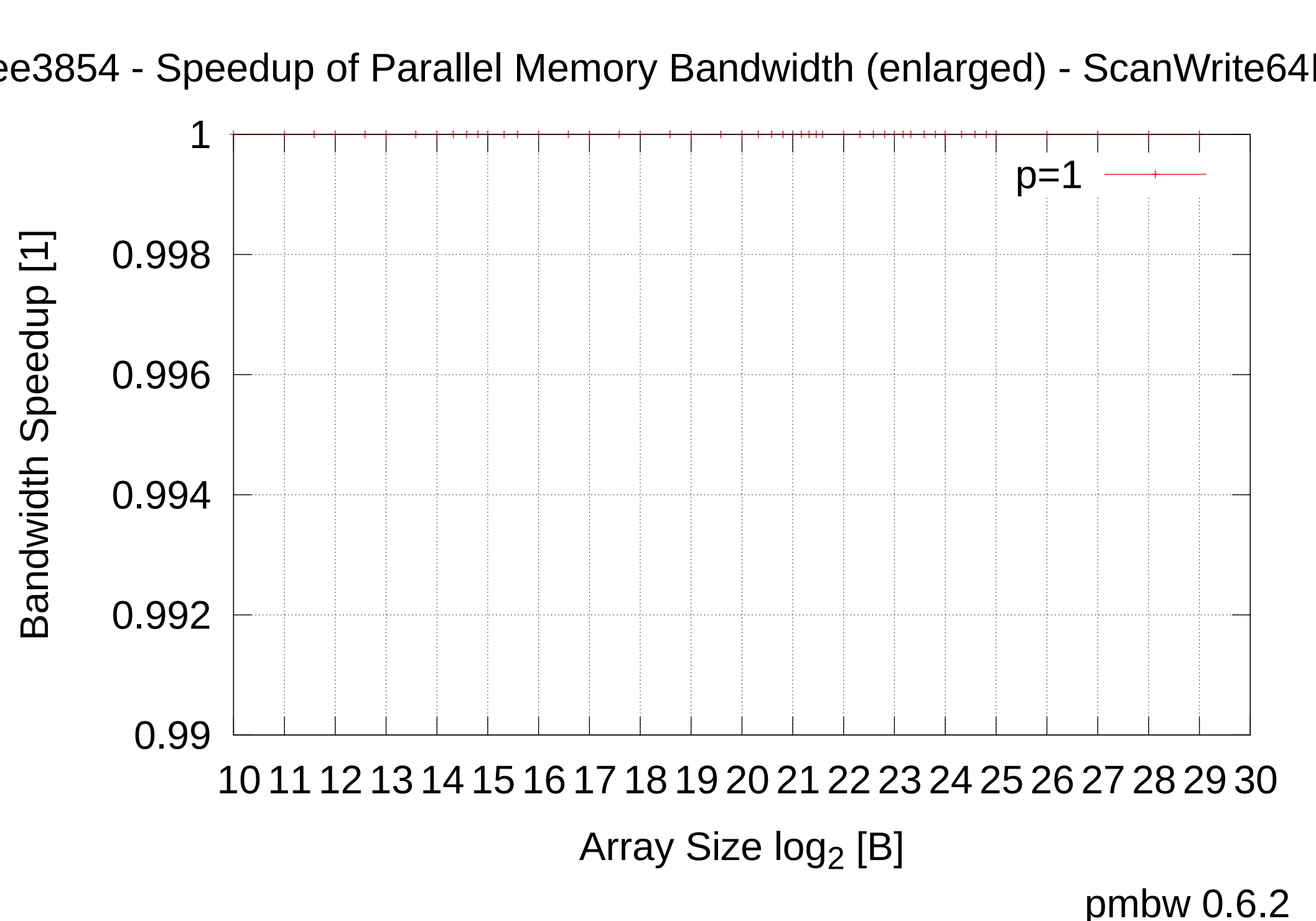

3792f0ee3854 - Speedup of Parallel Memory Bandwidth - ScanRead64PtrU
Bandwidth Speedup [1]
1.01
1.005
1
0.995
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

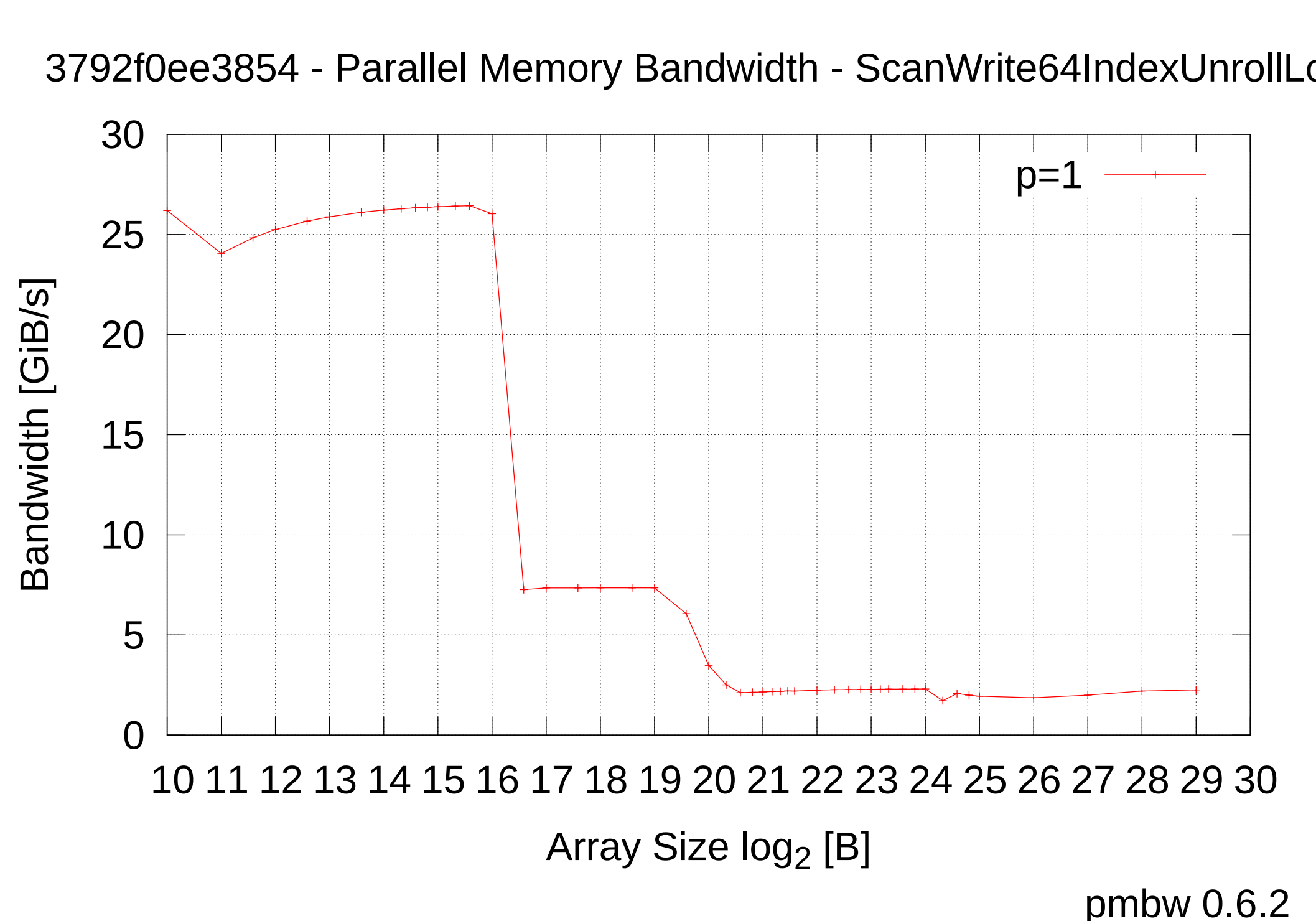

0ee3854 - Speedup of Parallel Memory Bandwidth (enlarged) - ScanRead6
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

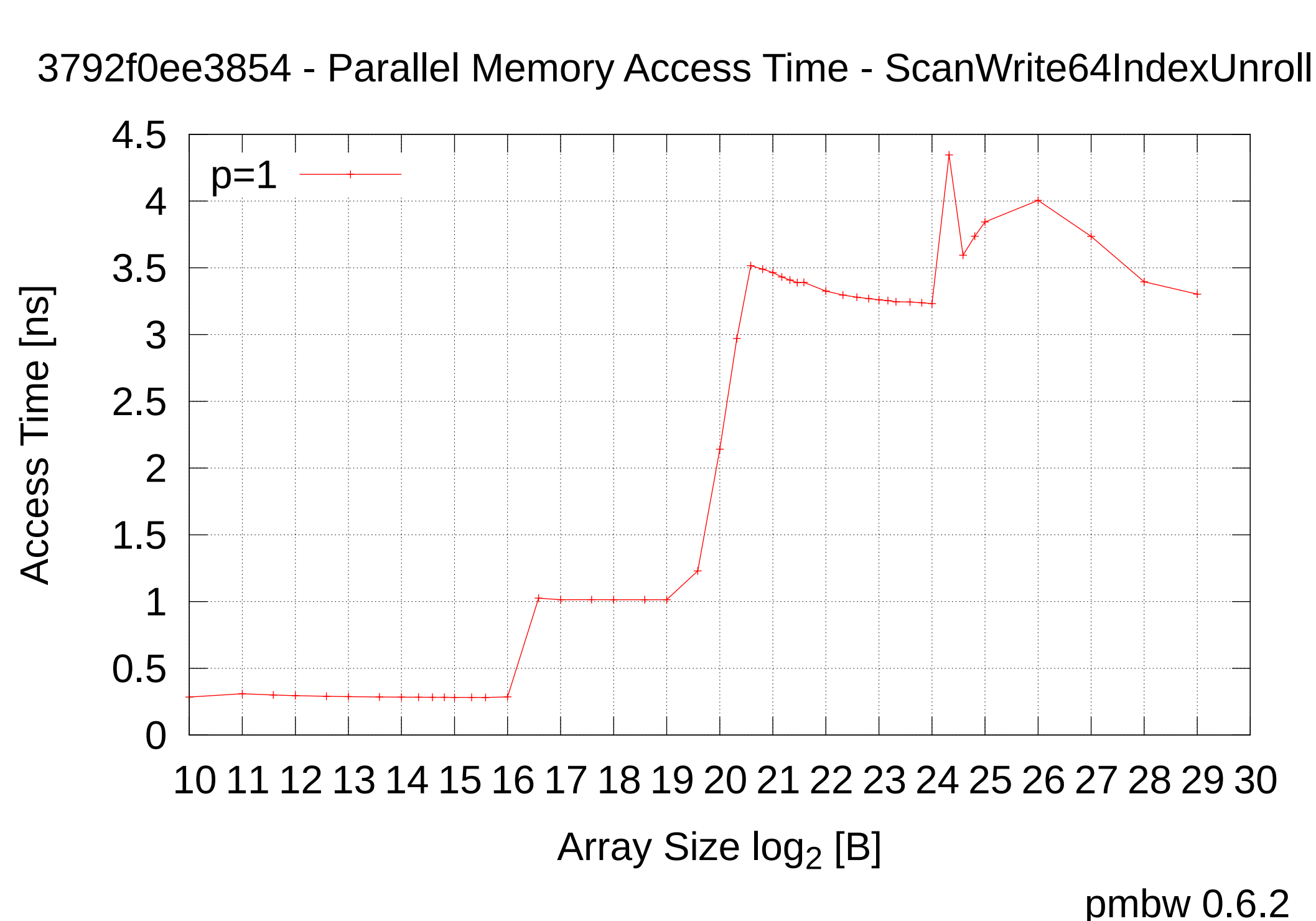

3792f0ee3854 - Parallel Memory Bandwidth - ScanWrite64IndexSimpleL
Bandwidth [GiB/s]
5
4.5
4
3.5
3
2.5
2
1.5
1
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

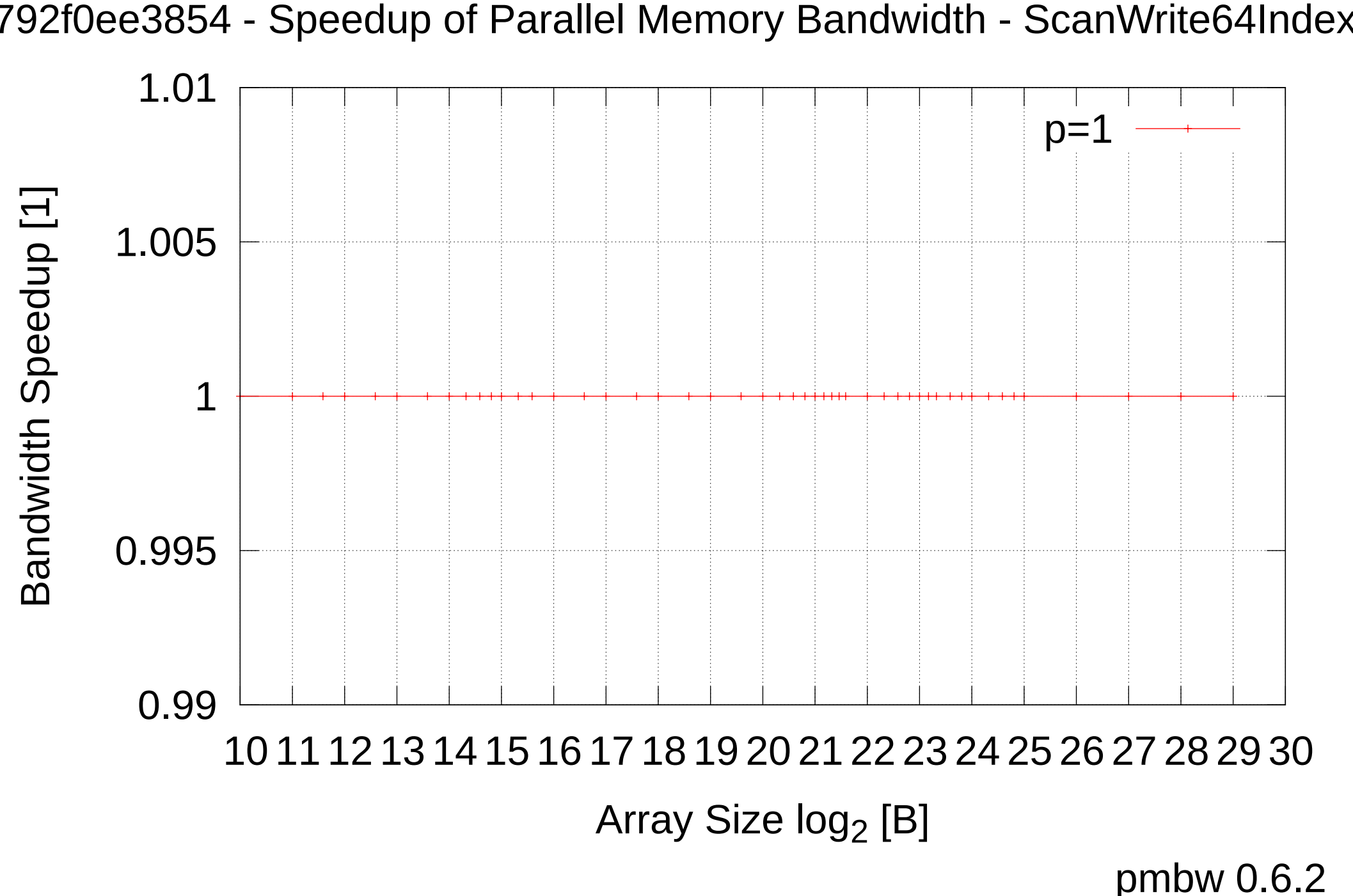

3792f0ee3854 - Parallel Memory Access Time - ScanWrite64IndexSimple
p=1
Access Time [ns]
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

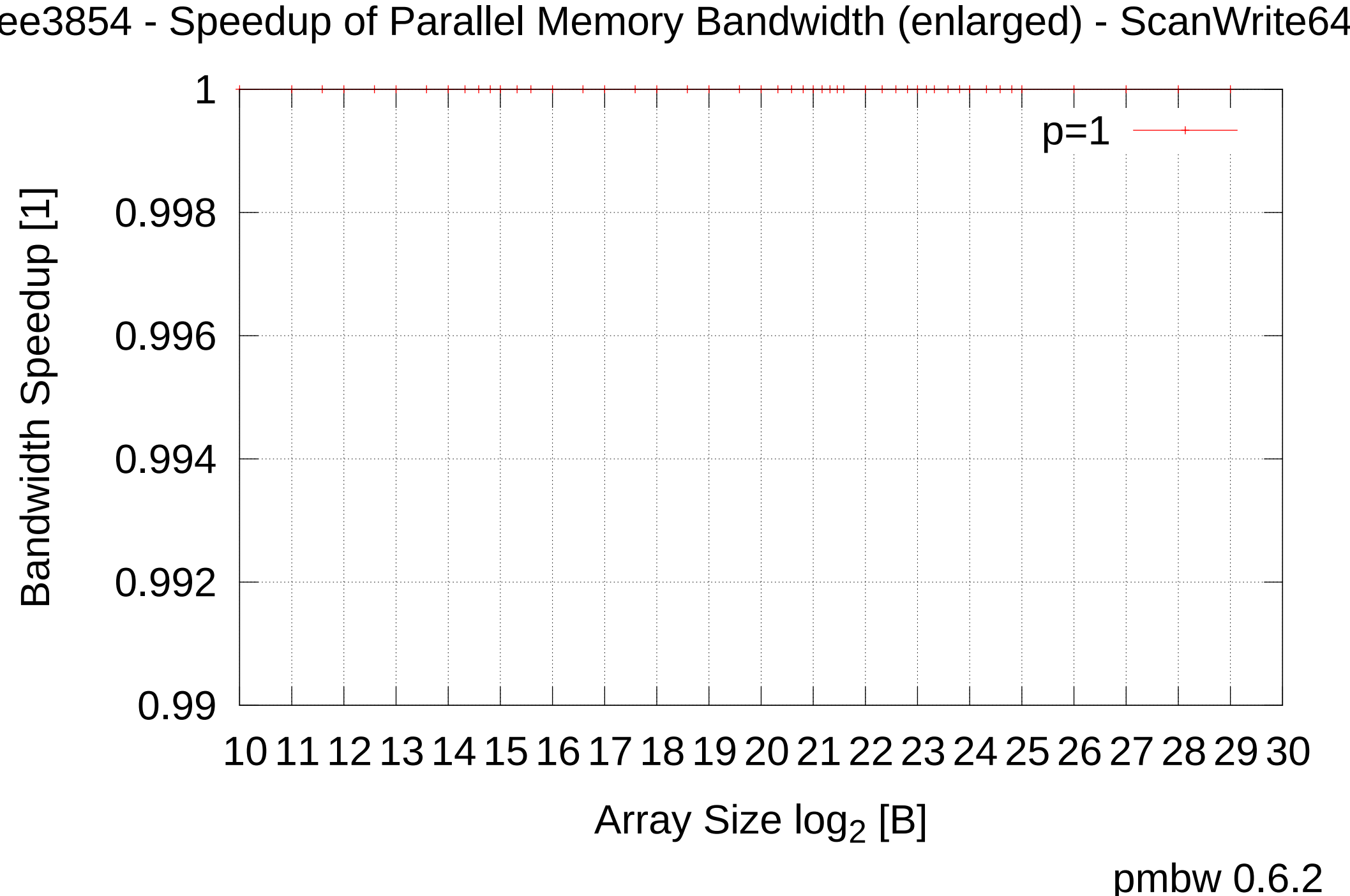

792f0ee3854 - Speedup of Parallel Memory Bandwidth - ScanWrite64Index
Bandwidth Speedup [1]
1.01
1.005
1
0.995
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

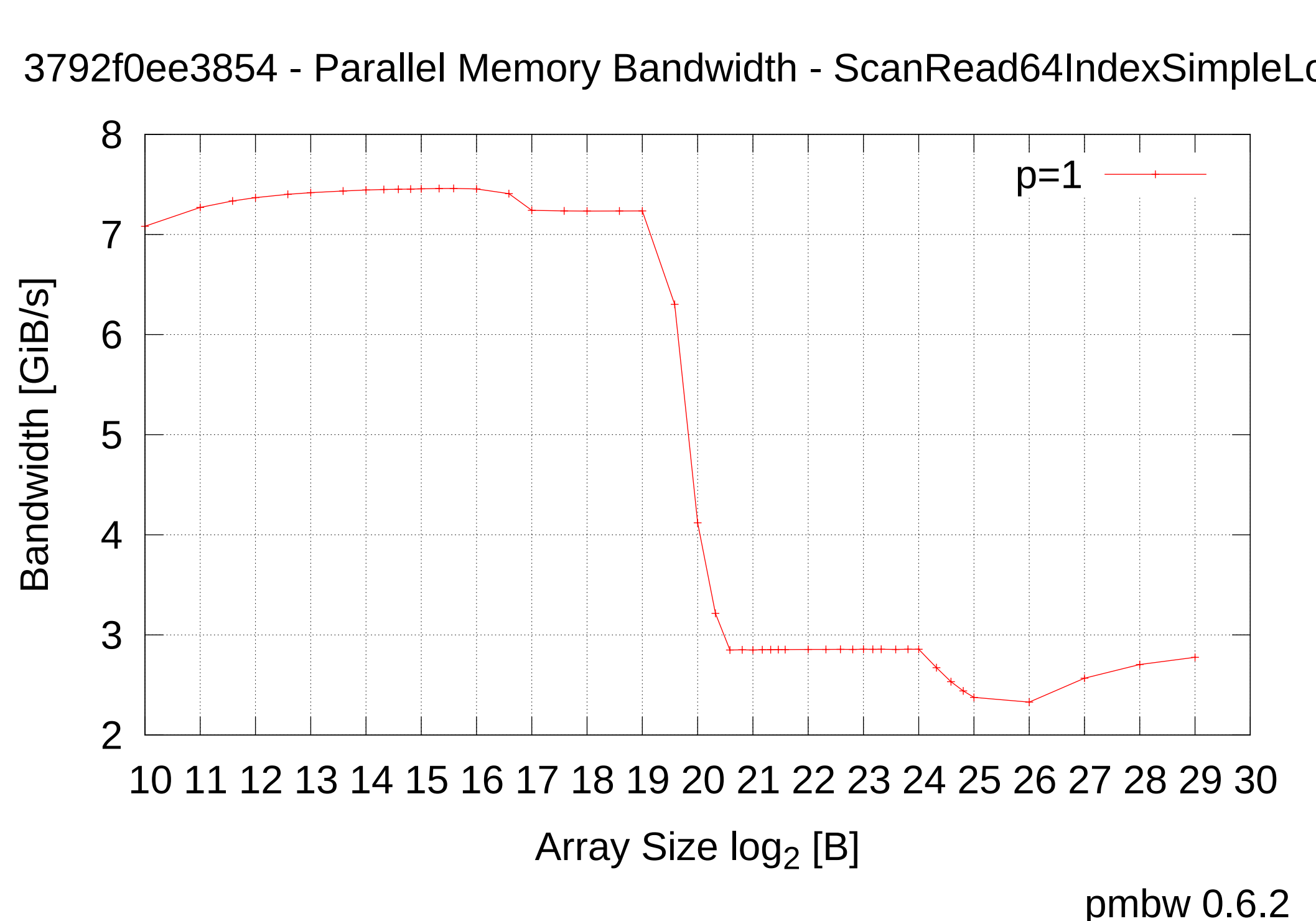

ee3854 - Speedup of Parallel Memory Bandwidth (enlarged) - ScanWrite64
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

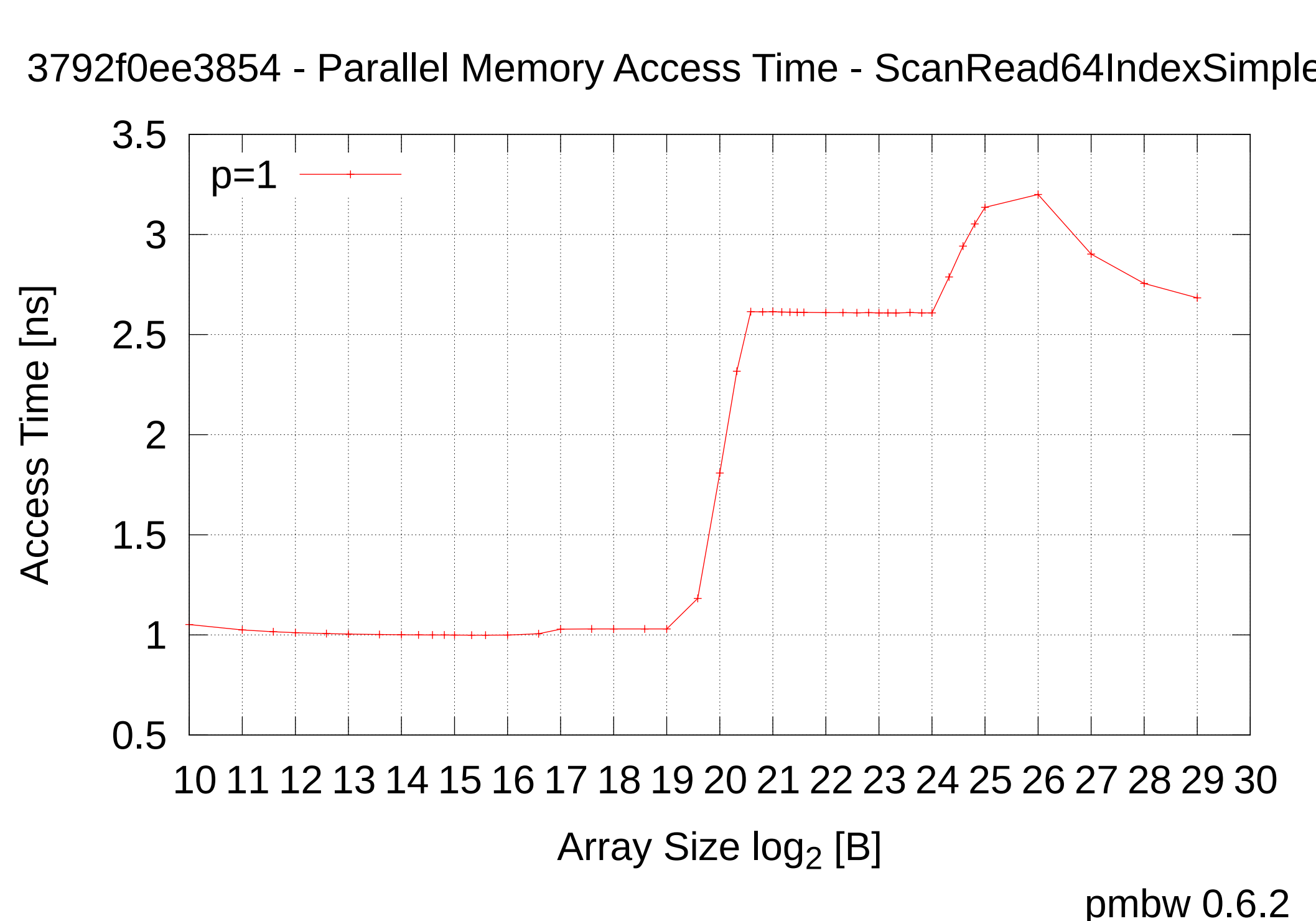

3792f0ee3854 - Parallel Memory Bandwidth - ScanWrite64IndexUnrollLo
p=1
Bandwidth [GiB/s]
0
5
10
15
20
25
30
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

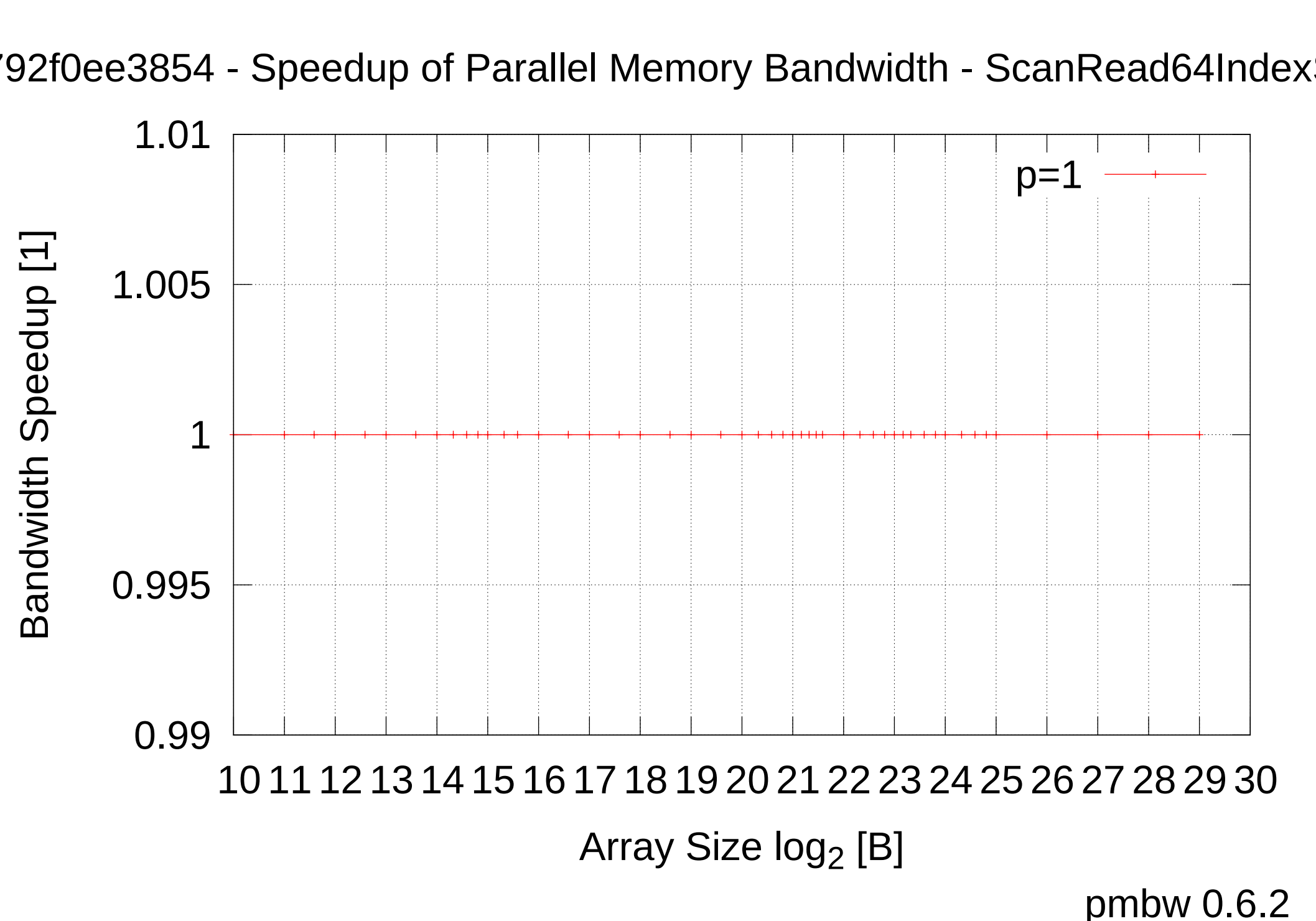

3792f0ee3854 - Parallel Memory Access Time - ScanWrite64IndexUnroll
p=1
Access Time [ns]
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

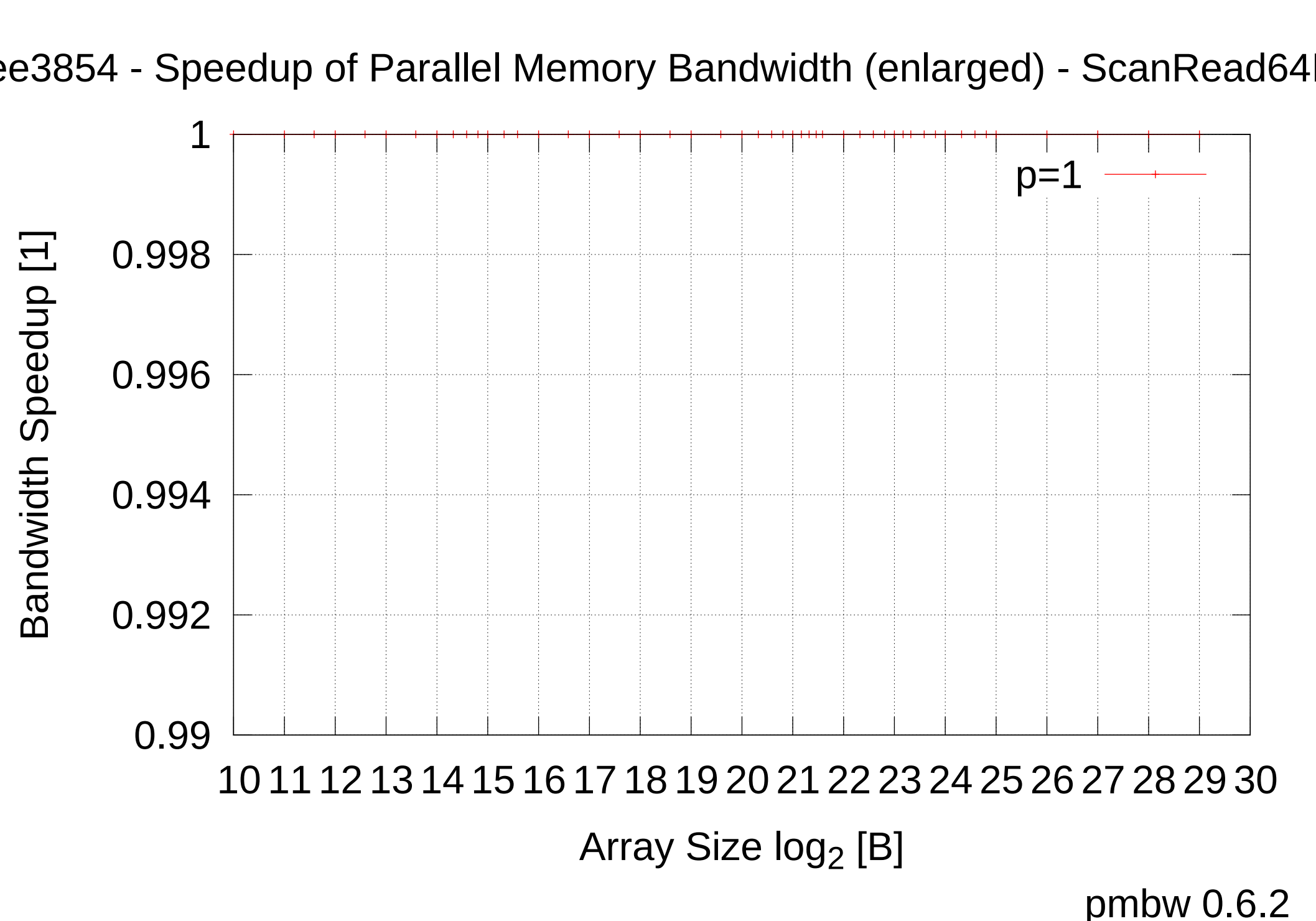

792f0ee3854 - Speedup of Parallel Memory Bandwidth - ScanWrite64Index
1.01
1.005
1
0.995
0.99
Bandwidth Speedup [1]
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

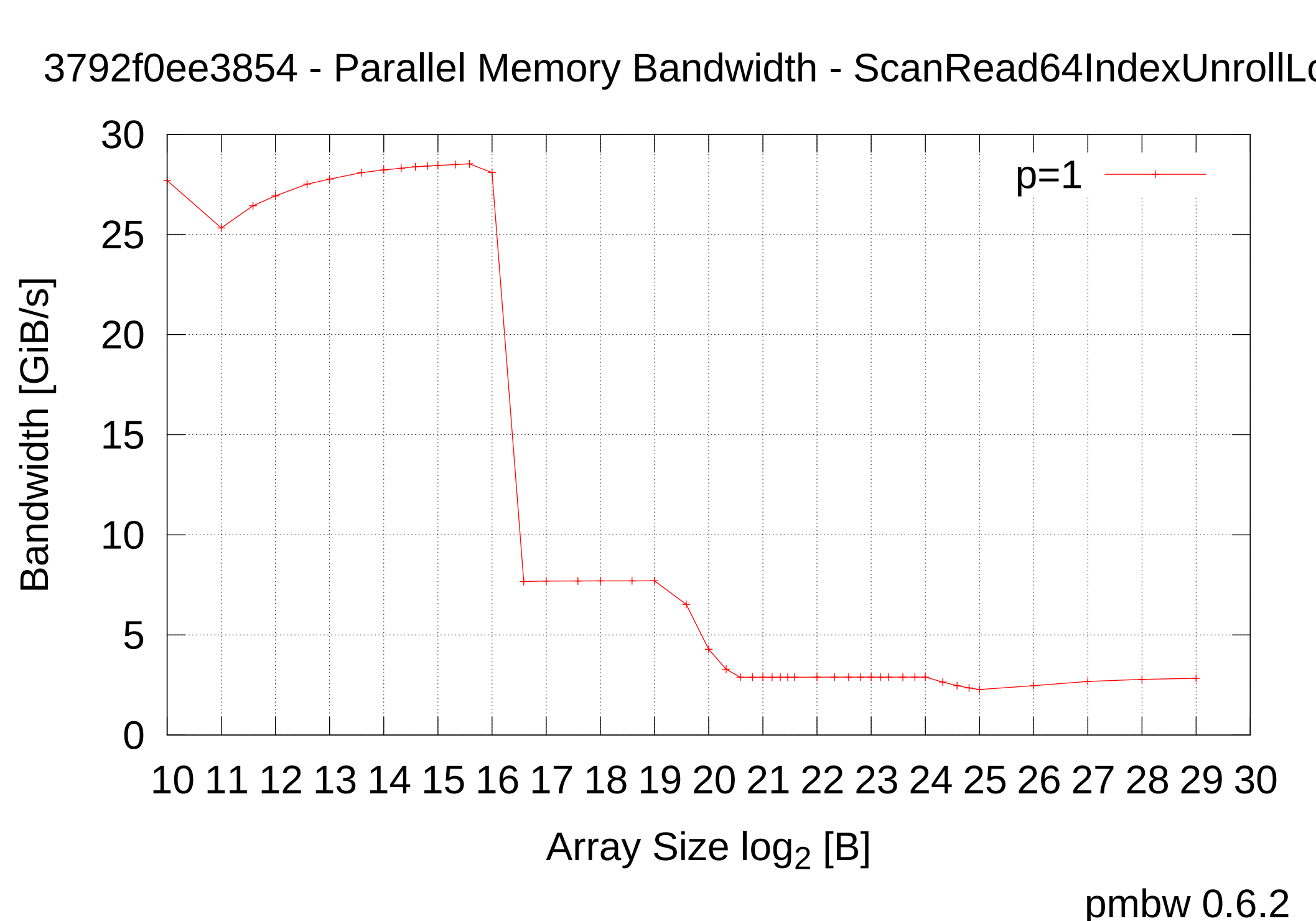

ee3854 - Speedup of Parallel Memory Bandwidth (enlarged) - ScanWrite64
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

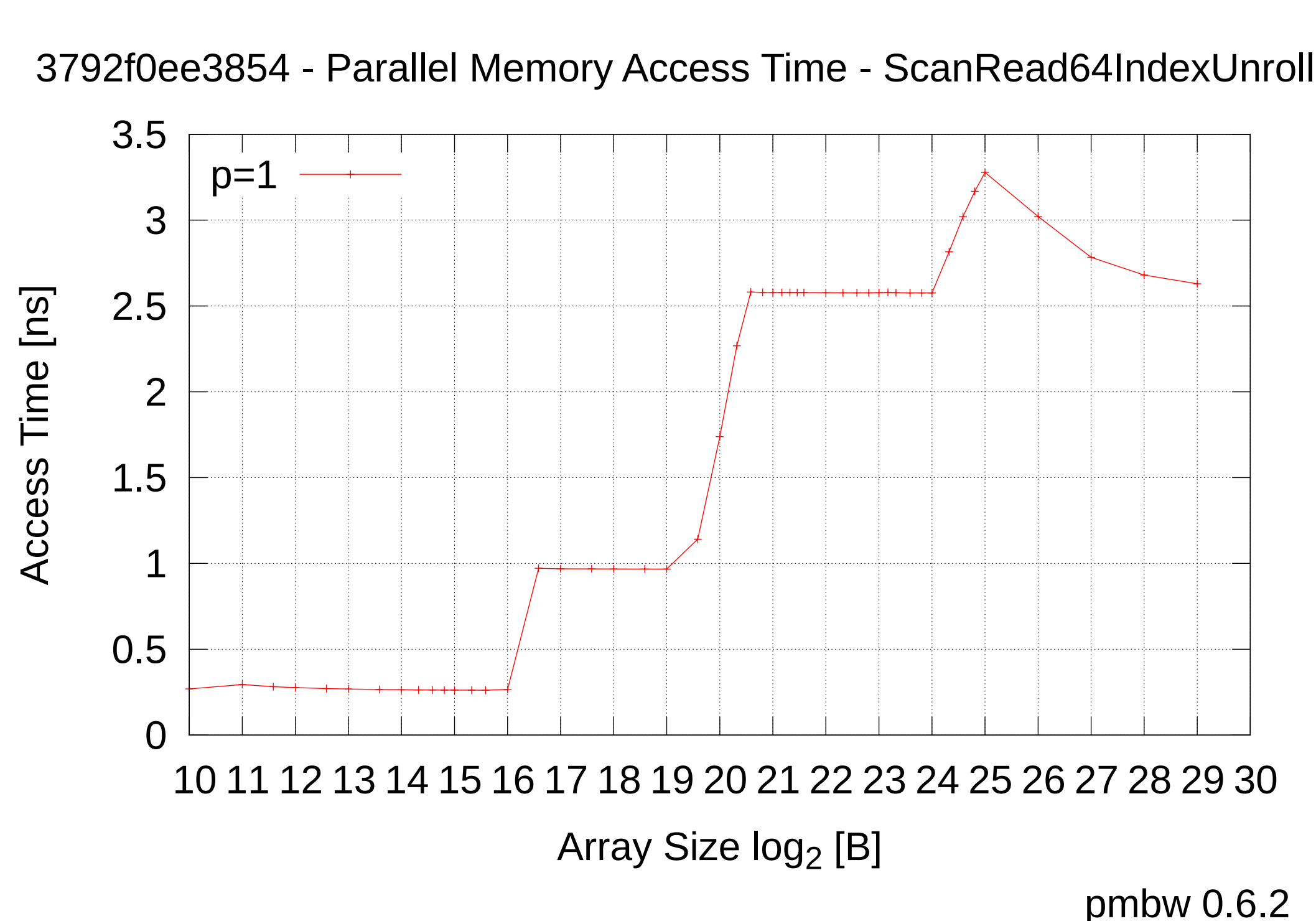

3792f0ee3854 - Parallel Memory Bandwidth - ScanRead64IndexSimpleLo
Bandwidth [GiB/s]
8
7
6
5
4
3
2
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

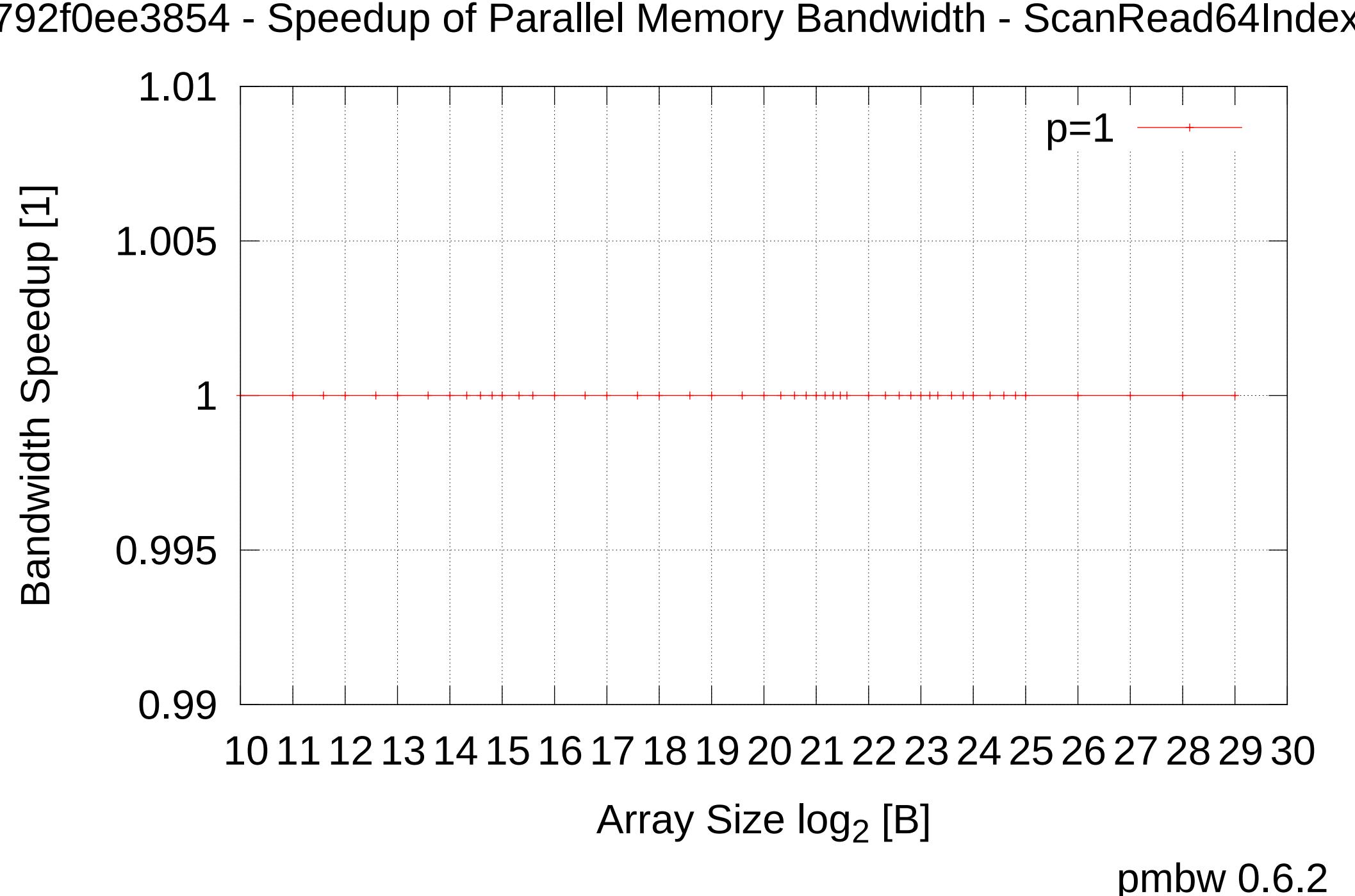

3792f0ee3854 - Parallel Memory Access Time - ScanRead64IndexSimple
p=1
Access Time [ns]
3.5
3
2.5
2
1.5
1
0.5
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

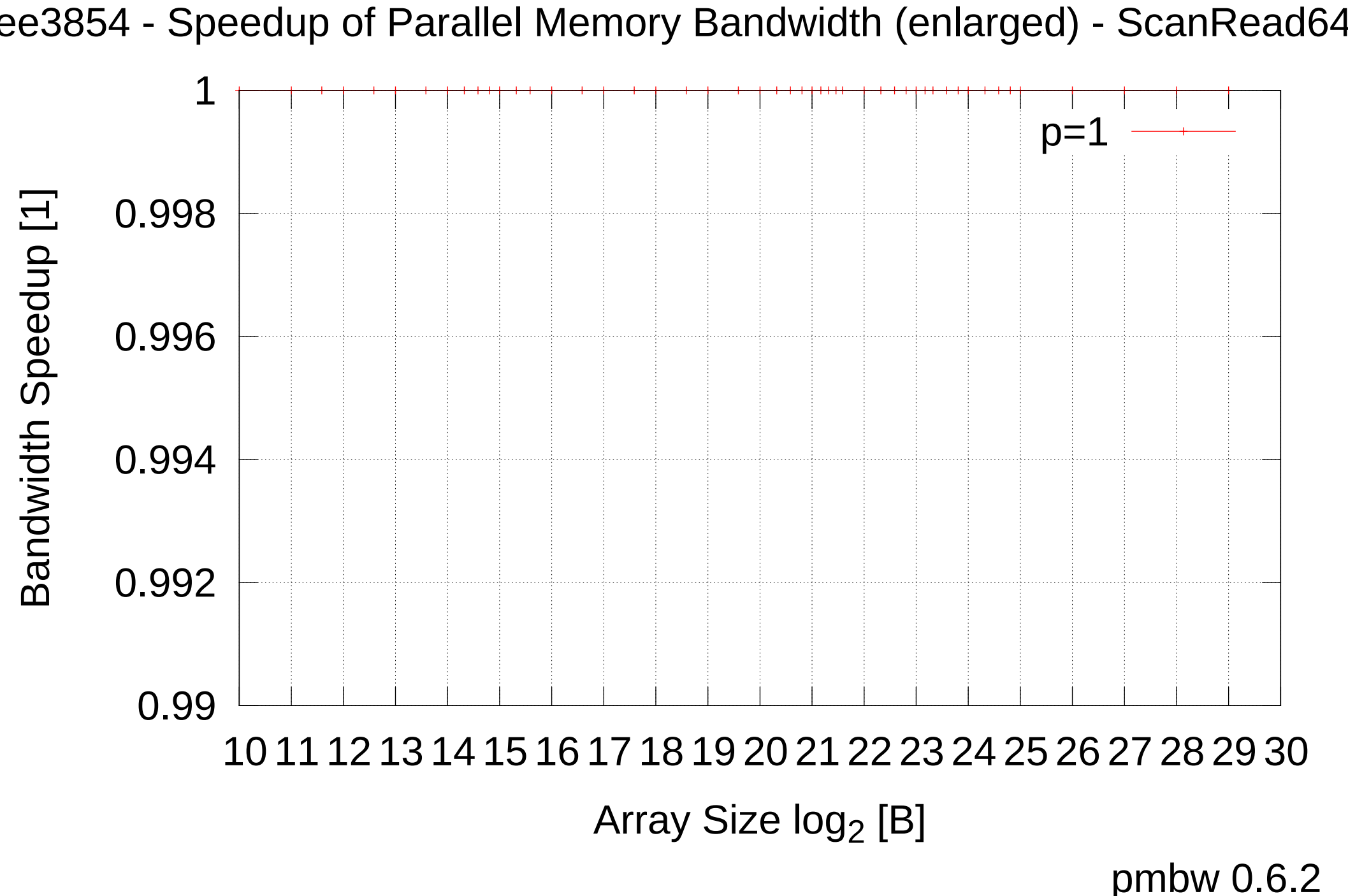

792f0ee3854 - Speedup of Parallel Memory Bandwidth - ScanRead64Index
1.01
1.005
1
0.995
0.99
Bandwidth Speedup [1]
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

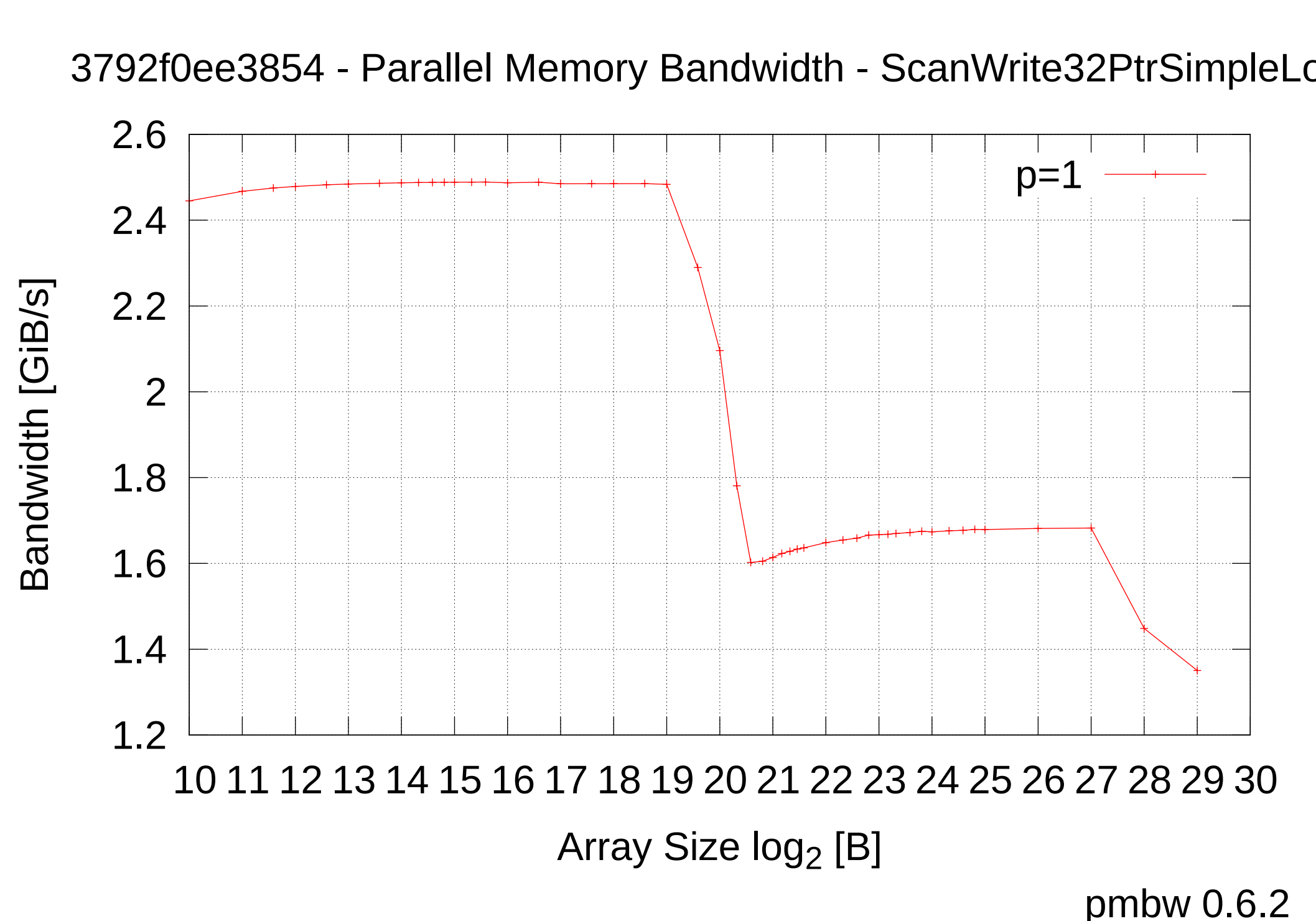

ee3854 - Speedup of Parallel Memory Bandwidth (enlarged) - ScanRead64
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

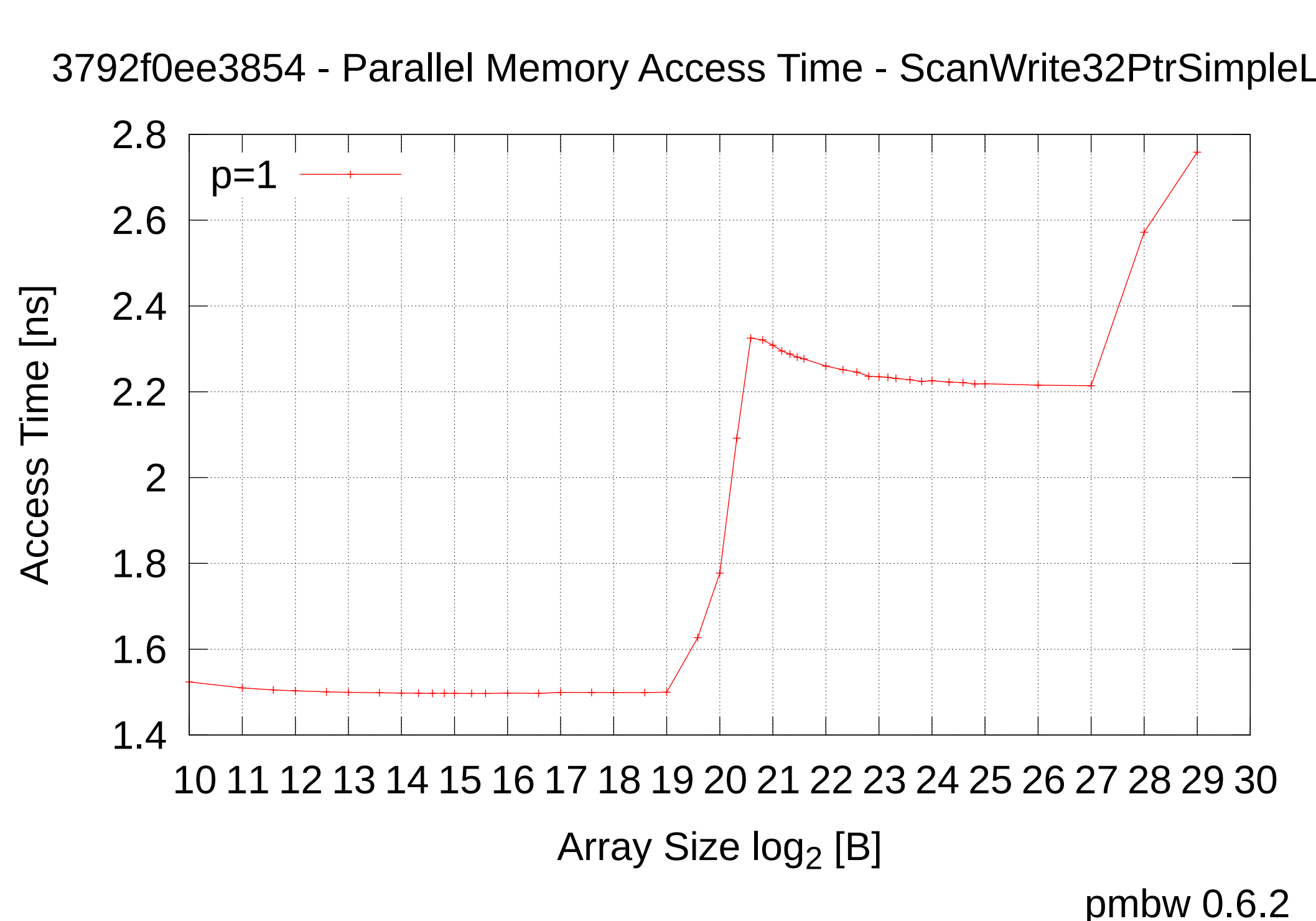

3792f0ee3854 - Parallel Memory Bandwidth - ScanRead64IndexUnrollL
Bandwidth [GiB/s]
0
5
10
15
20
25
30
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

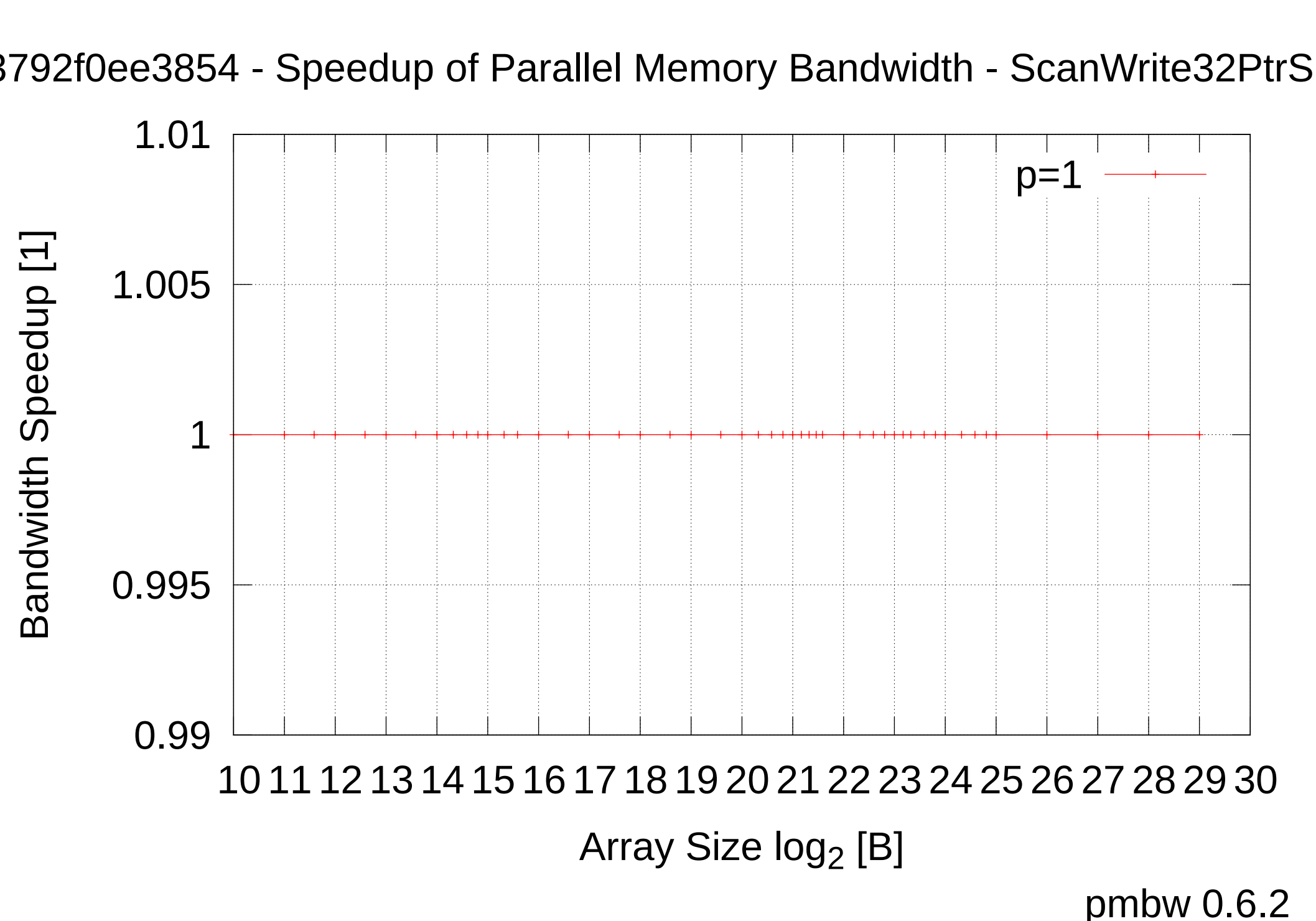

3792f0ee3854 - Parallel Memory Access Time - ScanRead64IndexUnroll
p=1
Access Time [ns]
0
0.5
1
1.5
2
2.5
3
3.5
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

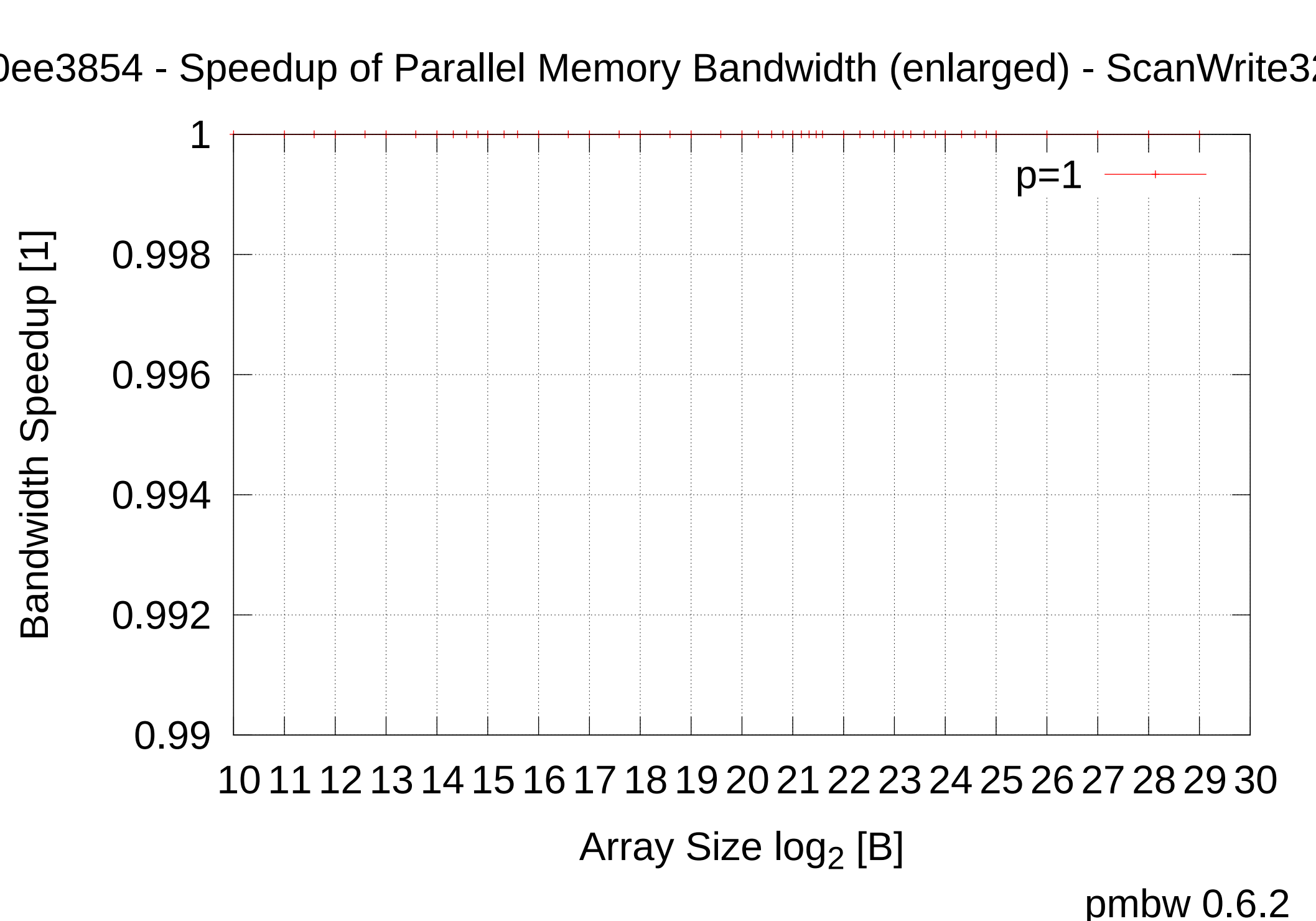

792f0ee3854 - Speedup of Parallel Memory Bandwidth - ScanRead64Index
Bandwidth Speedup [1]
1.01
1.005
1
0.995
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

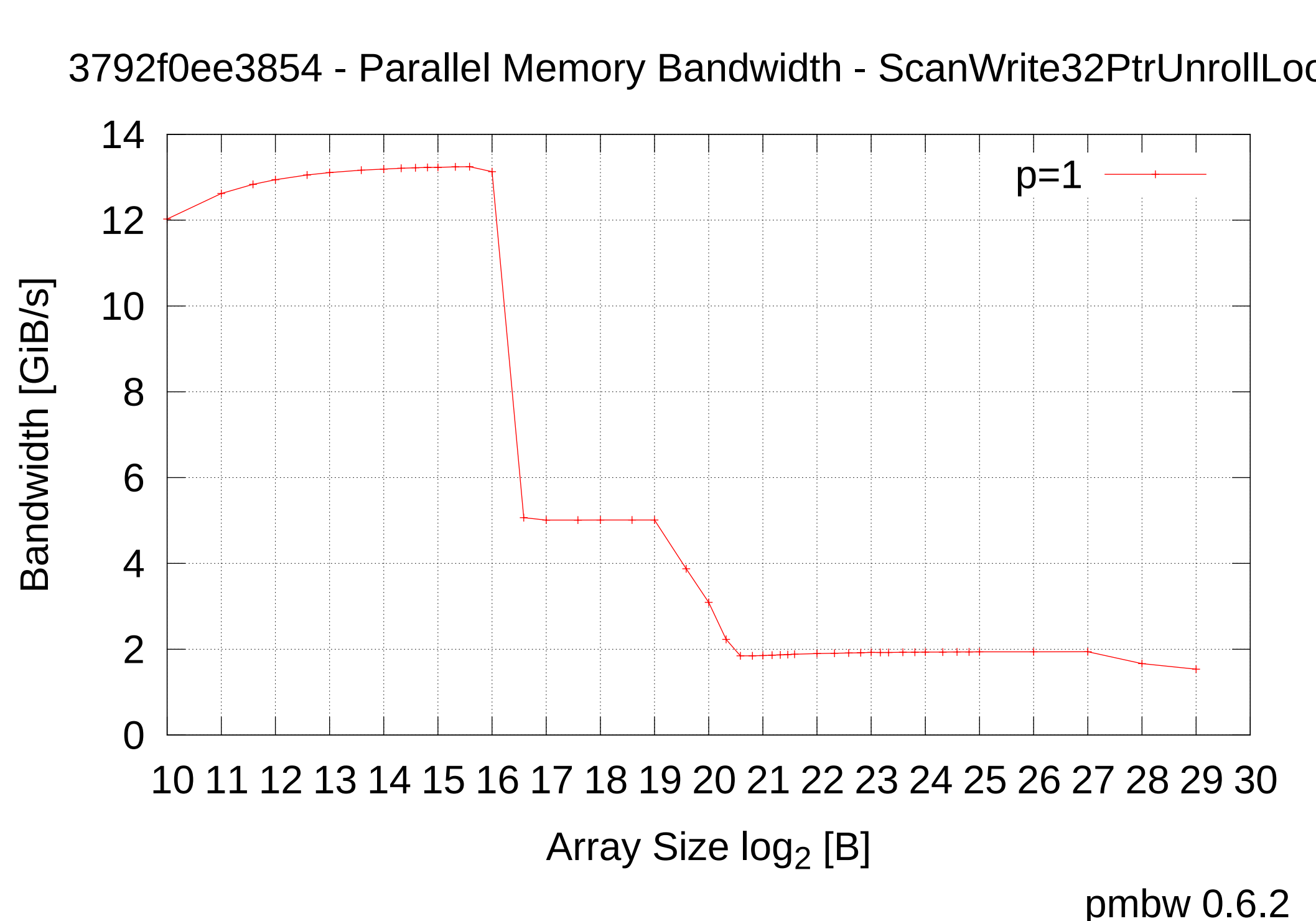

ee3854 - Speedup of Parallel Memory Bandwidth (enlarged) - ScanRead64
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

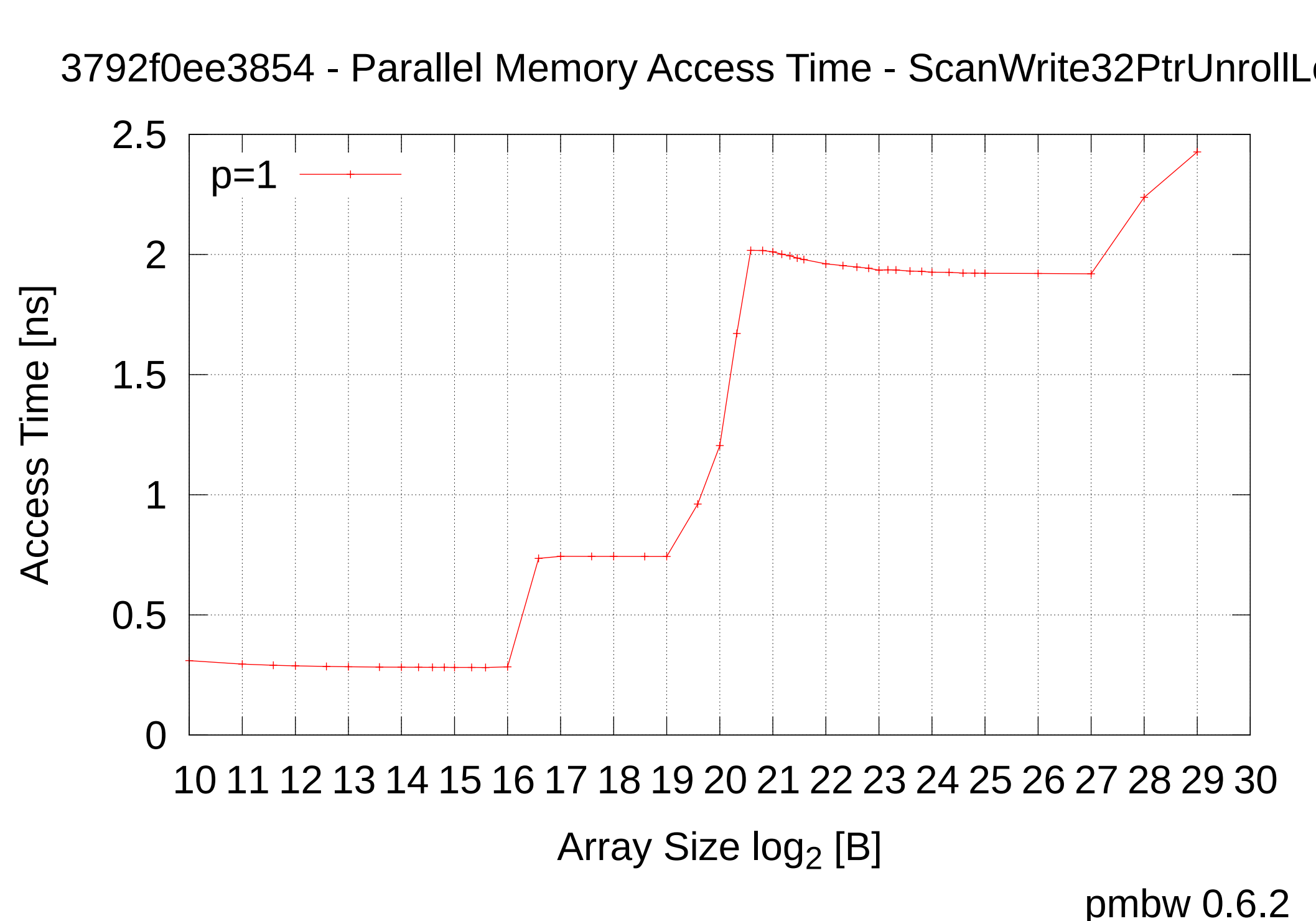

3792f0ee3854 - Parallel Memory Bandwidth - ScanWrite32PtrSimpleLo
Bandwidth [GiB/s]
2.6
2.4
2.2
2
1.8
1.6
1.4
1.2
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

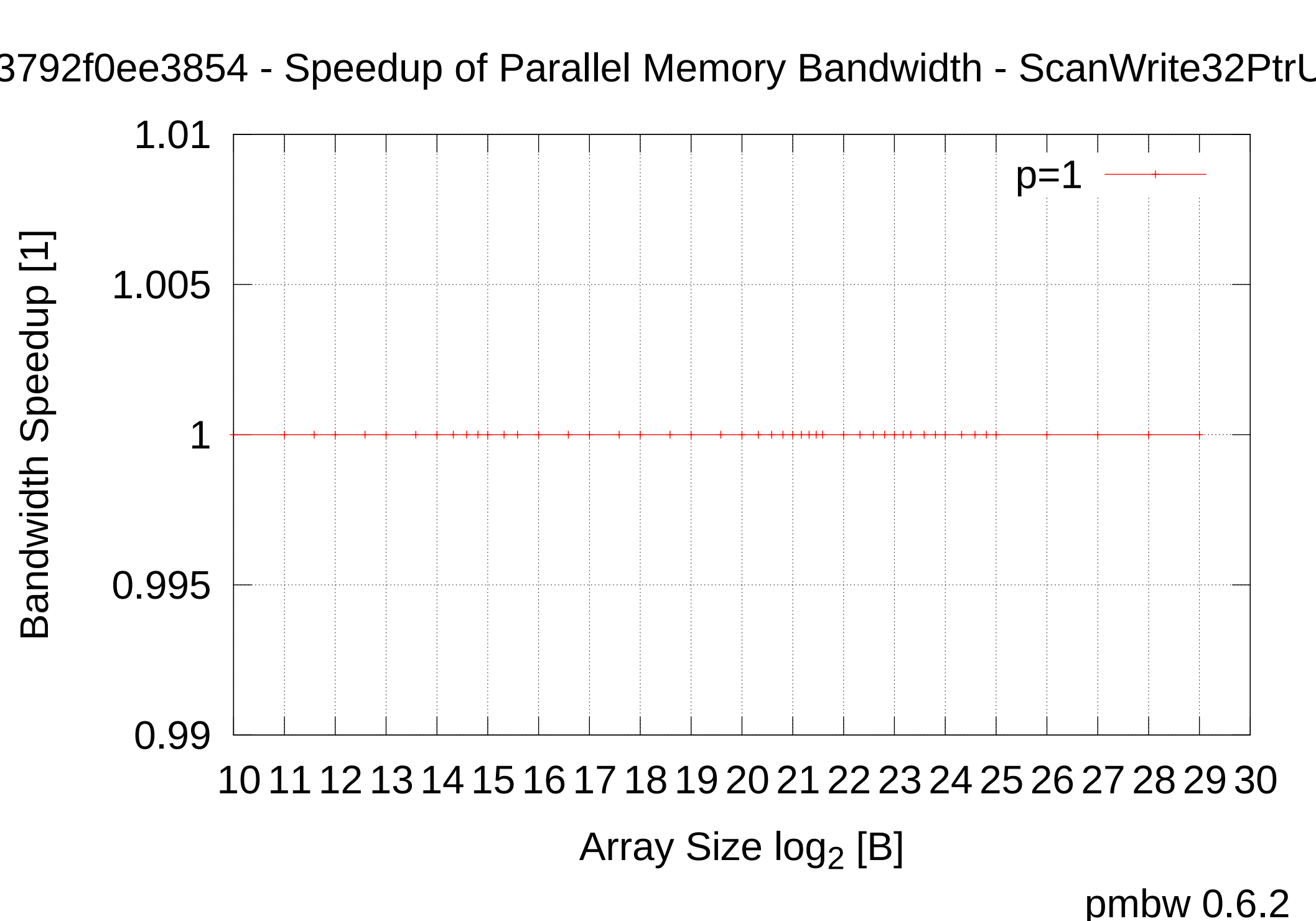

3792f0ee3854 - Parallel Memory Access Time - ScanWrite32PtrSimpleL
p=1
Access Time [ns]
2.8
2.6
2.4
2.2
2
1.8
1.6
1.4
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

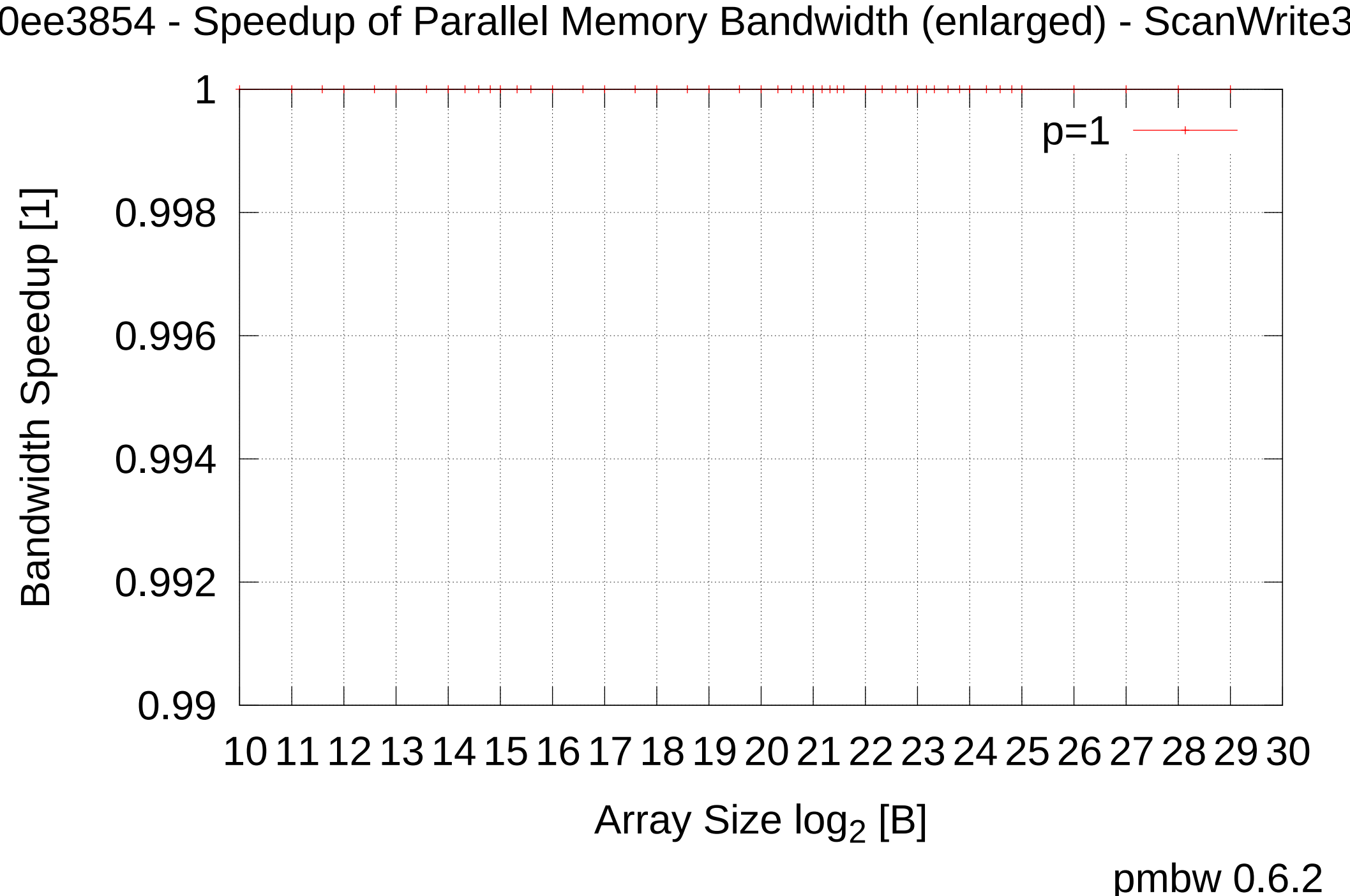

3792f0ee3854 - Speedup of Parallel Memory Bandwidth - ScanWrite32PtrS
Bandwidth Speedup [1]
1.01
1.005
1
0.995
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

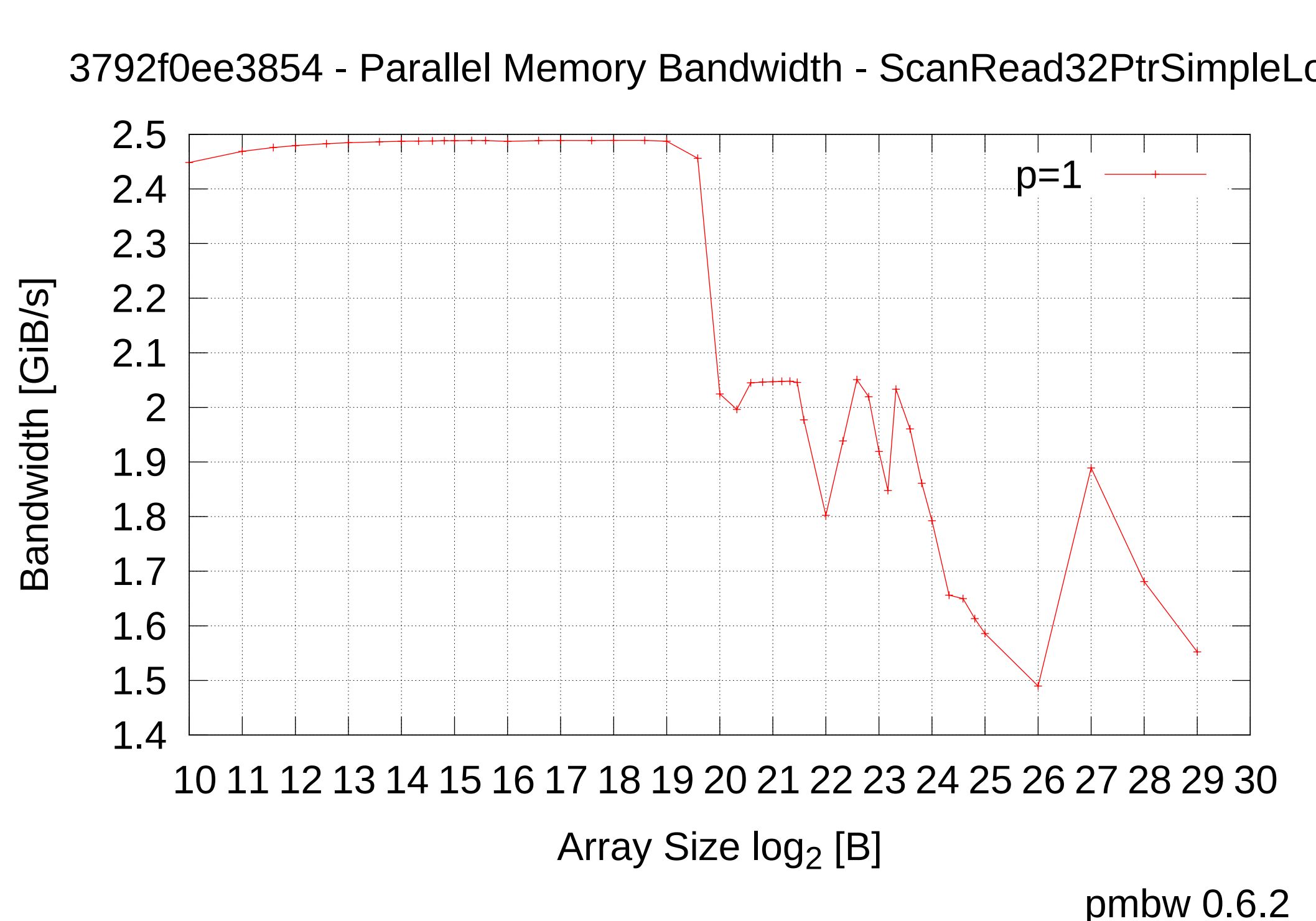

0ee3854 - Speedup of Parallel Memory Bandwidth (enlarged) - ScanWrite3
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

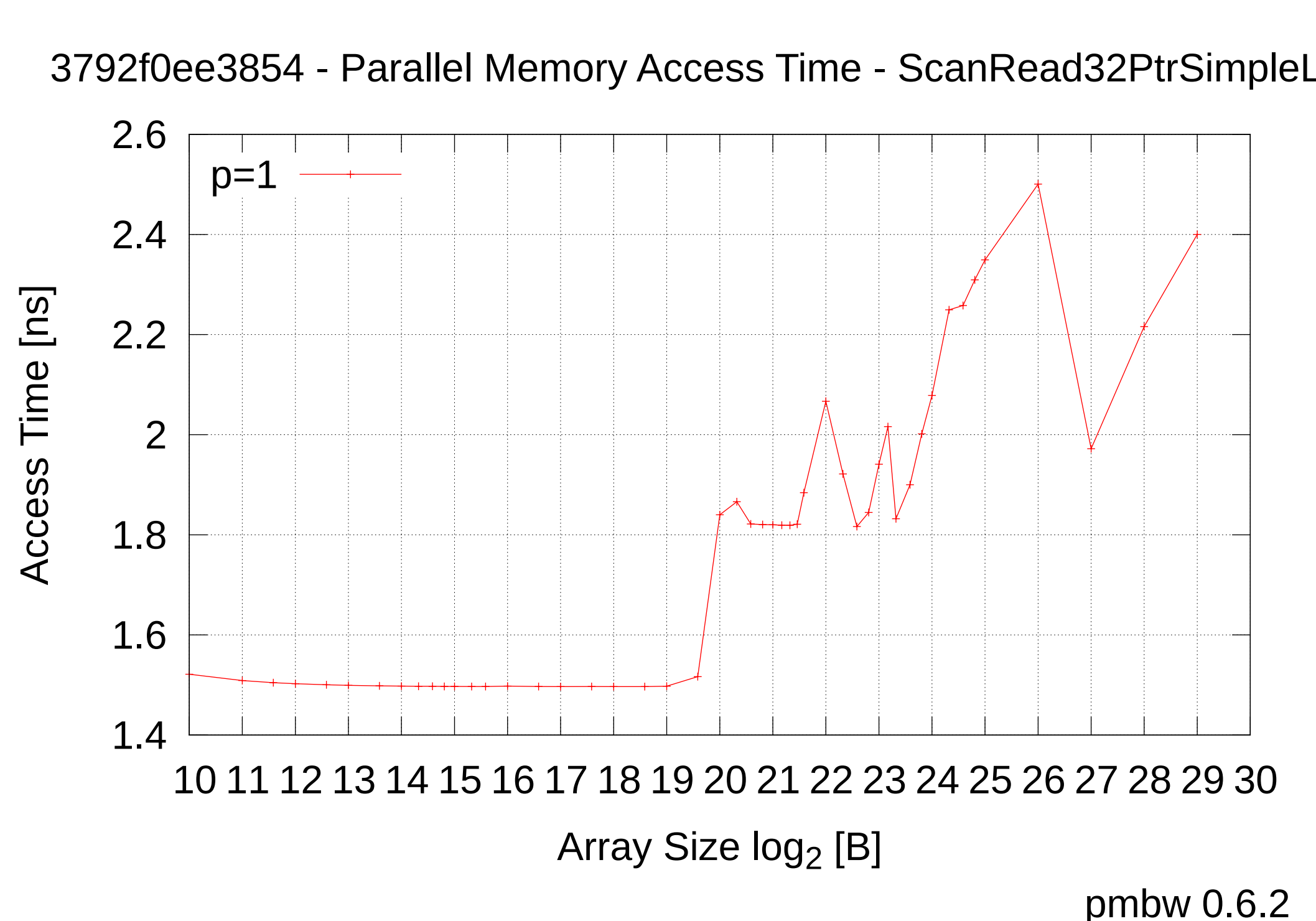

3792f0ee3854 - Parallel Memory Bandwidth - ScanWrite32PtrUnrollLoo
Bandwidth [GiB/s]
0
2
4
6
8
10
12
14
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

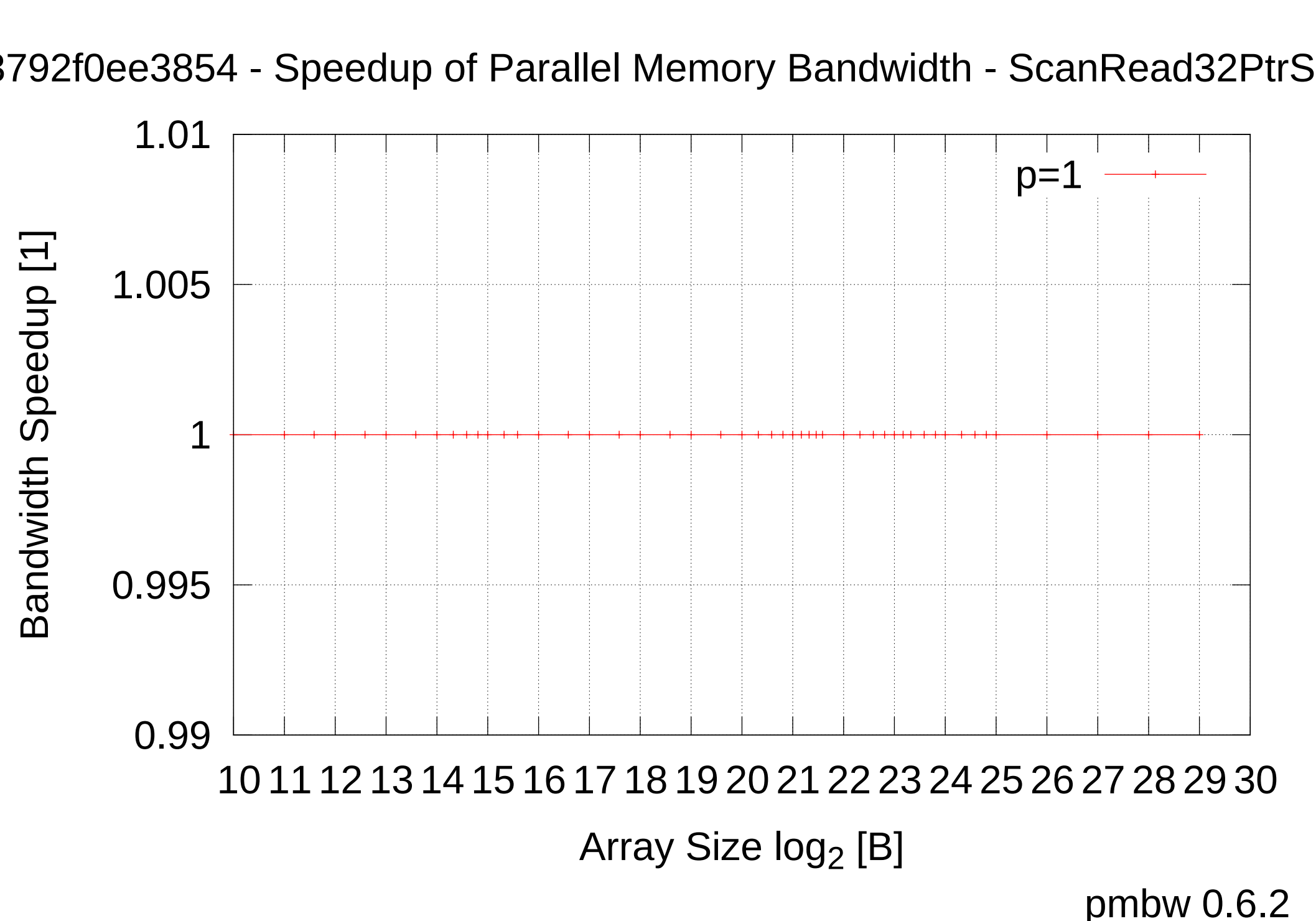

3792f0ee3854 - Parallel Memory Access Time - ScanWrite32PtrUnroll
p=1
Access Time [ns]
2.5
2
1.5
1
0.5
0
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

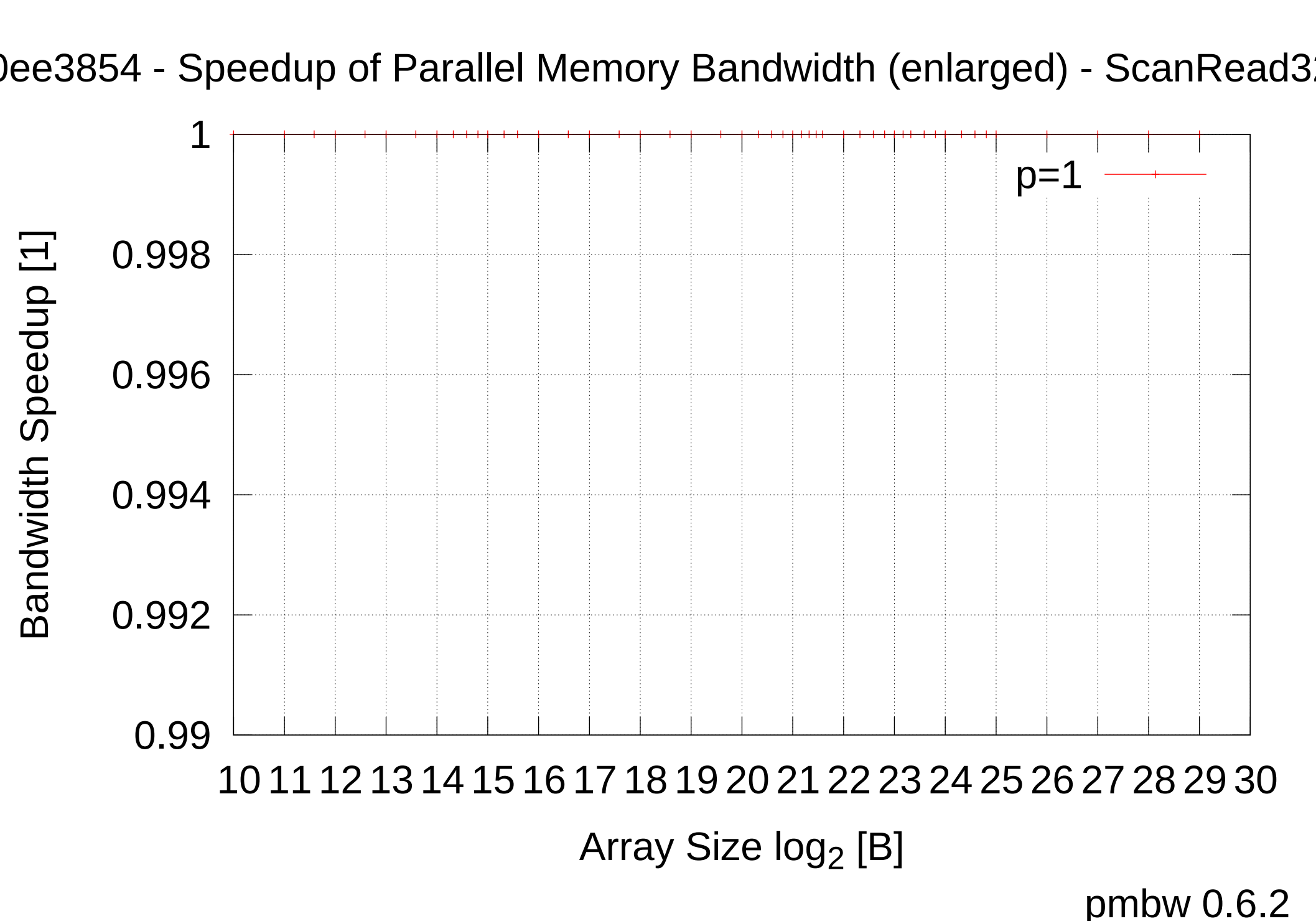

3792f0ee3854 - Speedup of Parallel Memory Bandwidth - ScanWrite32PtrU
Bandwidth Speedup [1]
1.01
1.005
1
0.995
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

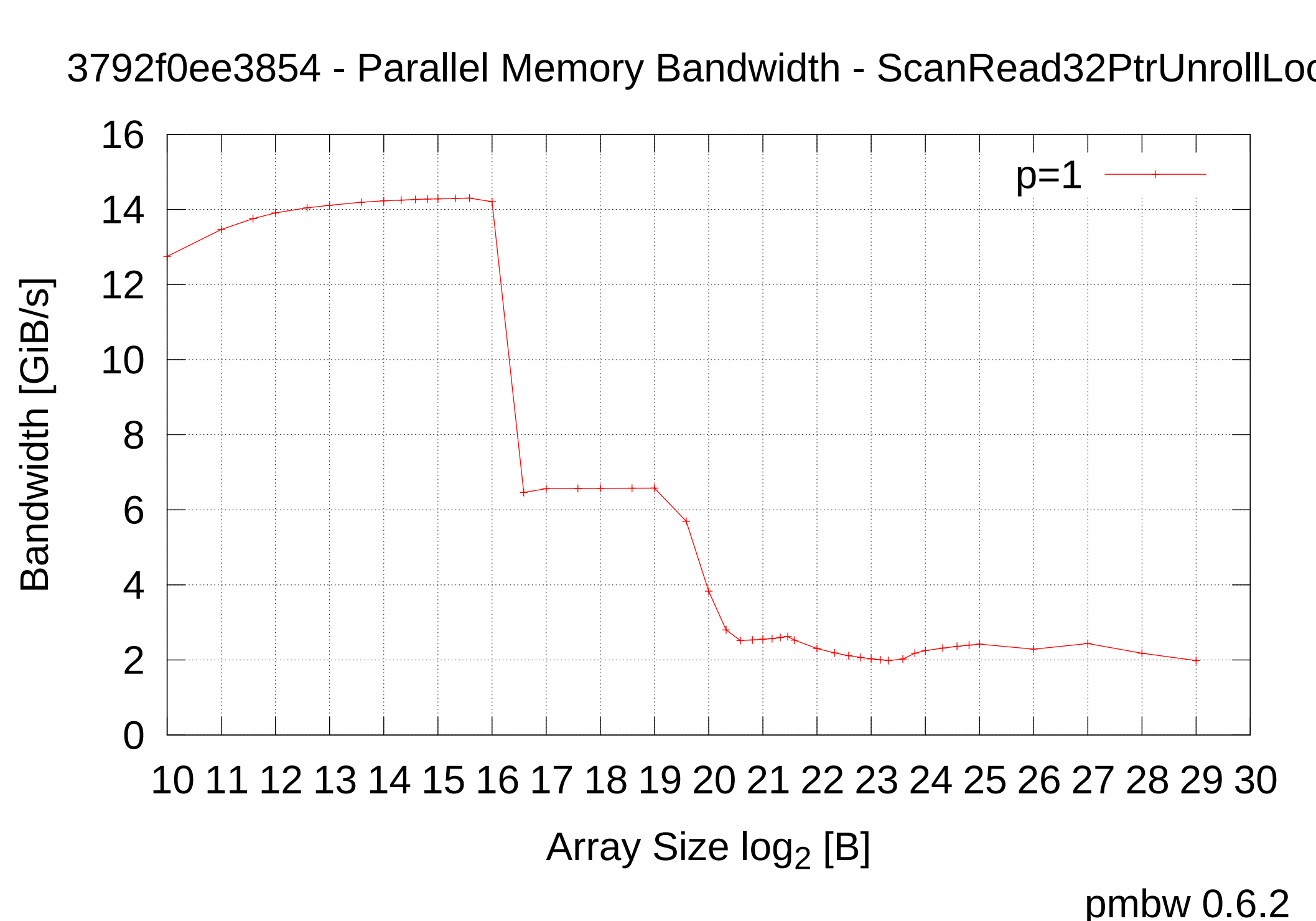

0ee3854 - Speedup of Parallel Memory Bandwidth (enlarged) - ScanWrite3
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

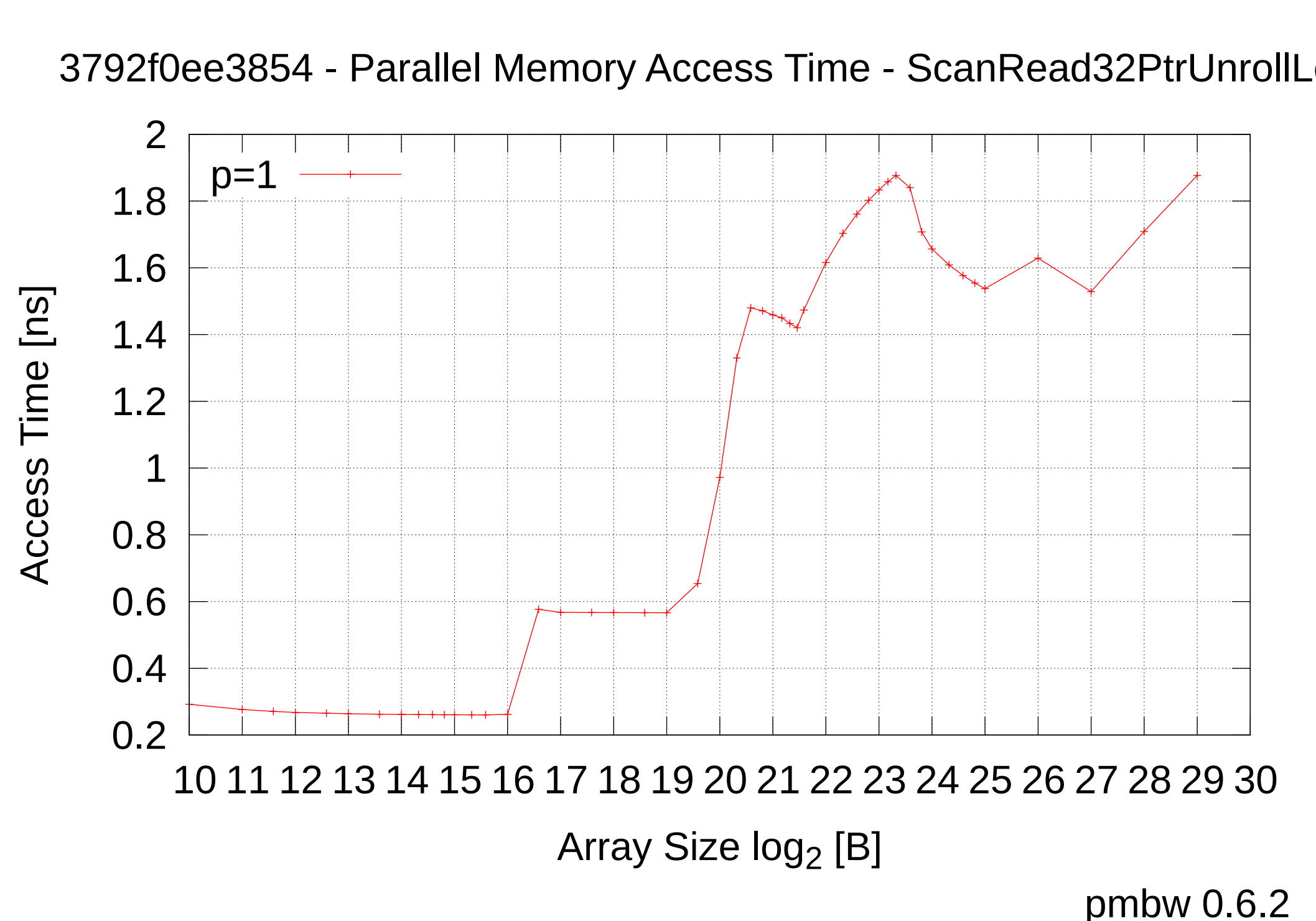

3792f0ee3854 - Parallel Memory Bandwidth - ScanRead32PtrSimpleLo
Bandwidth [GiB/s]
2.5
2.4
2.3
2.2
2.1
2
1.9
1.8
1.7
1.6
1.5
1.4
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

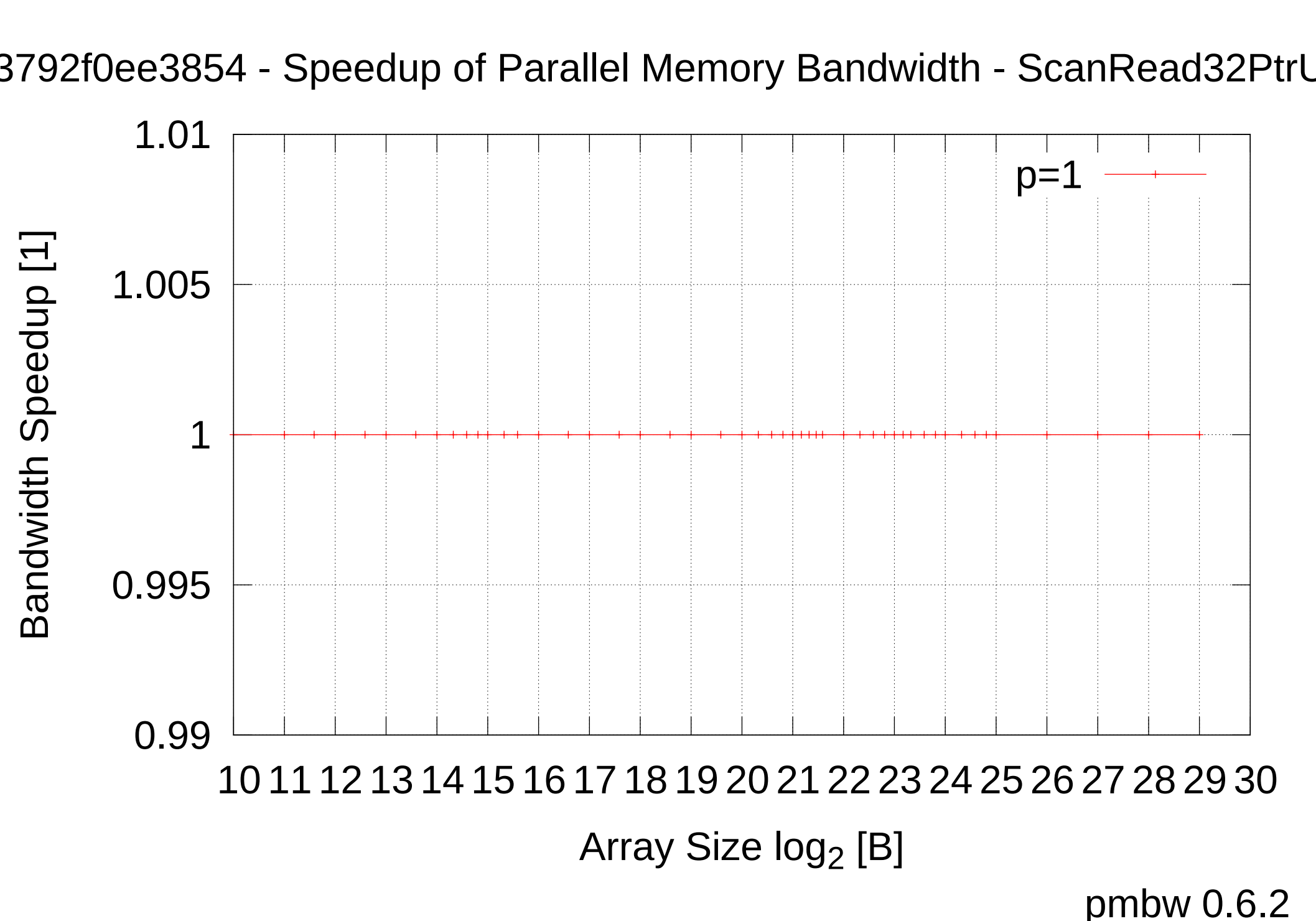

3792f0ee3854 - Parallel Memory Access Time - ScanRead32PtrSimpleL
p=1
Access Time [ns]
2.6
2.4
2.2
2
1.8
1.6
1.4
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

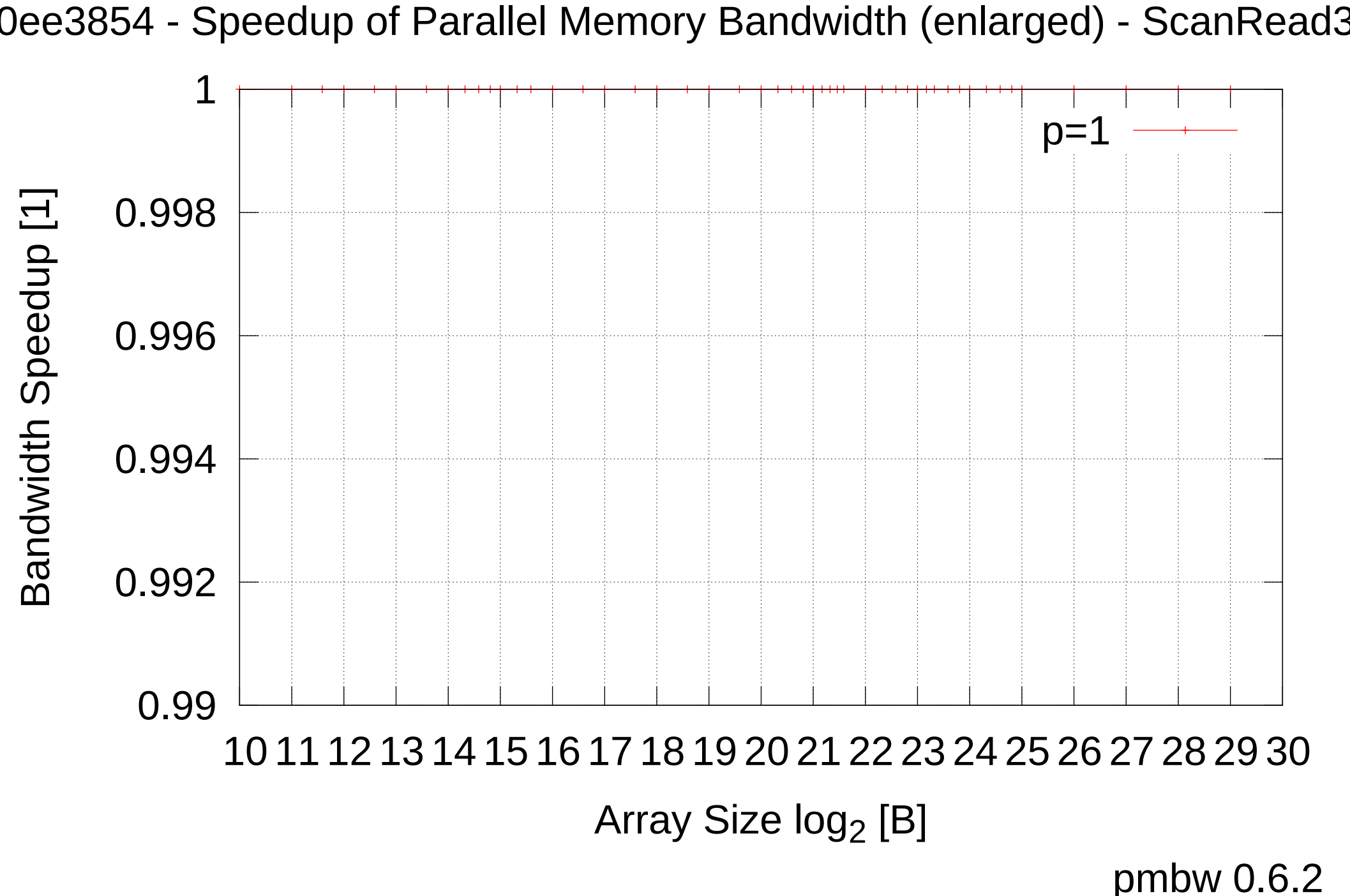

3792f0ee3854 - Speedup of Parallel Memory Bandwidth - ScanRead32PtrS
Bandwidth Speedup [1]
1.01
1.005
1
0.995
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

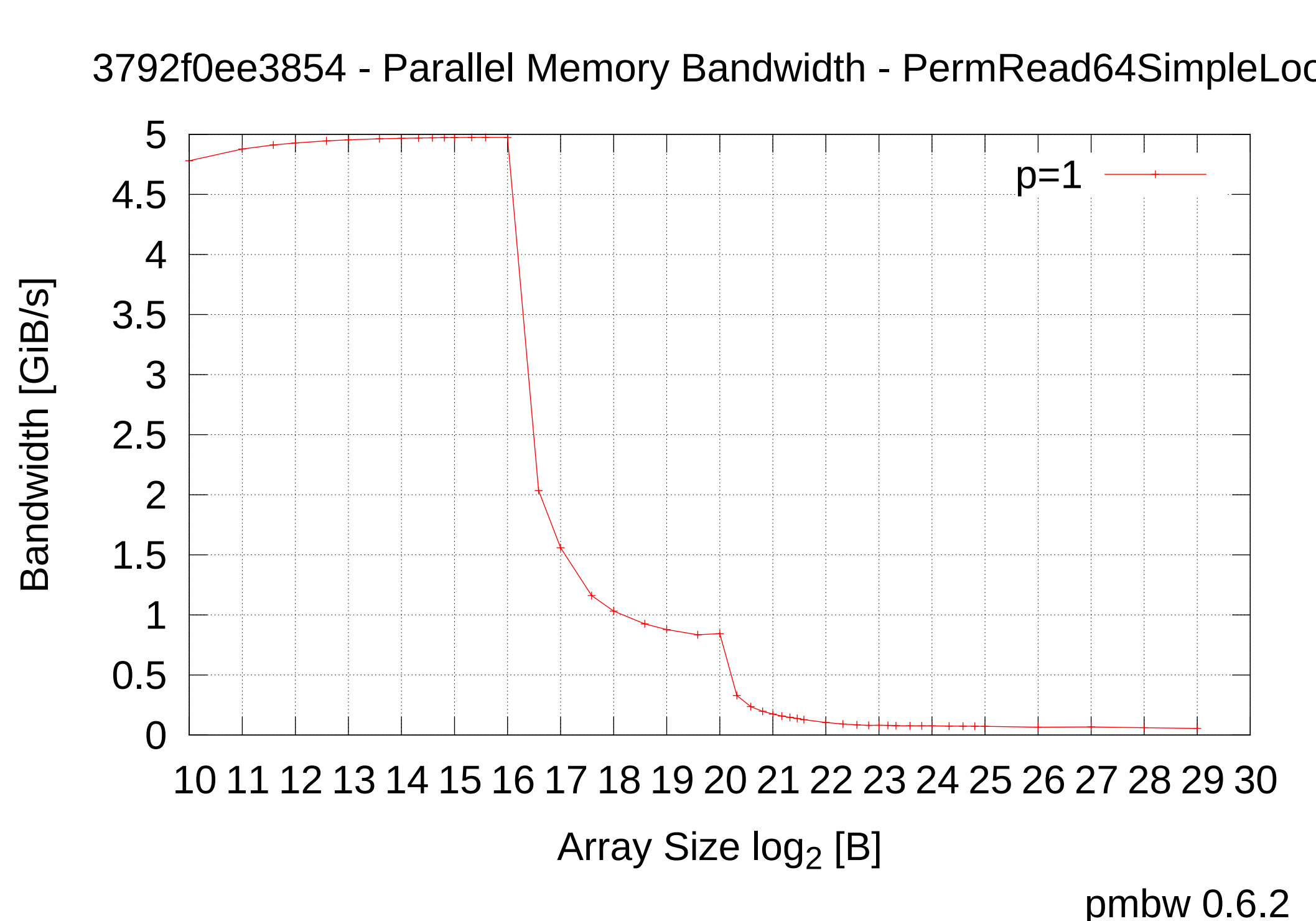

0ee3854 - Speedup of Parallel Memory Bandwidth (enlarged) - ScanRead3
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

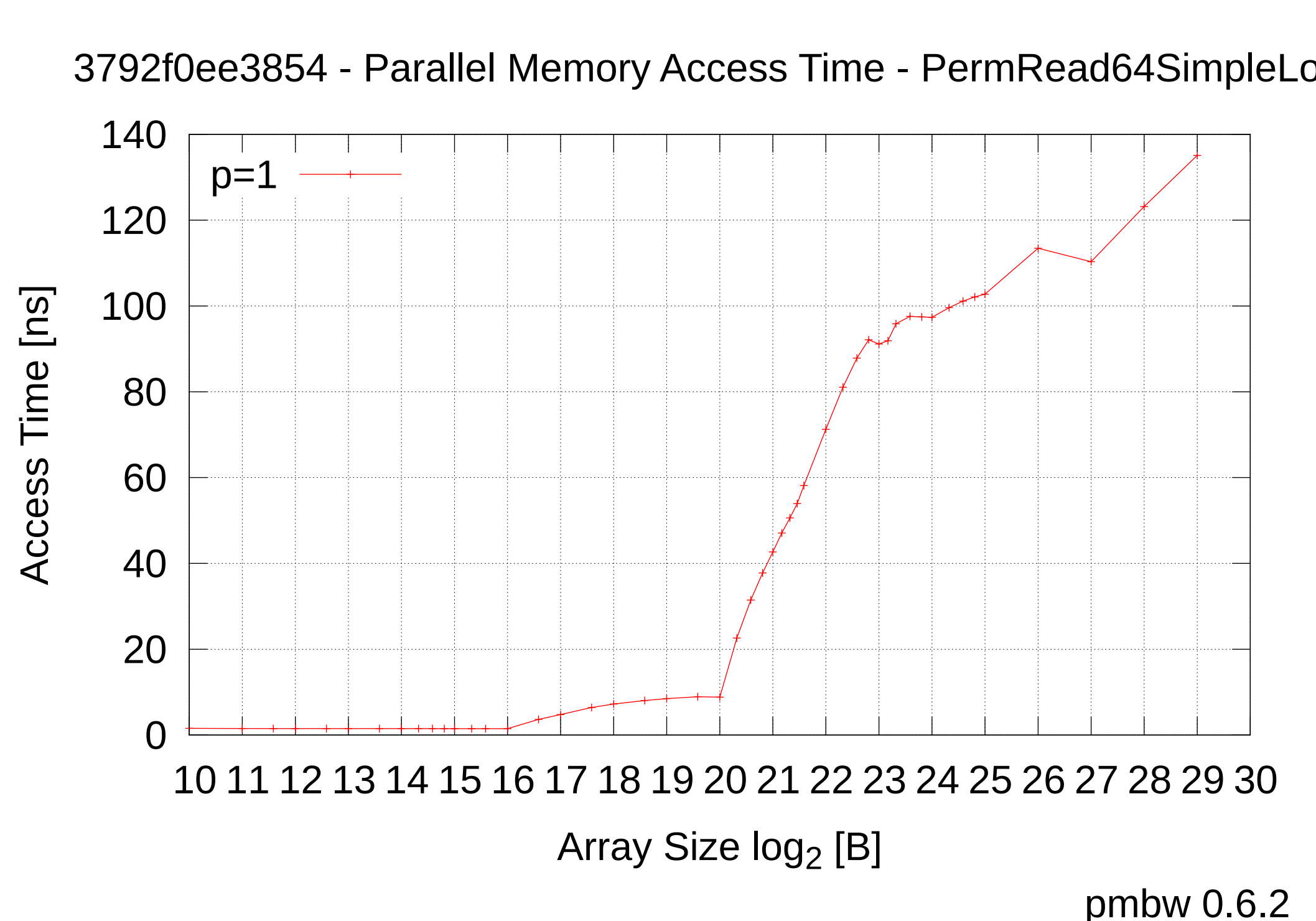

3792f0ee3854 - Parallel Memory Bandwidth - ScanRead32PtrUnrollLoo
p=1
Bandwidth [GiB/s]
0
2
4
6
8
10
12
14
16
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

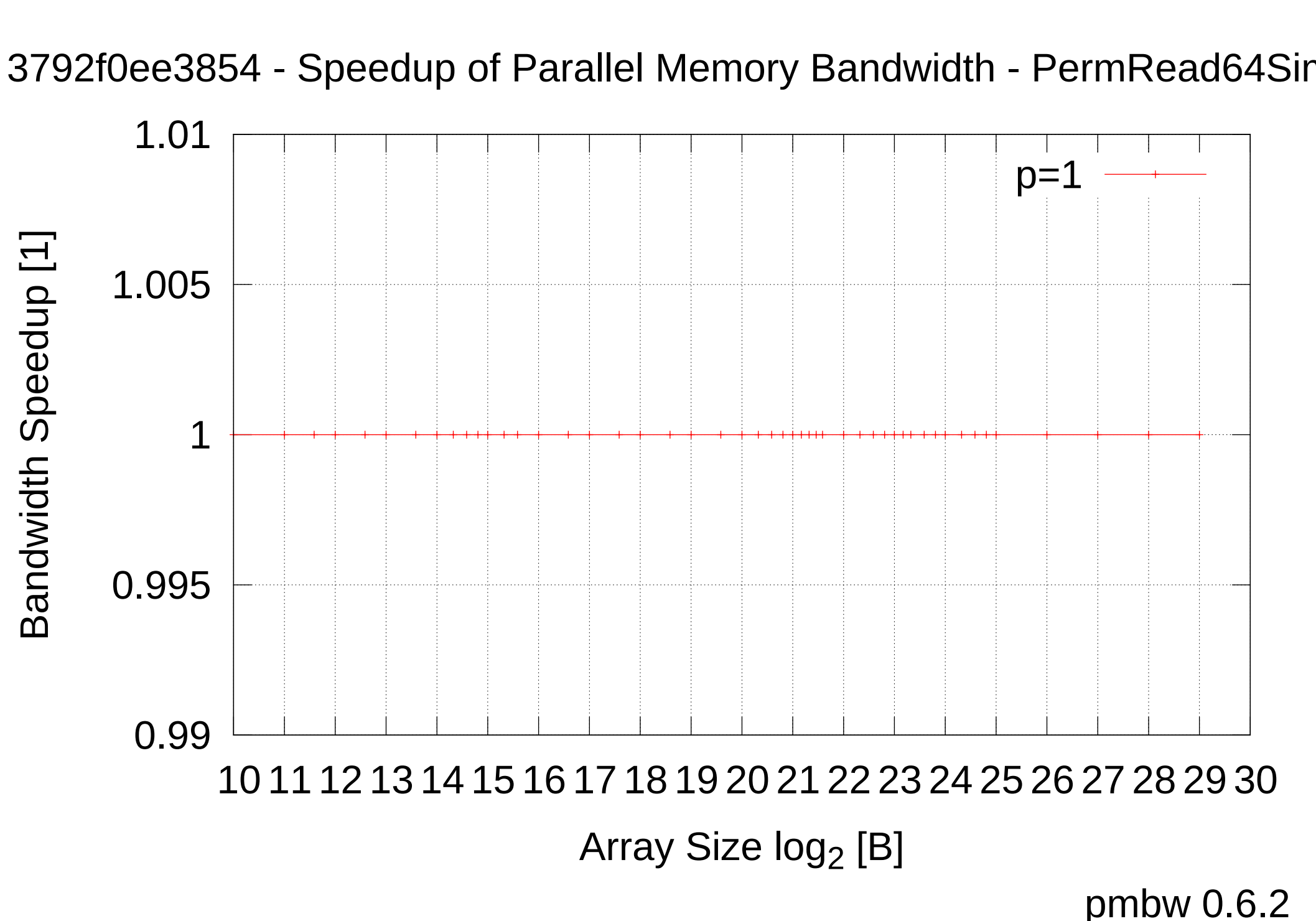

3792f0ee3854 - Parallel Memory Access Time - ScanRead32PtrUnroll
p=1
Access Time [ns]
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

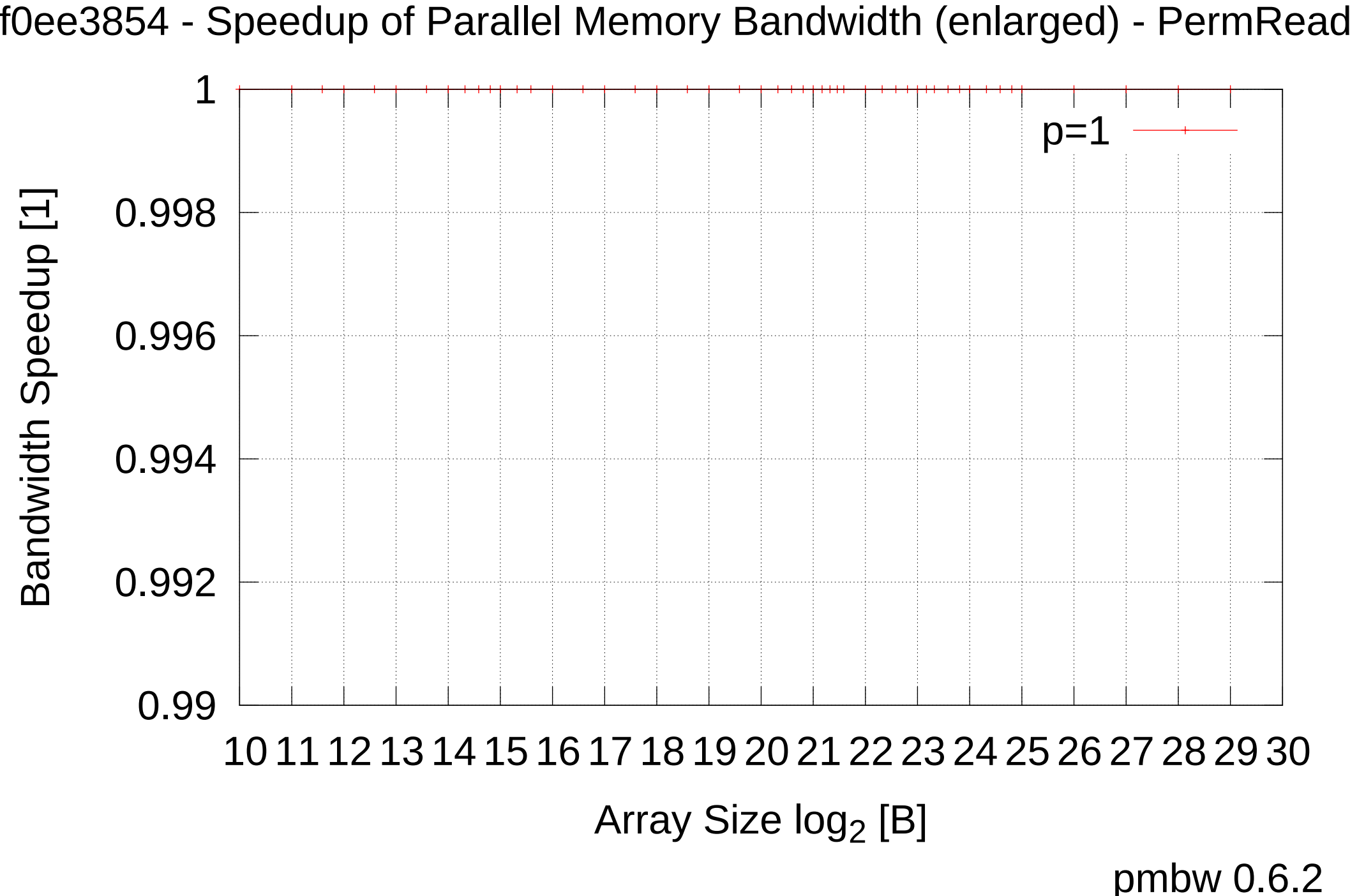

3792f0ee3854 - Speedup of Parallel Memory Bandwidth - ScanRead32PtrU
Bandwidth Speedup [1]
1.01
1.005
1
0.995
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

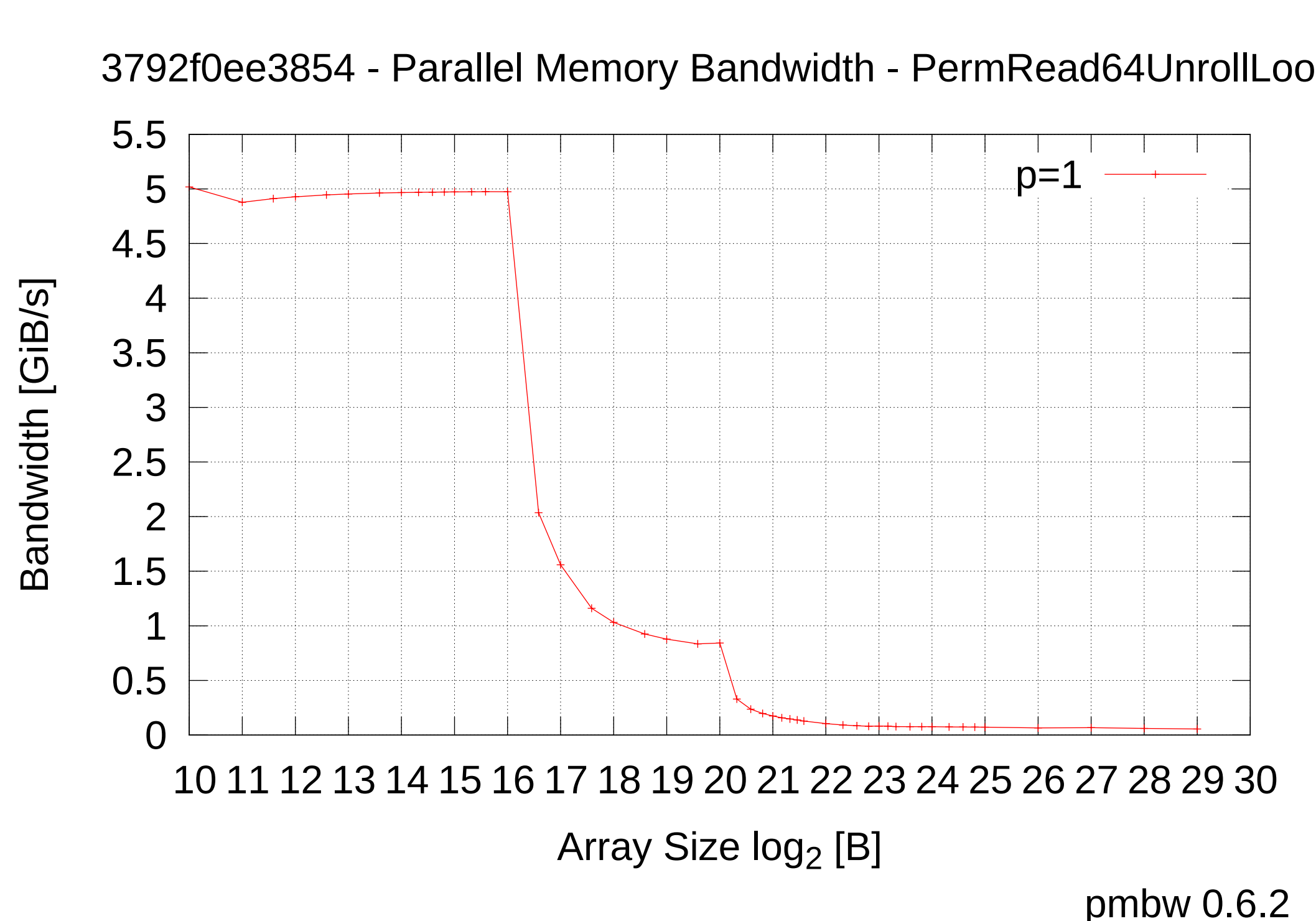

0ee3854 - Speedup of Parallel Memory Bandwidth (enlarged) - ScanRead3
Bandwidth Speedup [1]
1
0.998
0.996
0.994
0.992
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

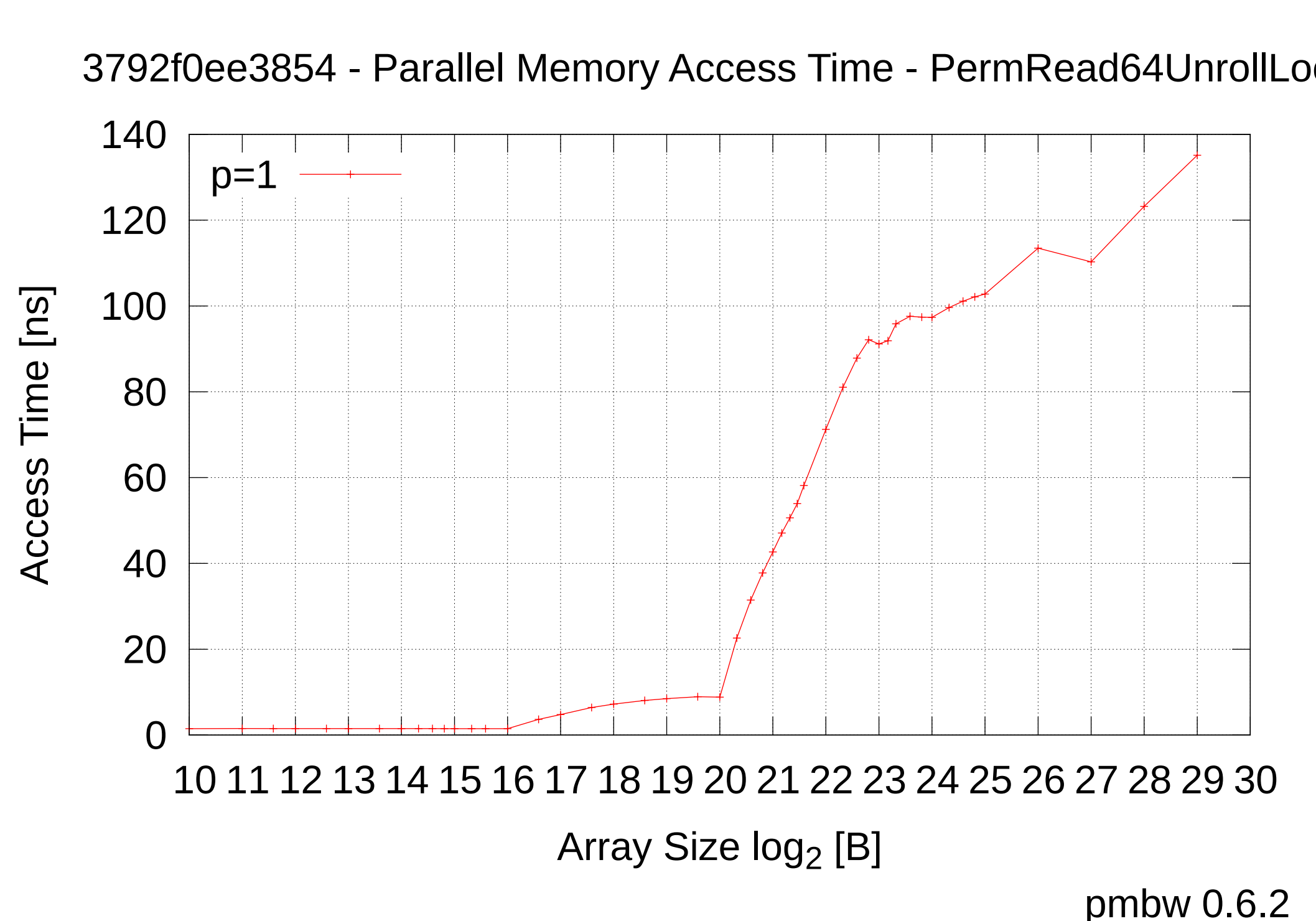

3792f0ee3854 - Parallel Memory Bandwidth - PermRead64SimpleLoc
Bandwidth [GiB/s]
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

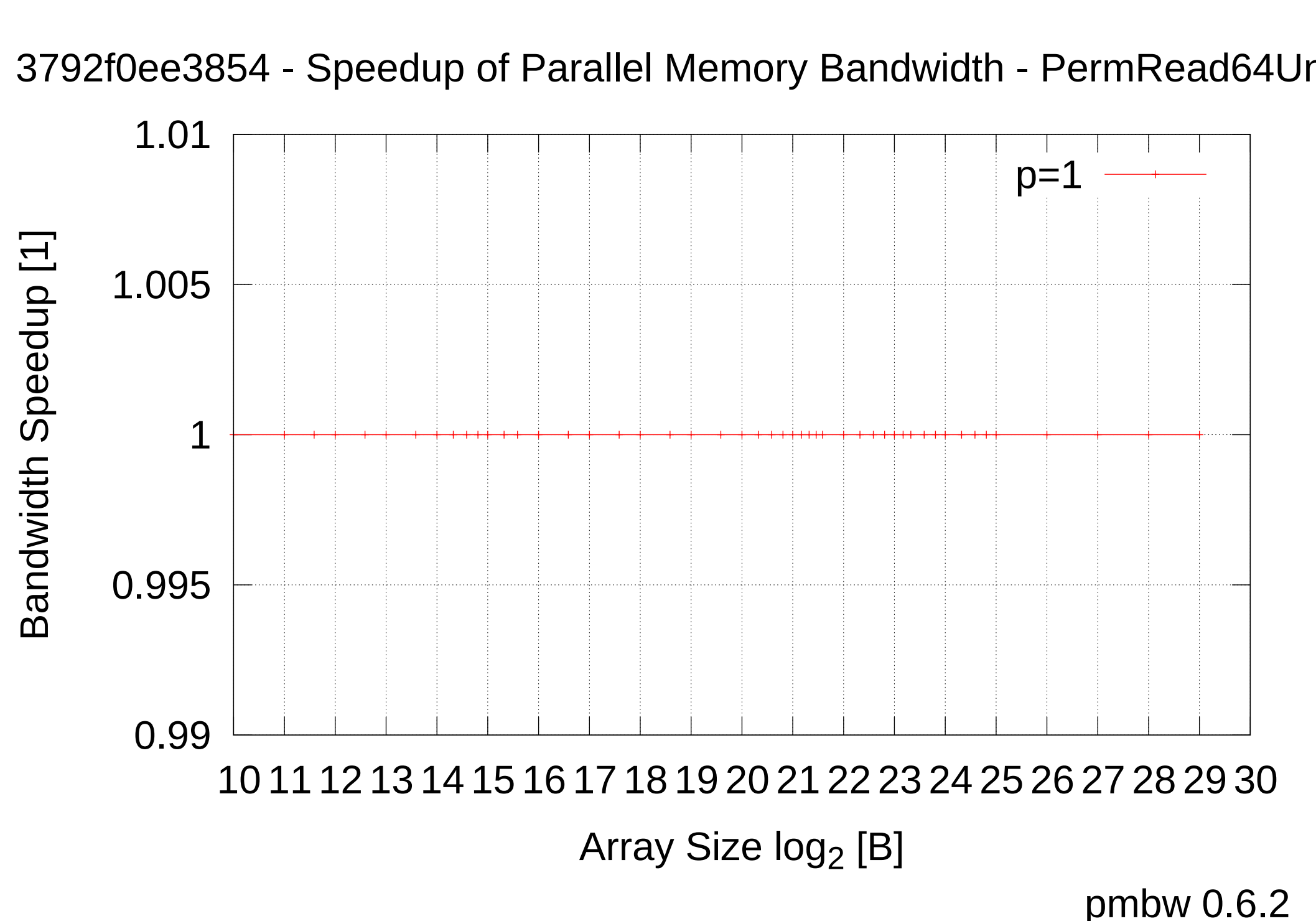

3792f0ee3854 - Parallel Memory Access Time - PermRead64SimpleLo
p=1
Access Time [ns]
0
20
40
60
80
100
120
140
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2

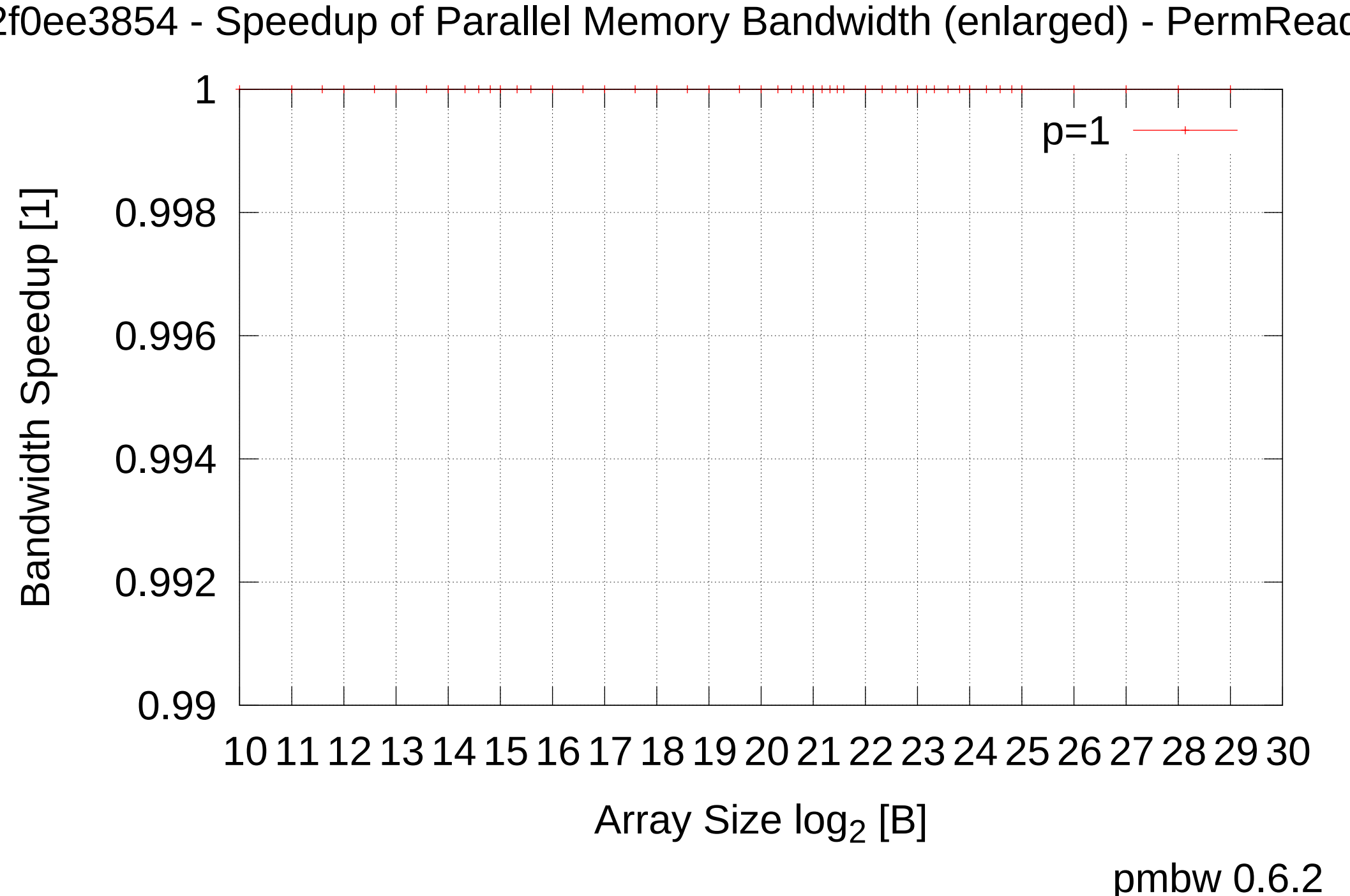

3792f0ee3854 - Speedup of Parallel Memory Bandwidth - PermRead64Sir
Bandwidth Speedup [1]
1.01
1.005
1
0.995
0.99
p=1
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Array Size log2 [B]
pmbw 0.6.2


f0ee3854 - Speedup of Parallel Memory Bandwidth (enlarged) - PermRead
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


3792f0ee3854 - Parallel Memory Bandwidth - PermRead64UnrollLoo
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


3792f0ee3854 - Parallel Memory Access Time - PermRead64UnrollLo
p=1
Access Time [ns]
0
20
40
60
80
100
120
140
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


3792f0ee3854 - Speedup of Parallel Memory Bandwidth - PermRead64Ur
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


2f0ee3854 - Speedup of Parallel Memory Bandwidth (enlarged) - PermRead
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