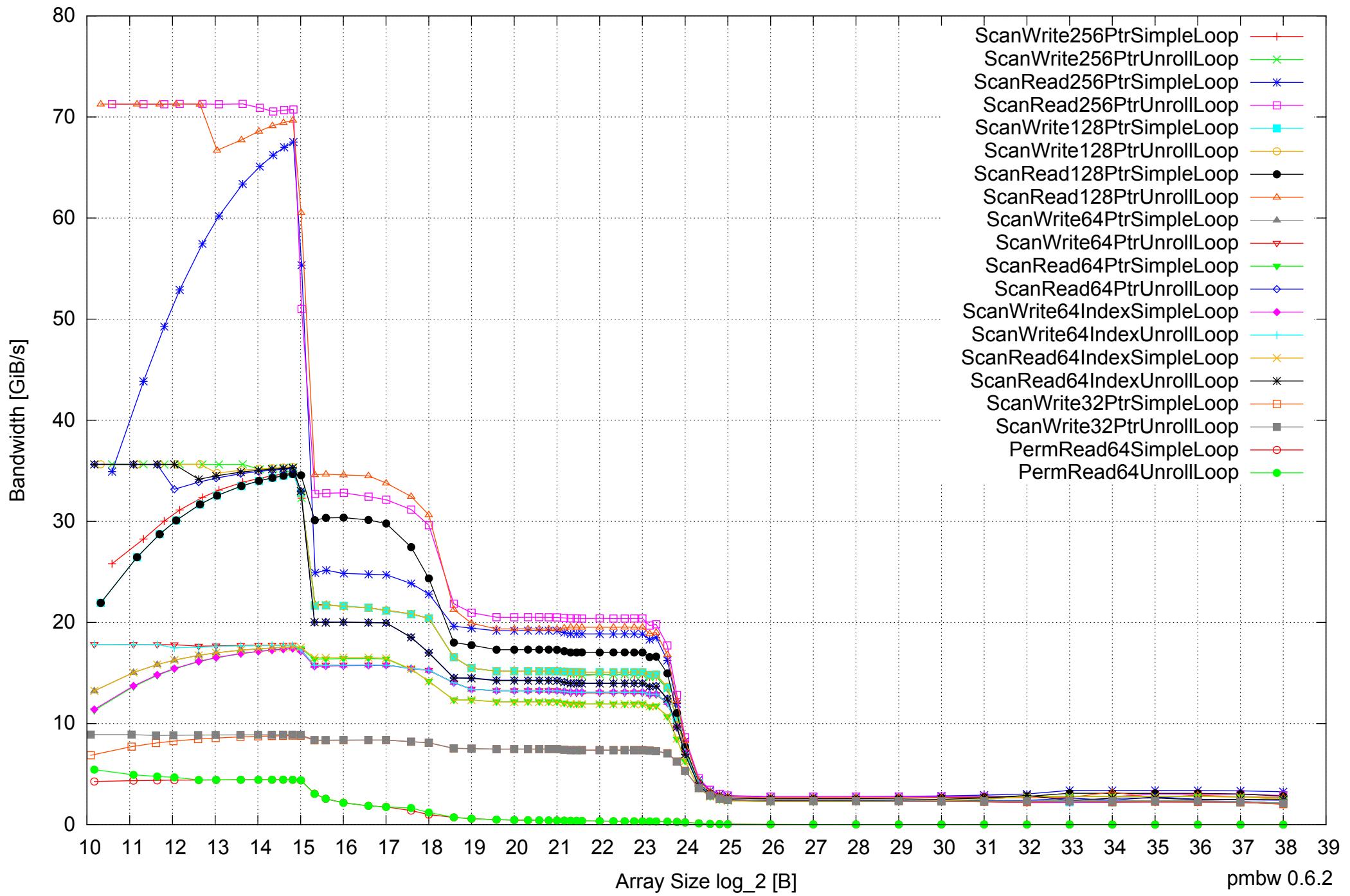
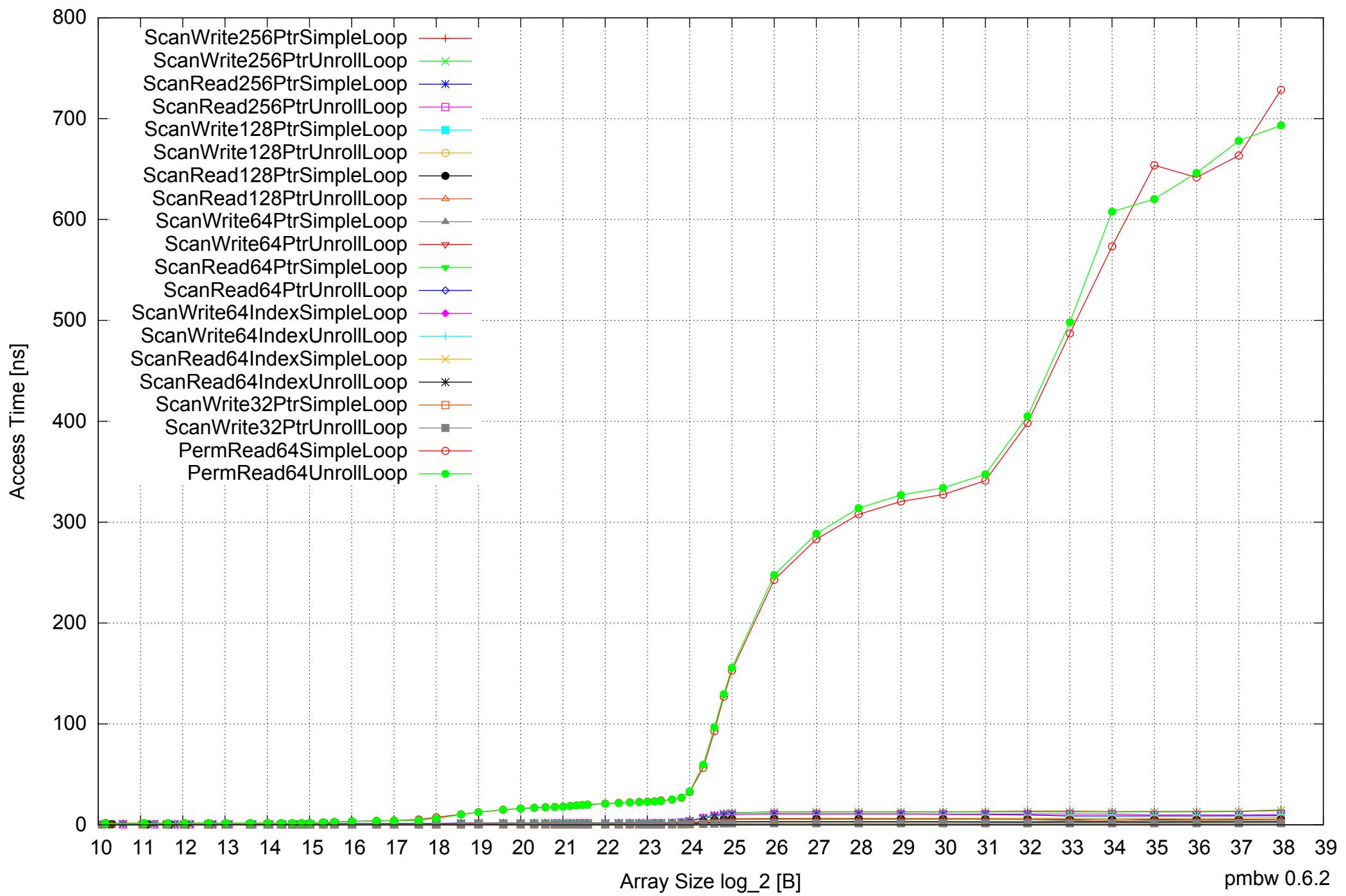


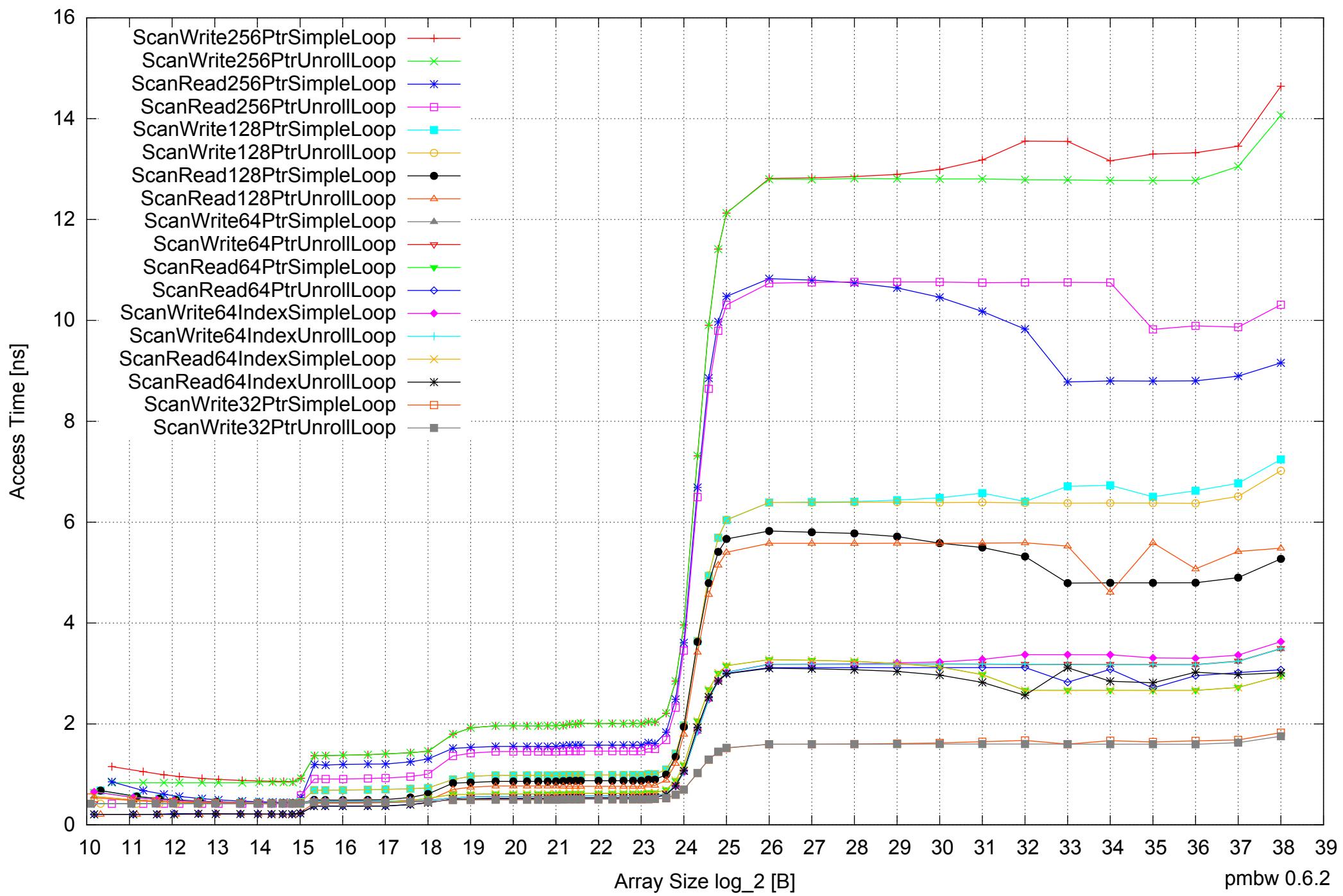
# Intel Xeon E5-4640 512GB - One Thread Memory Bandwidth



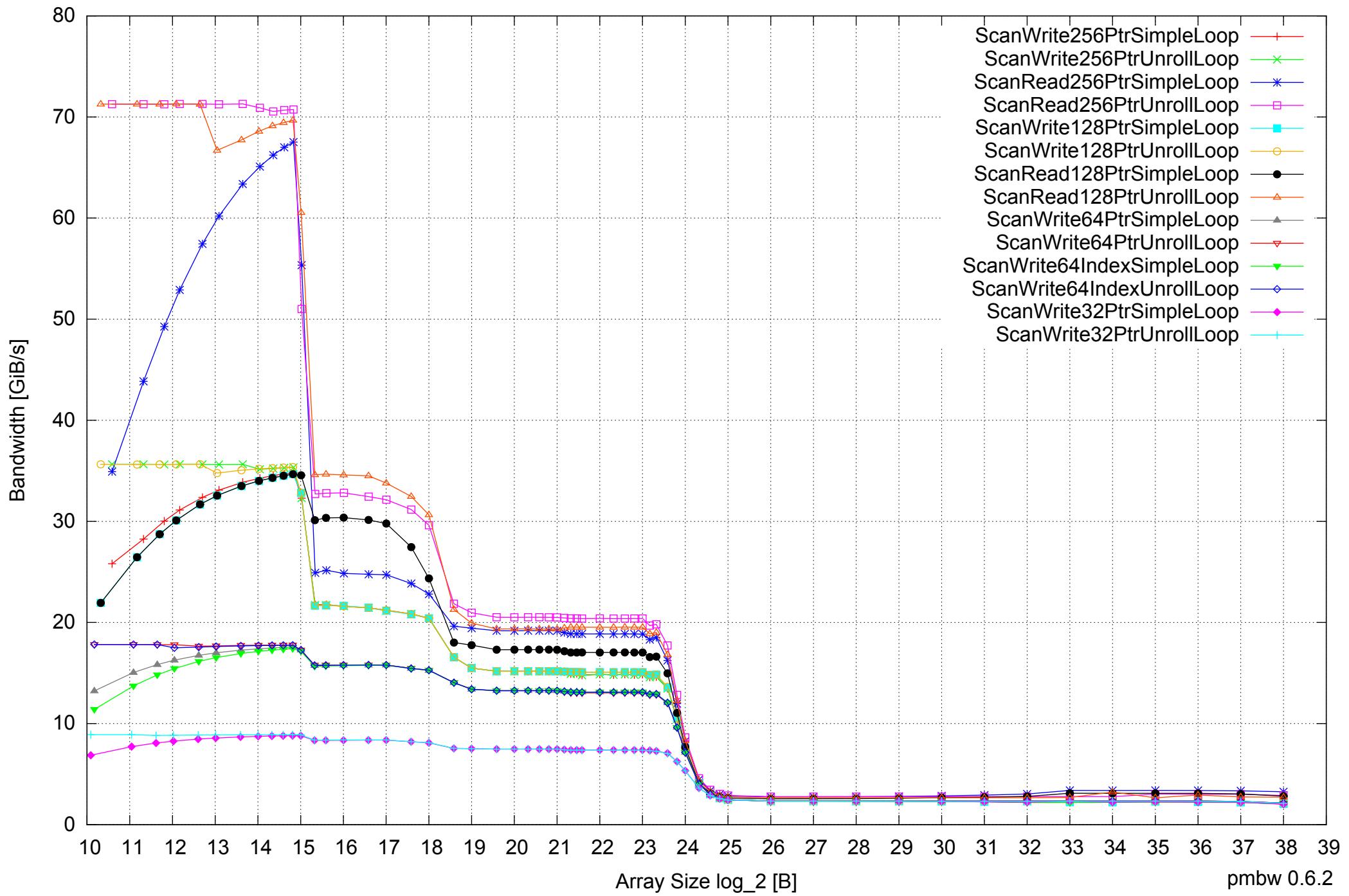
# Intel Xeon E5-4640 512GB - One Thread Memory Latency (Access Time)



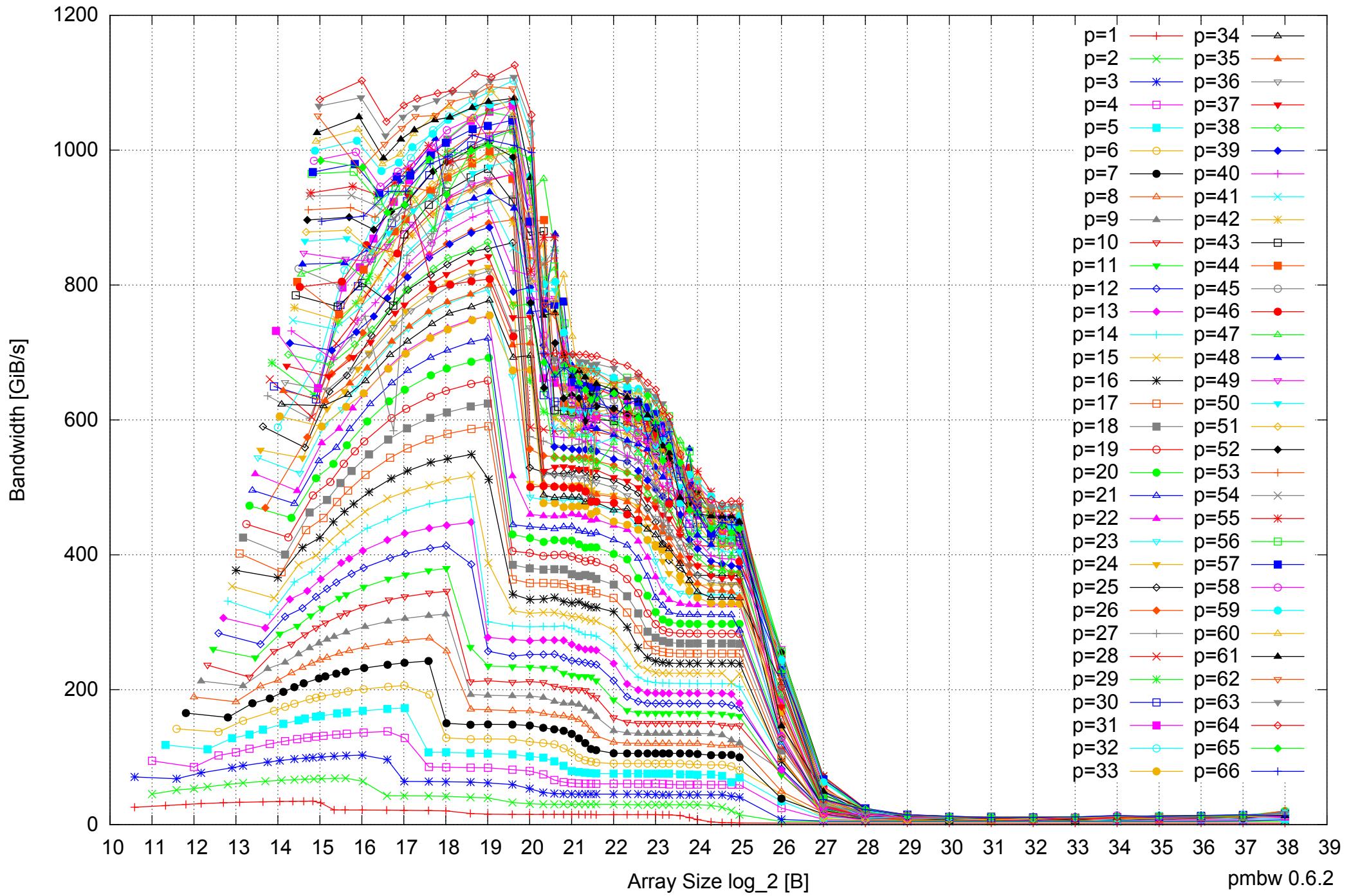
# Intel Xeon E5-4640 512GB - One Thread Memory Latency (excluding Permutation)



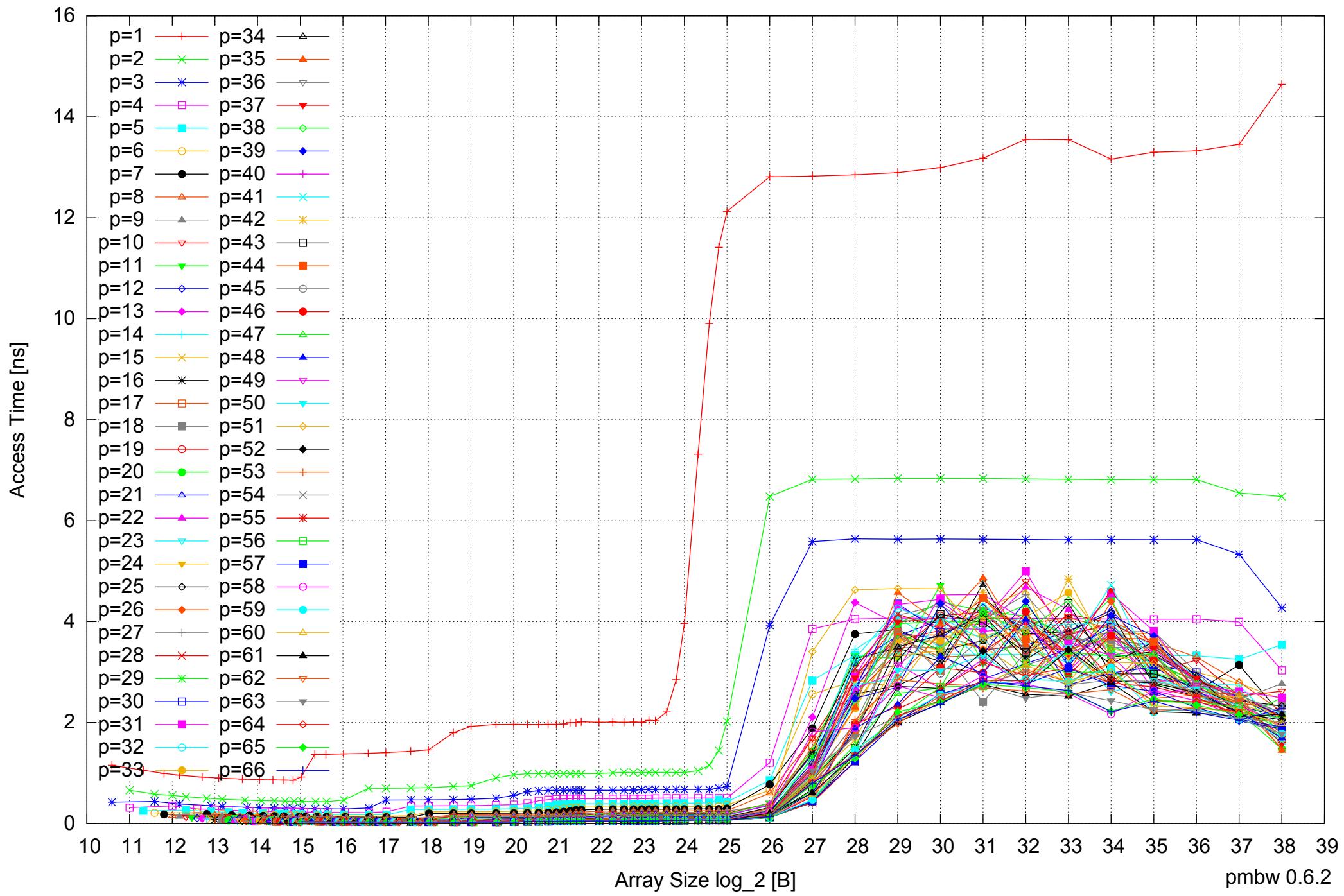
# Intel Xeon E5-4640 512GB - One Thread Memory Bandwidth (only 64-bit Reads)



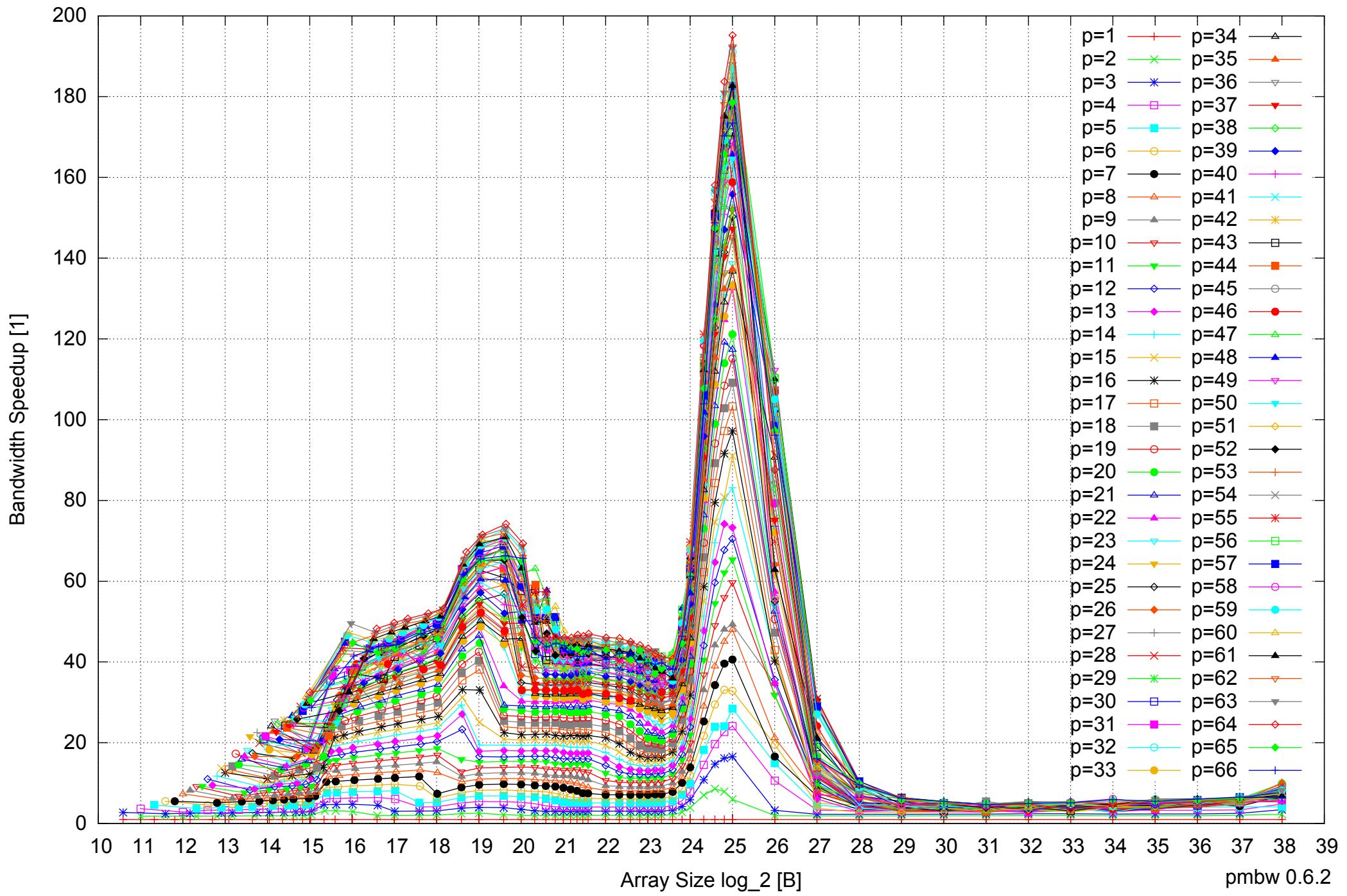
# Intel Xeon E5-4640 512GB - Parallel Memory Bandwidth - ScanWrite256PtrSimpleLoop



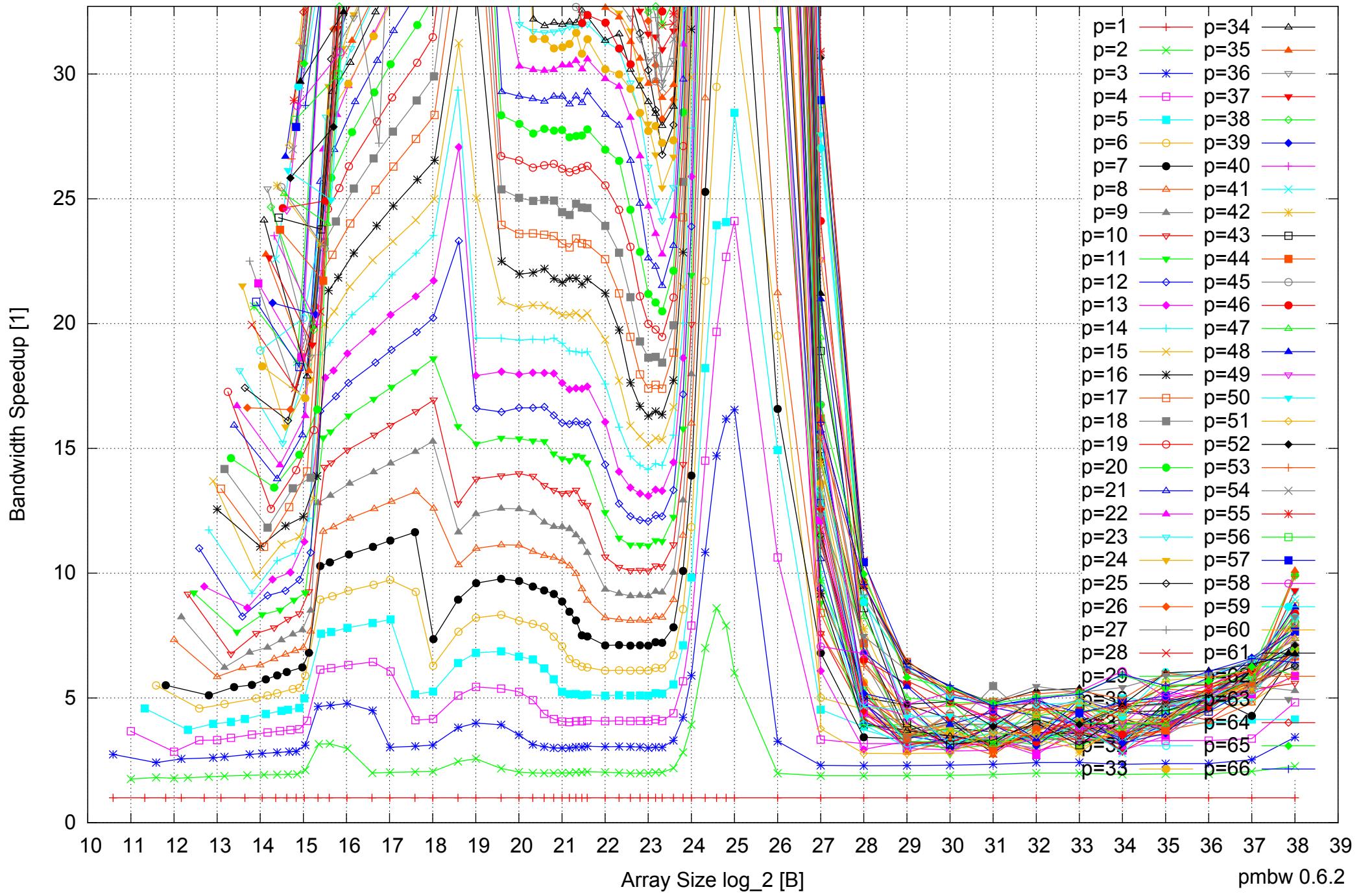
# Intel Xeon E5-4640 512GB - Parallel Memory Access Time - ScanWrite256PtrSimpleLoop



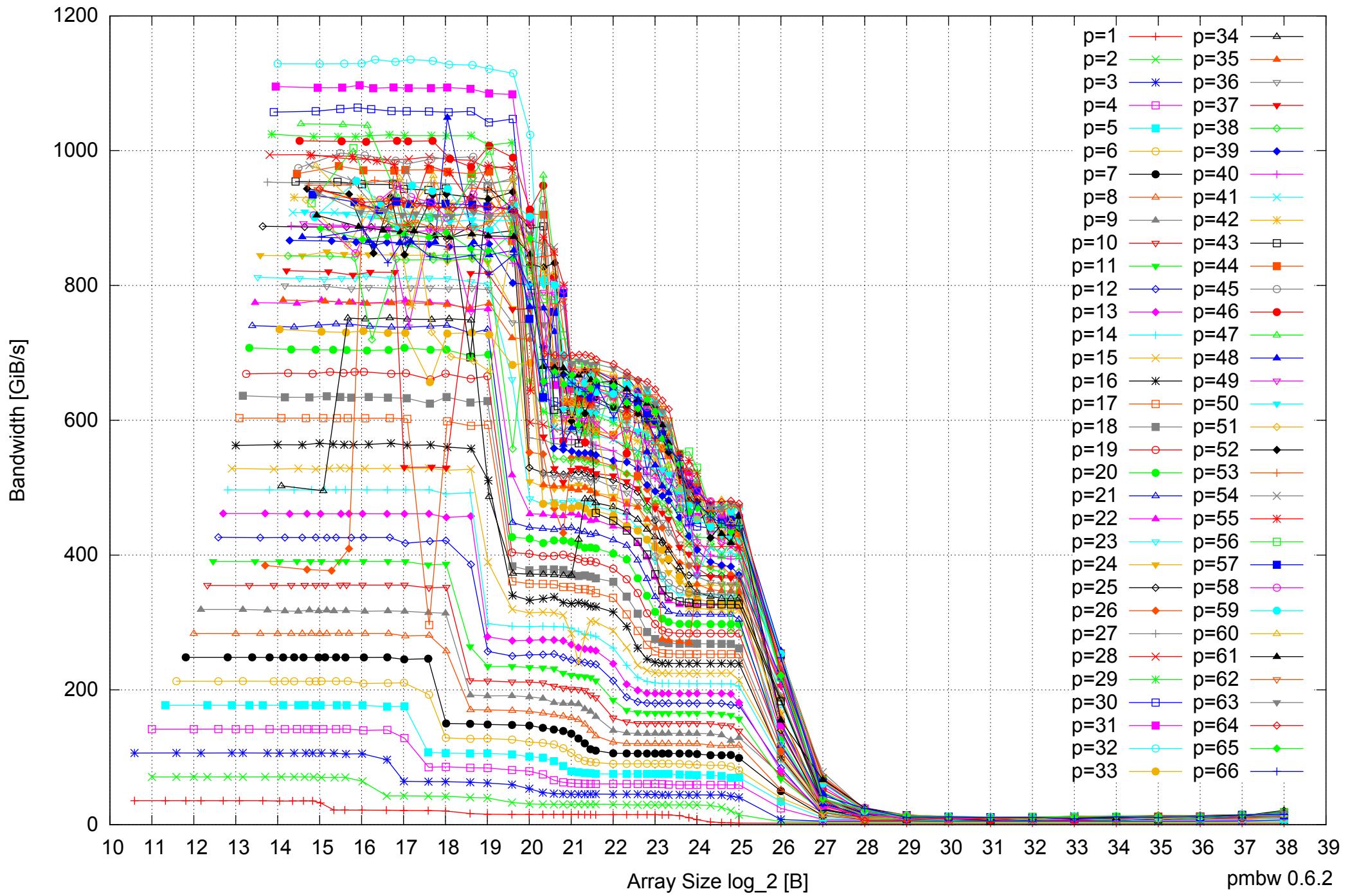
# Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth - ScanWrite256PtrSimpleLoop



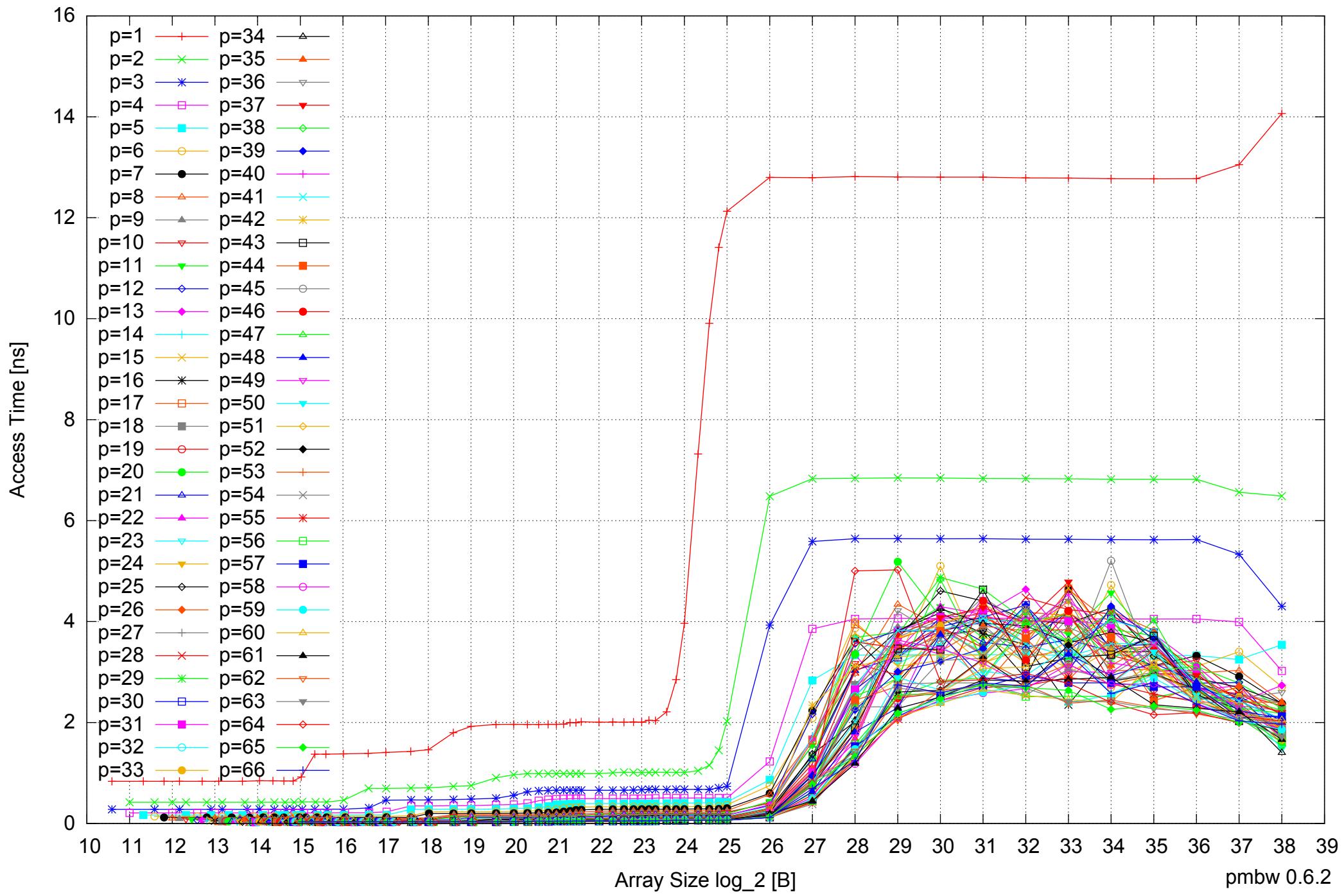
Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth (enlarged) - ScanWrite256PtrSimpleLoop



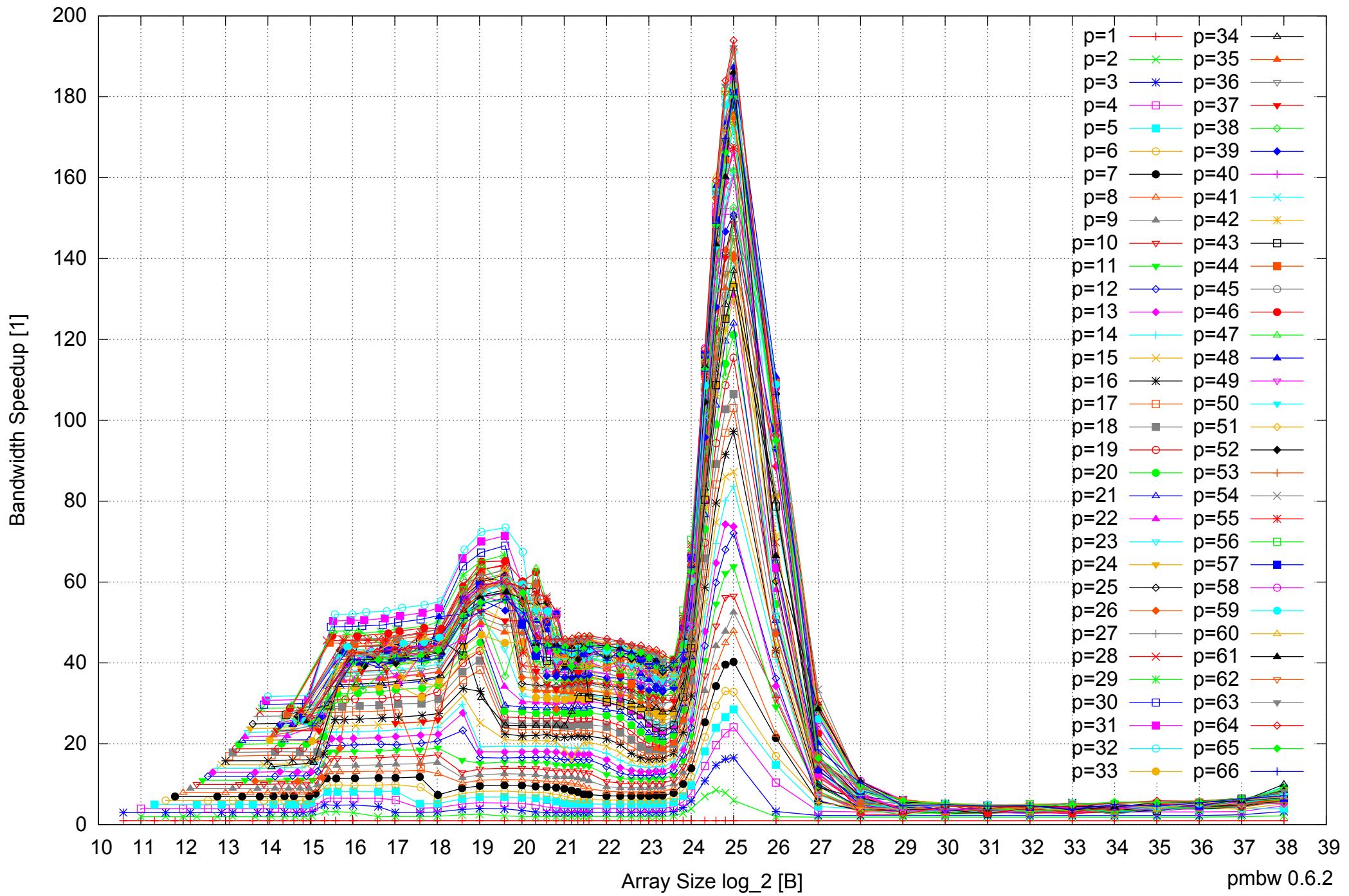
# Intel Xeon E5-4640 512GB - Parallel Memory Bandwidth - ScanWrite256PtrUnrollLoop



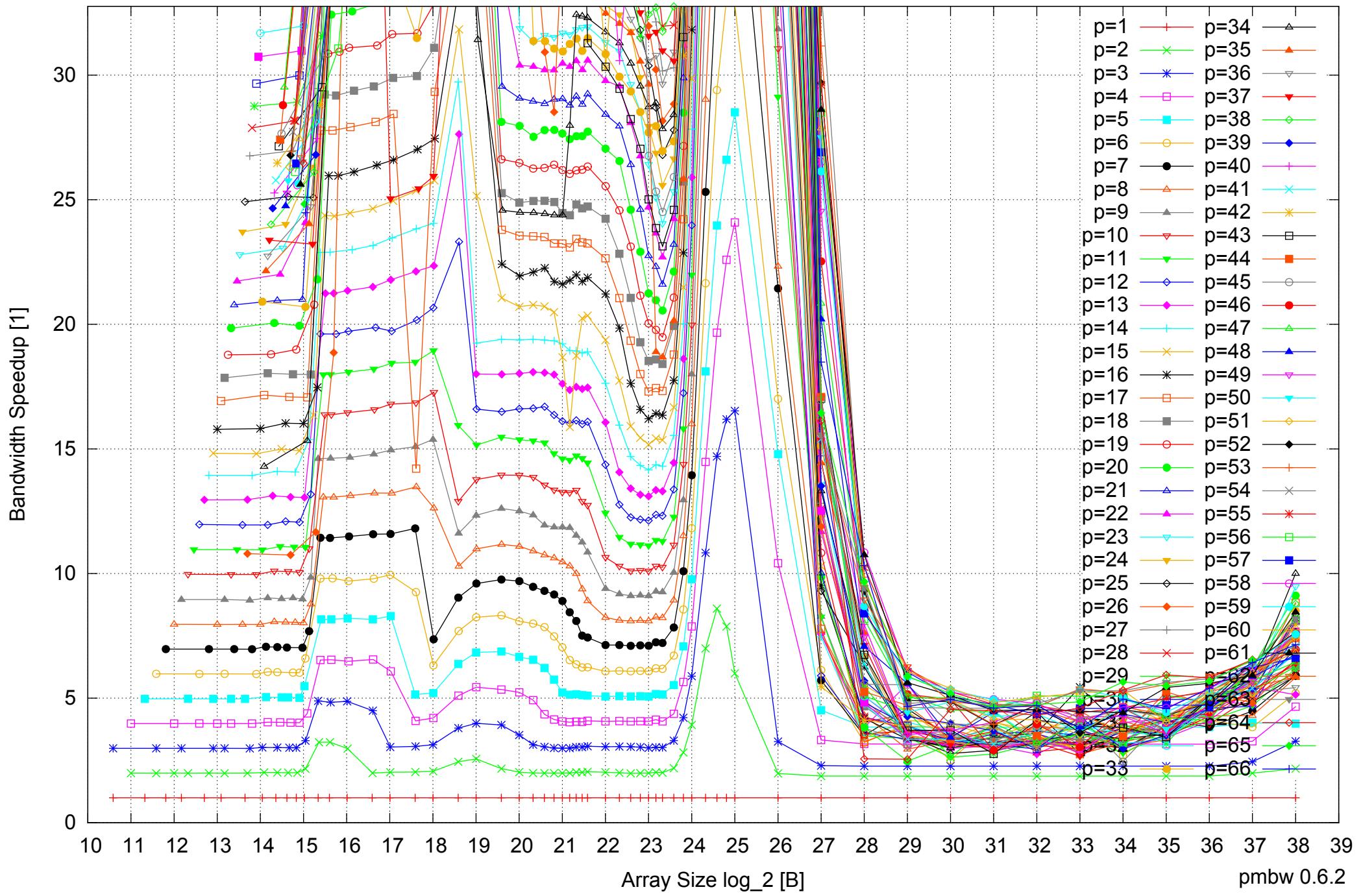
# Intel Xeon E5-4640 512GB - Parallel Memory Access Time - ScanWrite256PtrUnrollLoop



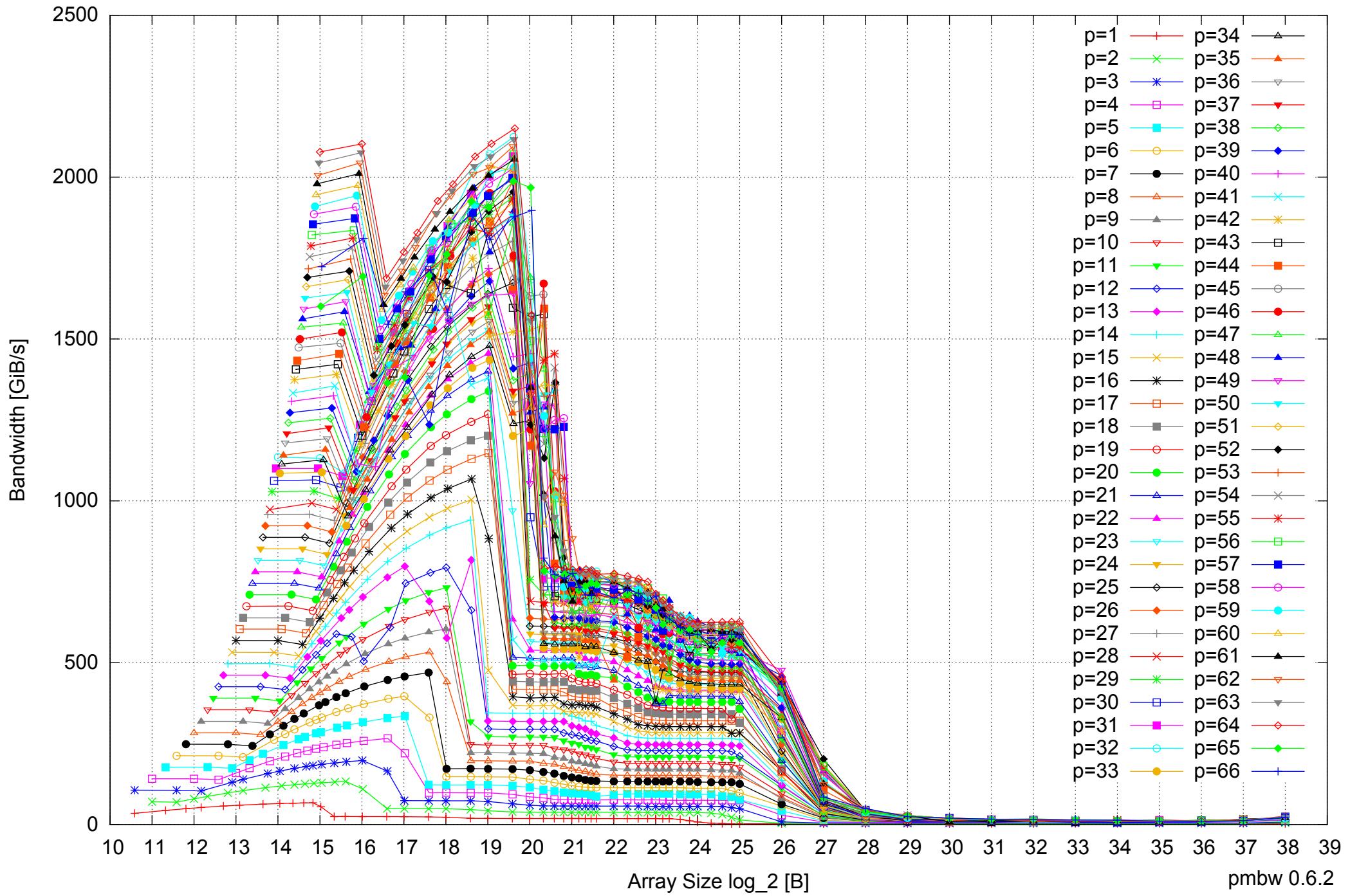
Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth - ScanWrite256PtrUnrollLoop



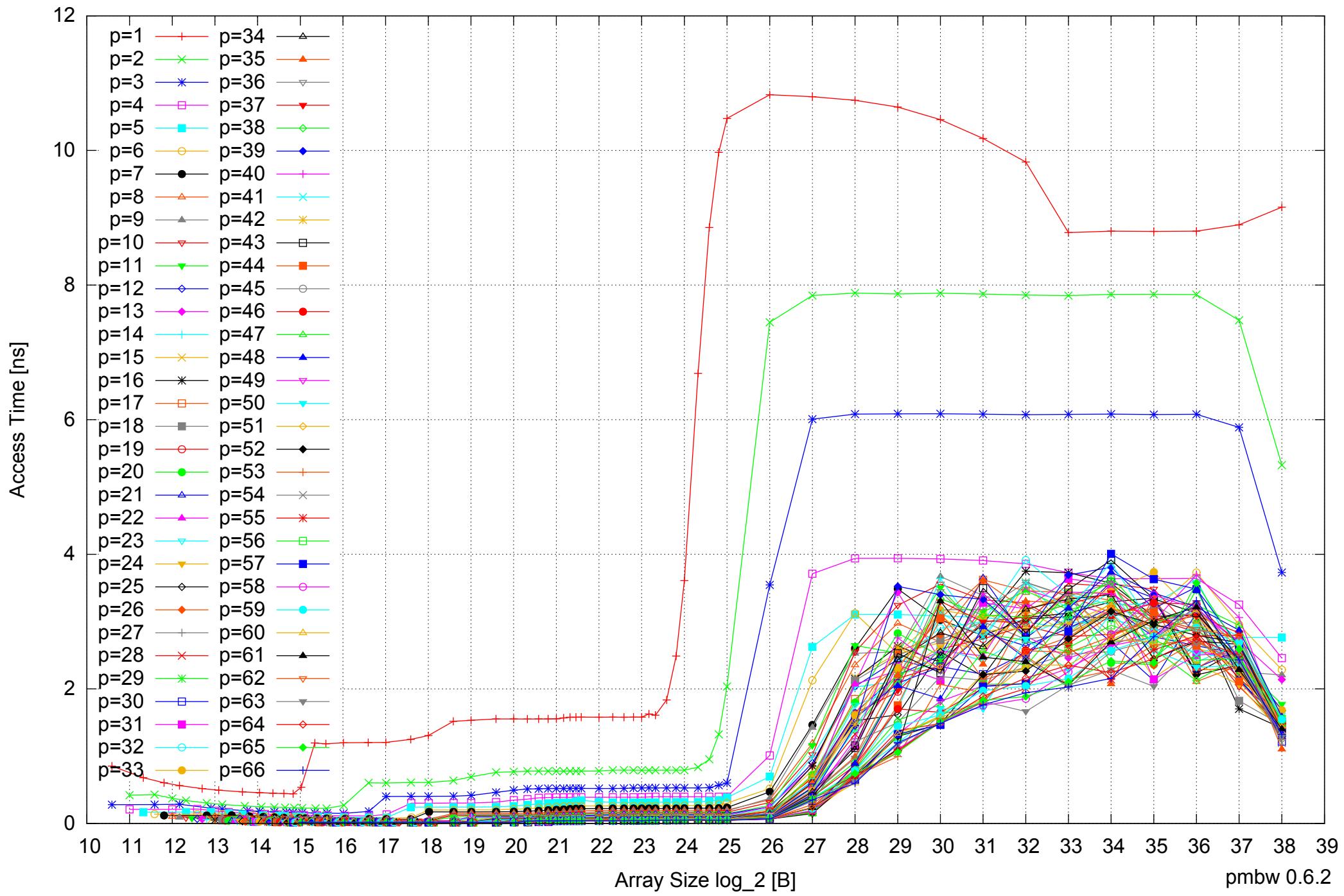
Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth (enlarged) - ScanWrite256PtrUnrollLoop



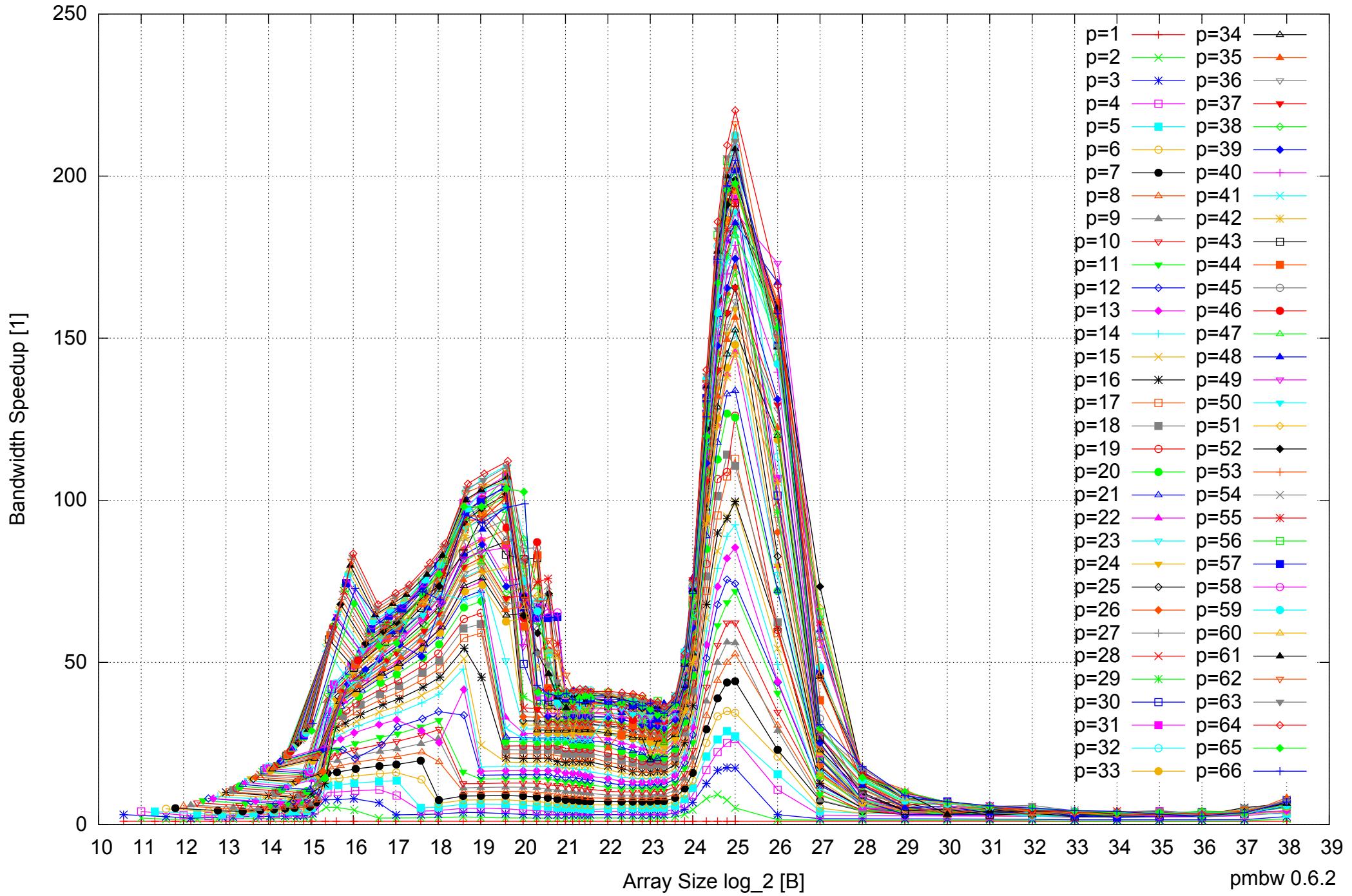
# Intel Xeon E5-4640 512GB - Parallel Memory Bandwidth - ScanRead256PtrSimpleLoop



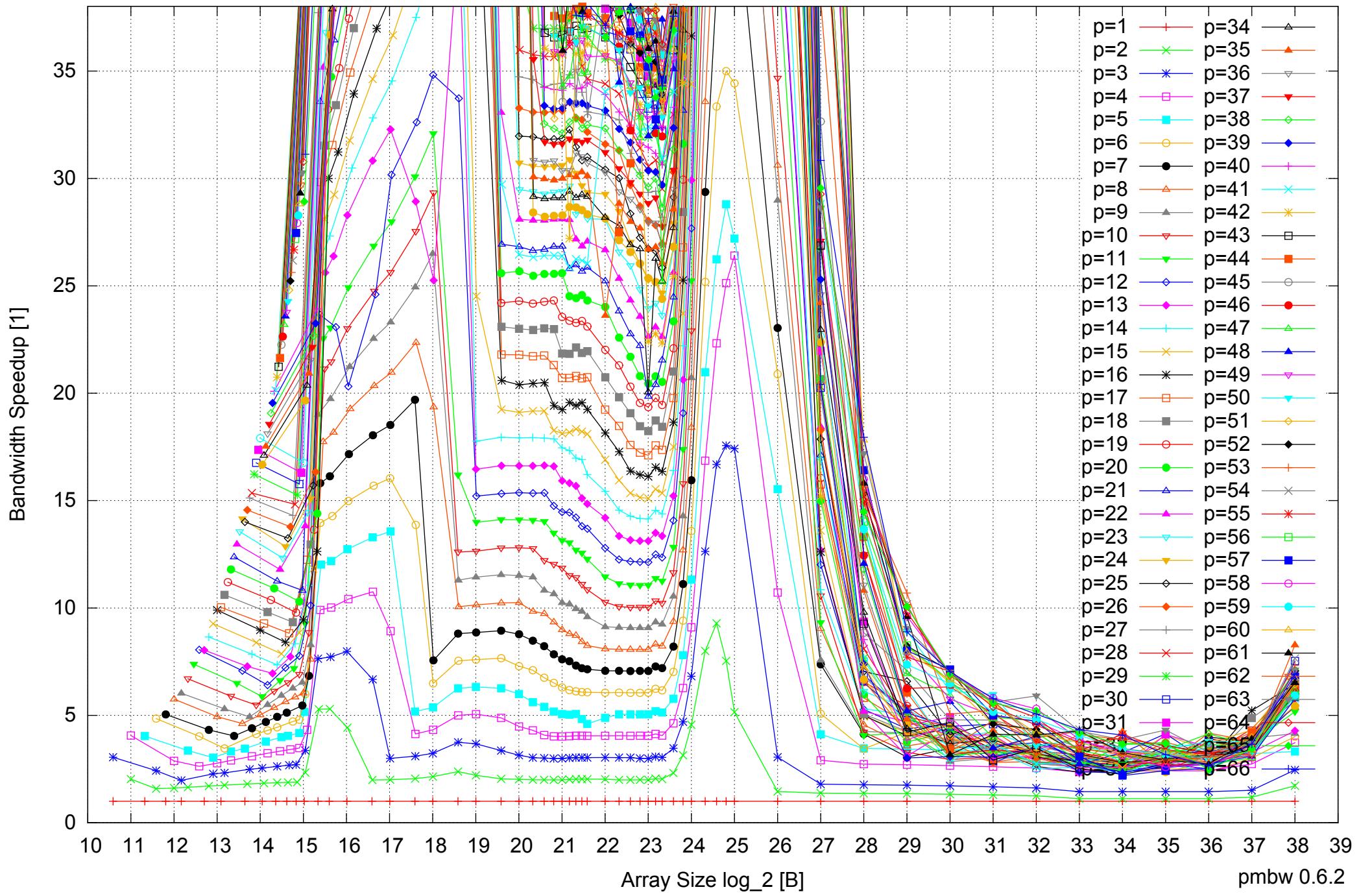
# Intel Xeon E5-4640 512GB - Parallel Memory Access Time - ScanRead256PtrSimpleLoop



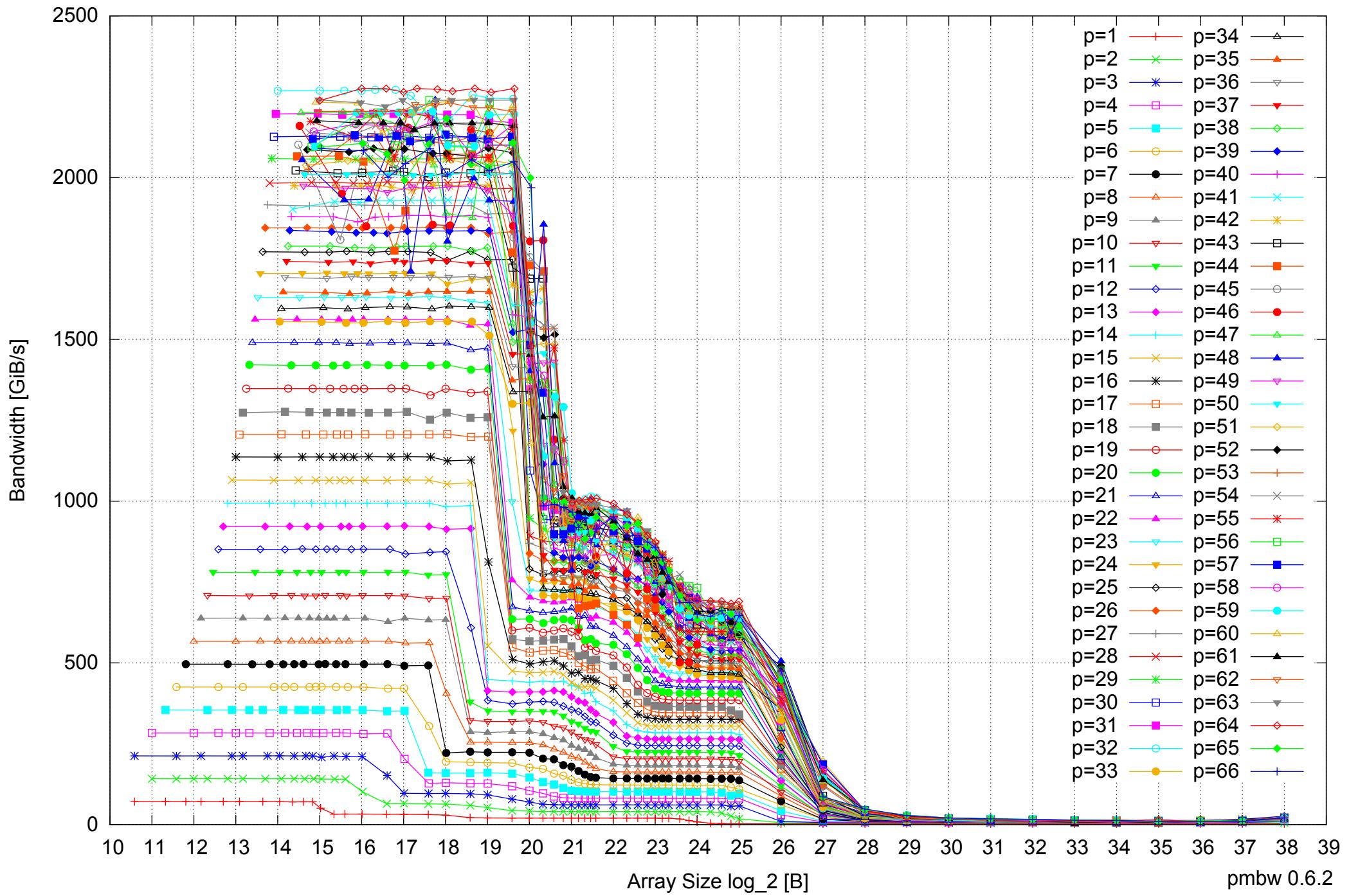
# Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth - ScanRead256PtrSimpleLoop



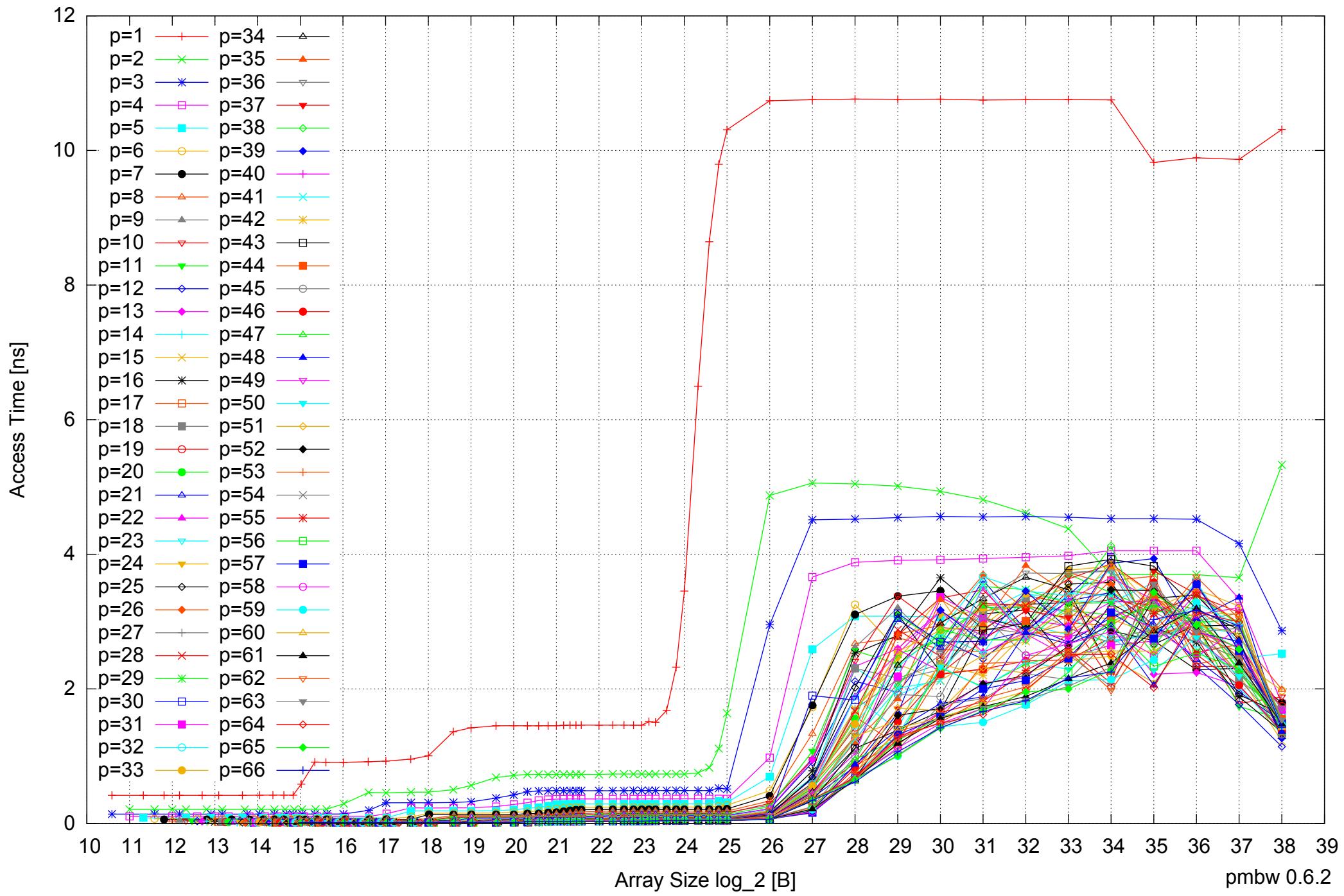
Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth (enlarged) - ScanRead256PtrSimpleLoop



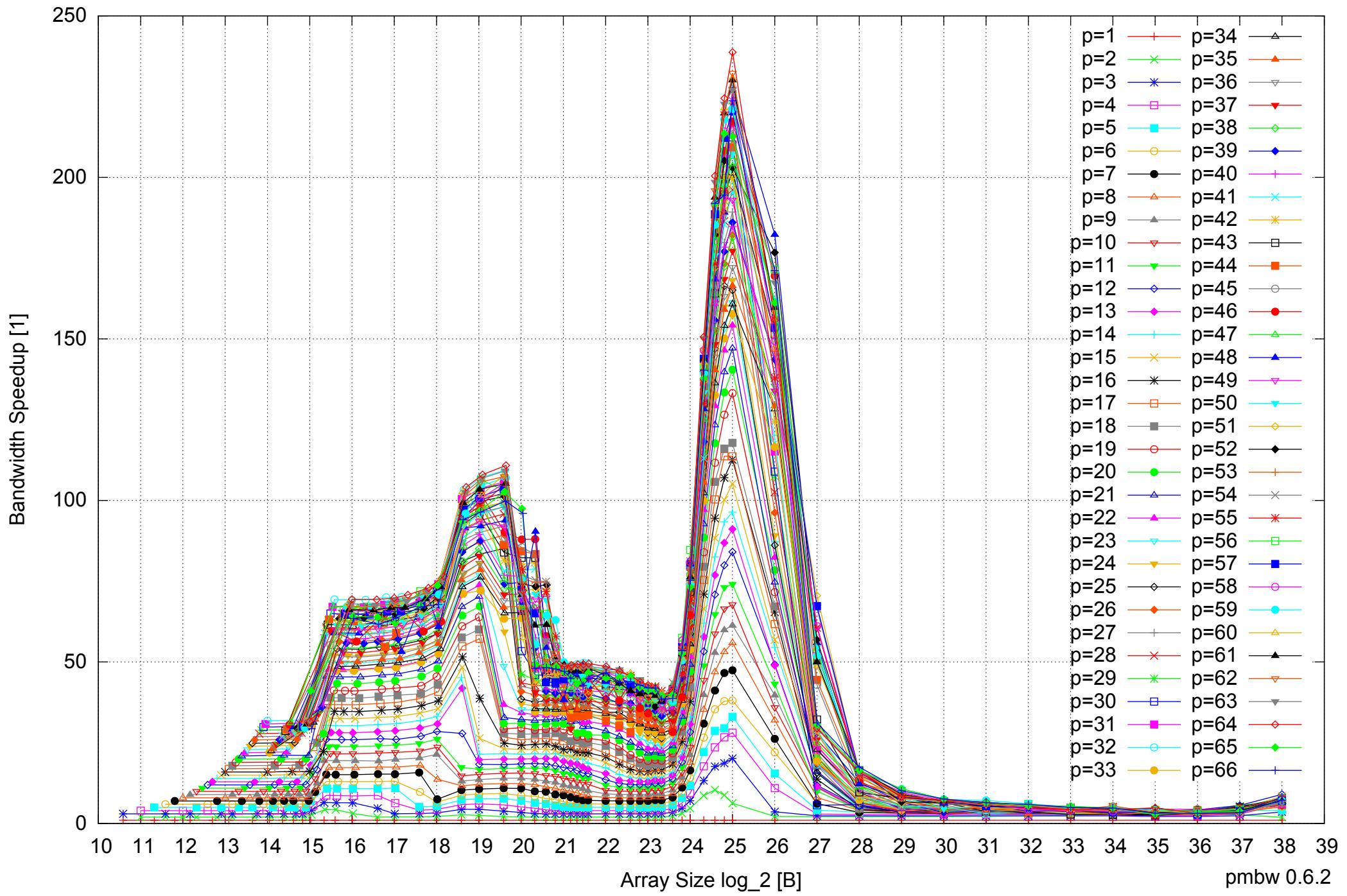
# Intel Xeon E5-4640 512GB - Parallel Memory Bandwidth - ScanRead256PtrUnrollLoop



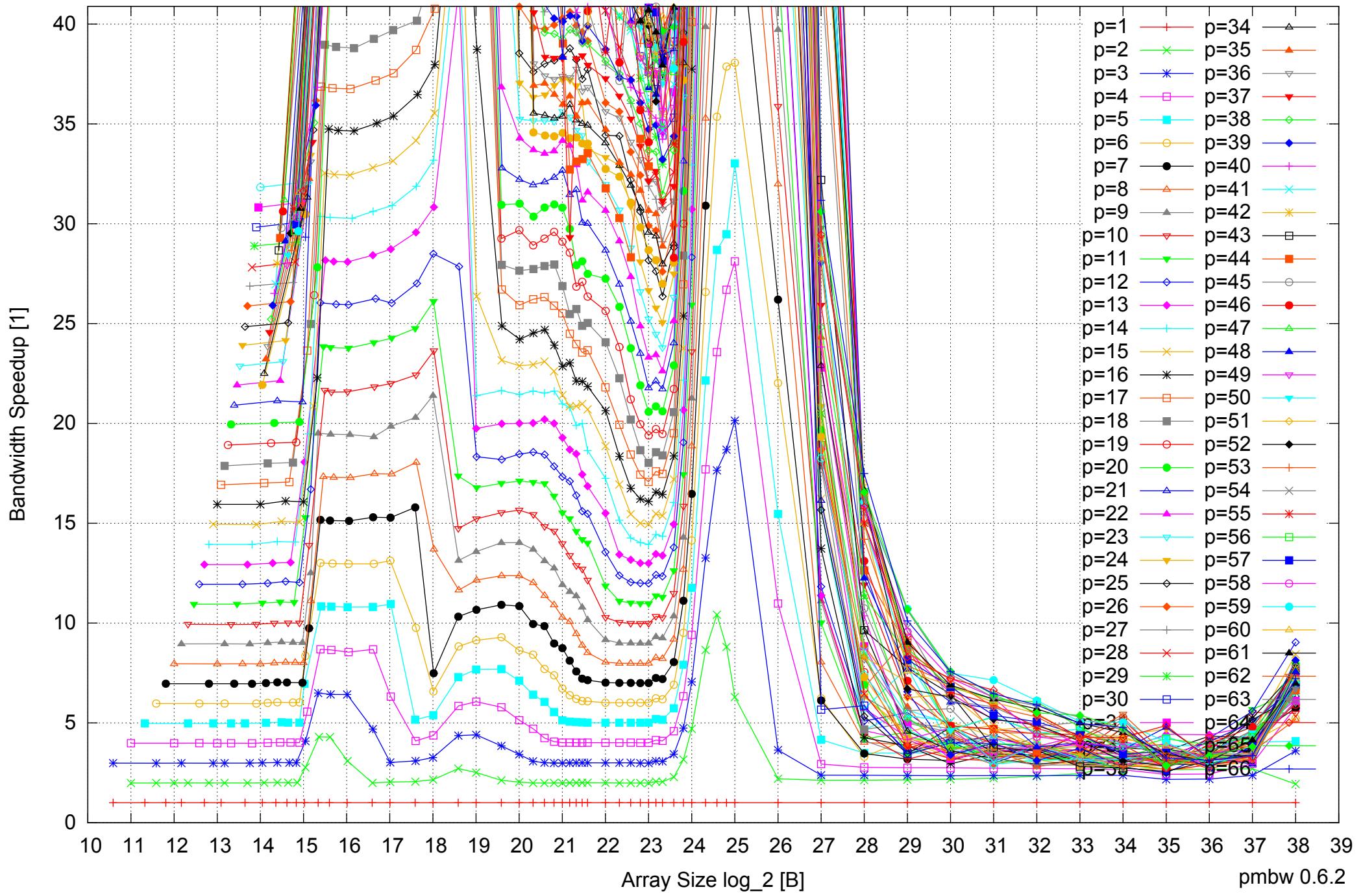
# Intel Xeon E5-4640 512GB - Parallel Memory Access Time - ScanRead256PtrUnrollLoop



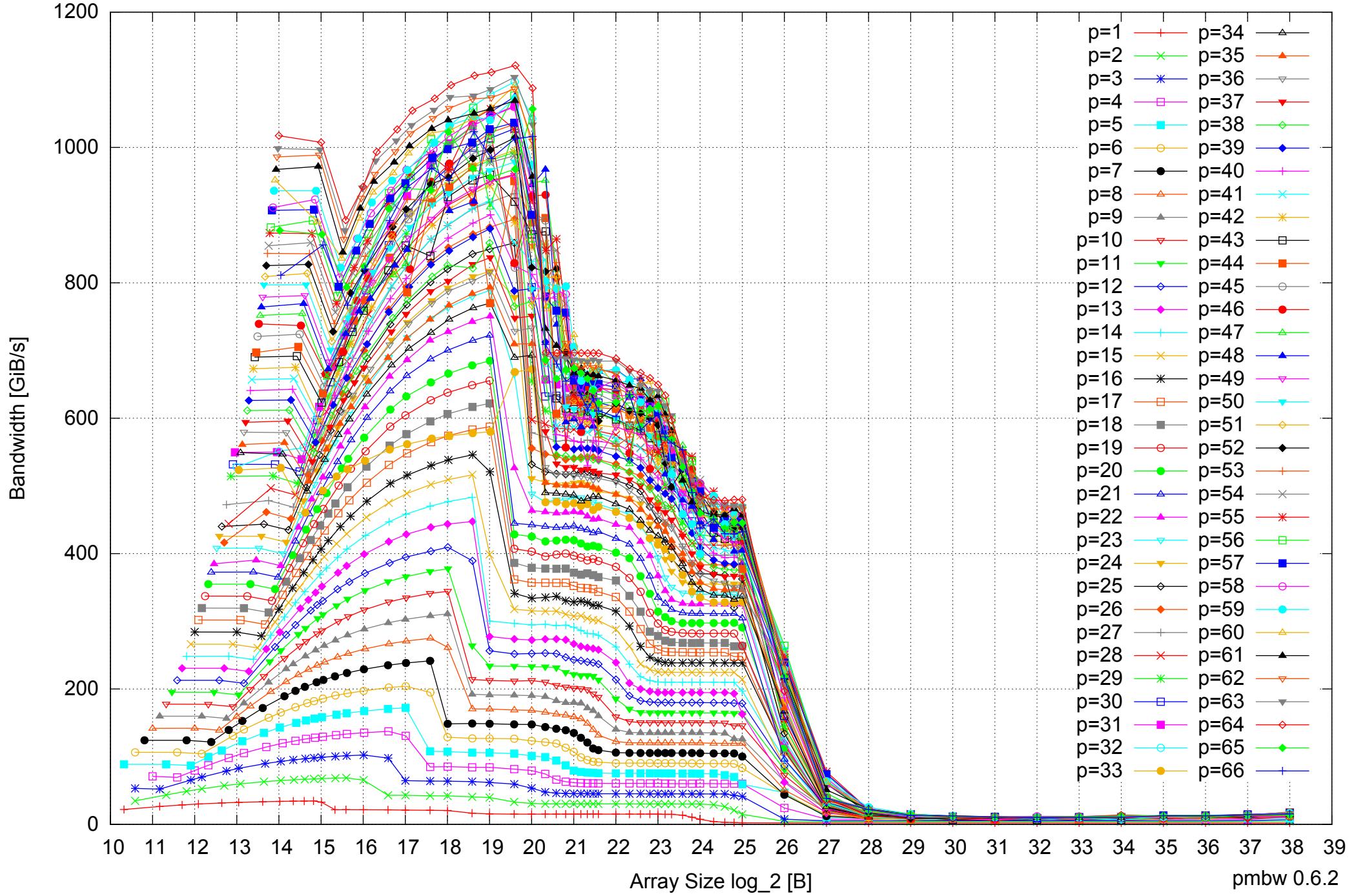
Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth - ScanRead256PtrUnrollLoop



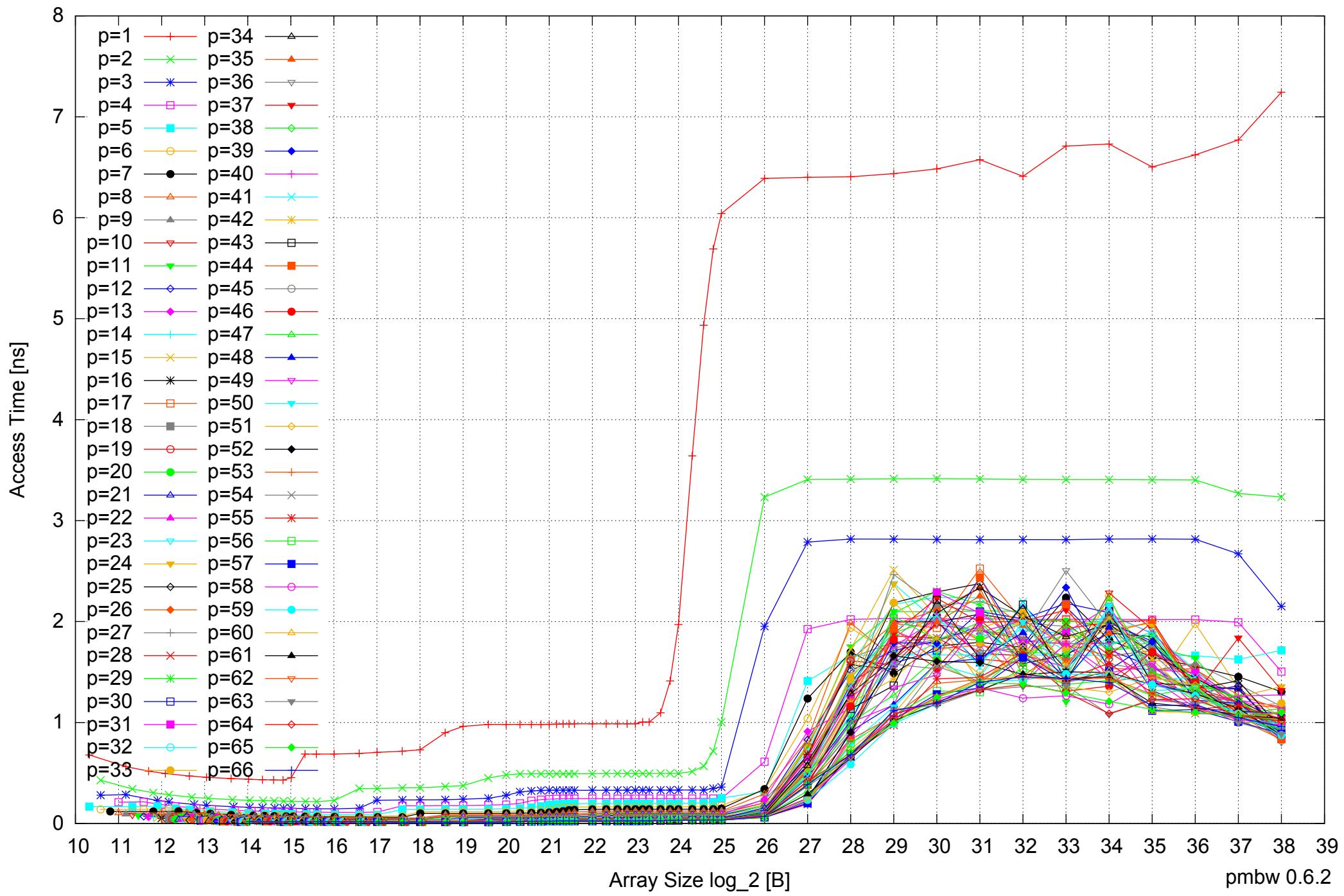
Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth (enlarged) - ScanRead256PtrUnrollLoop



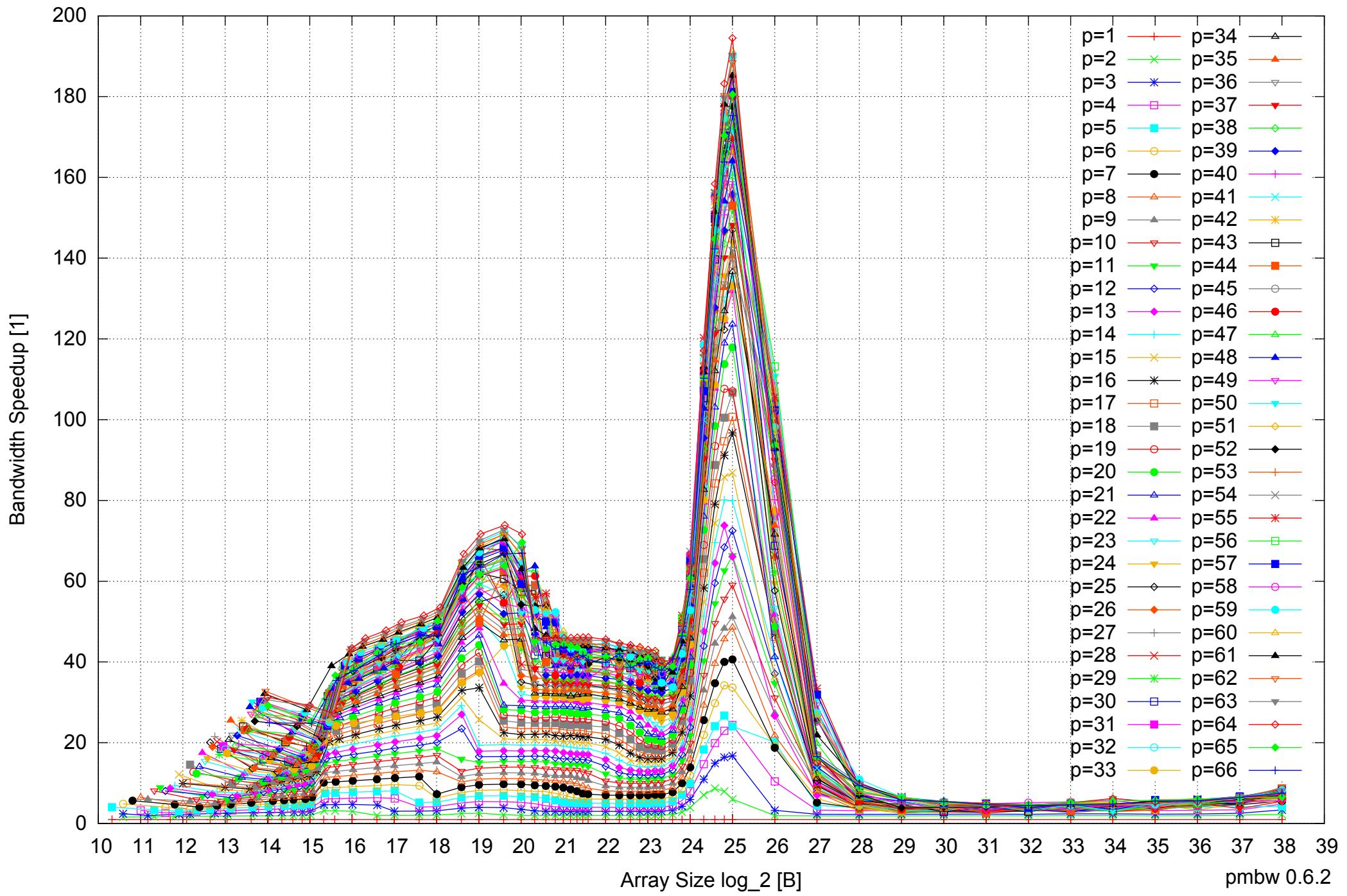
# Intel Xeon E5-4640 512GB - Parallel Memory Bandwidth - ScanWrite128PtrSimpleLoop



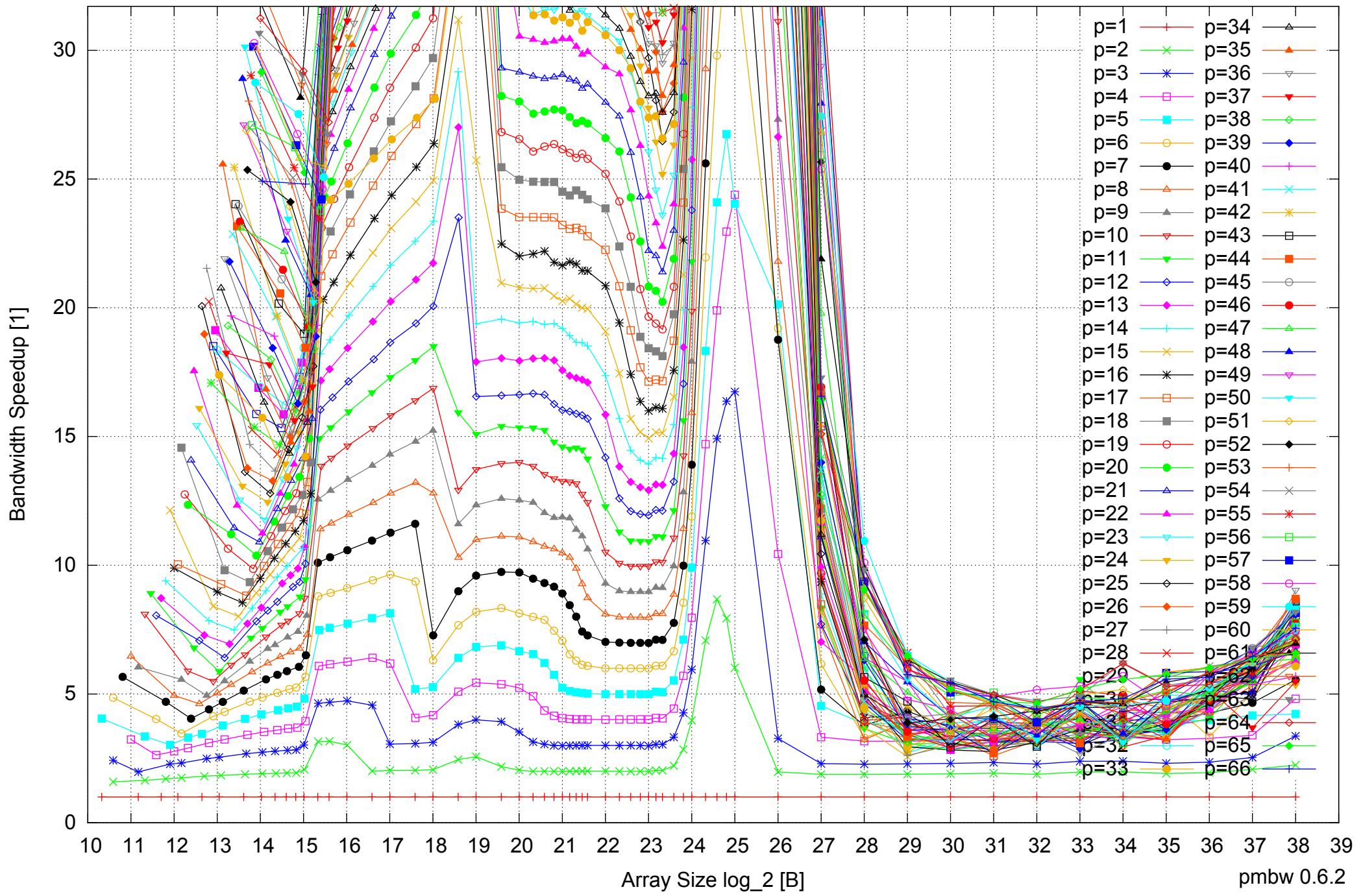
# Intel Xeon E5-4640 512GB - Parallel Memory Access Time - ScanWrite128PtrSimpleLoop



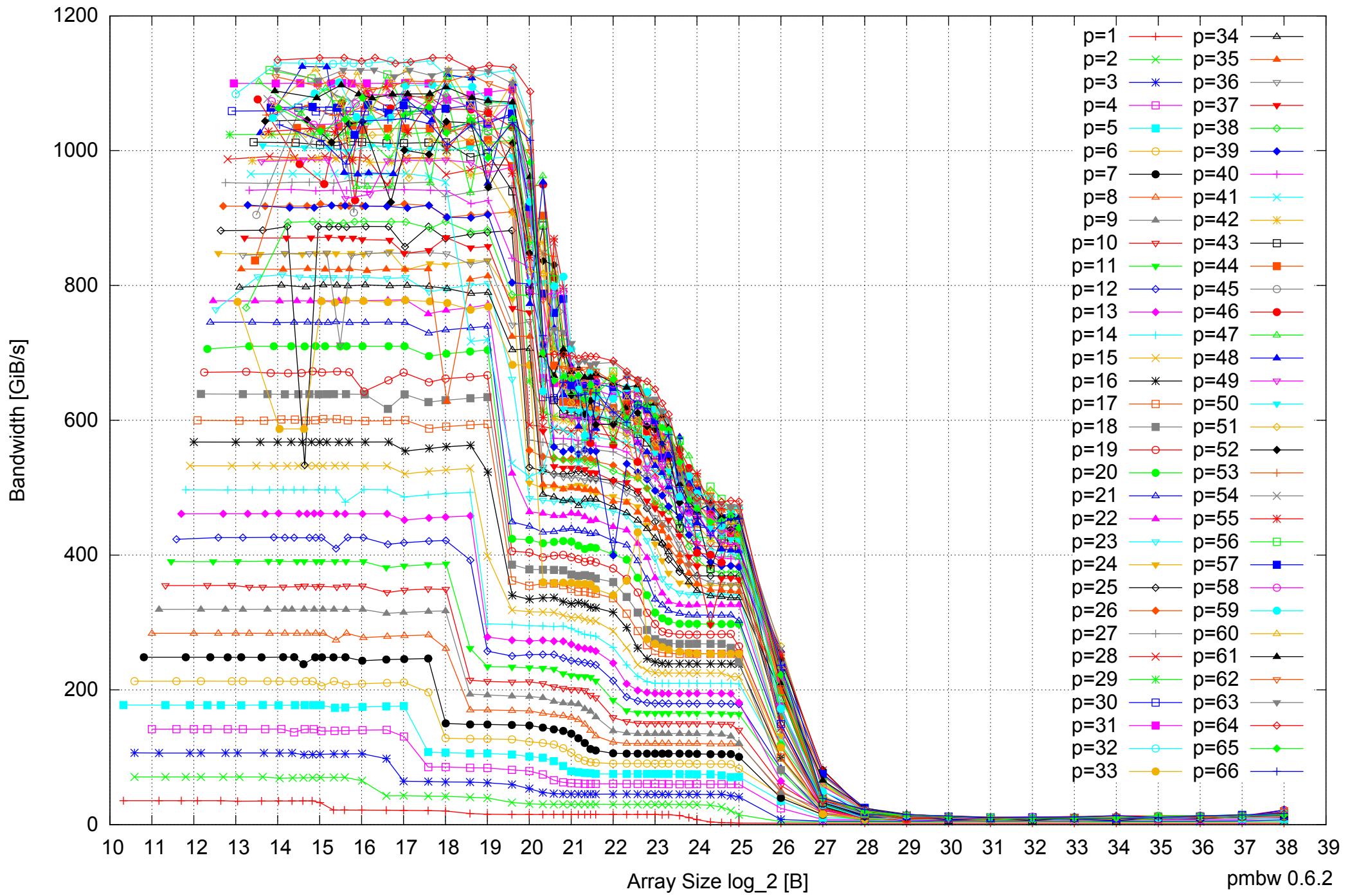
# Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth - ScanWrite128PtrSimpleLoop



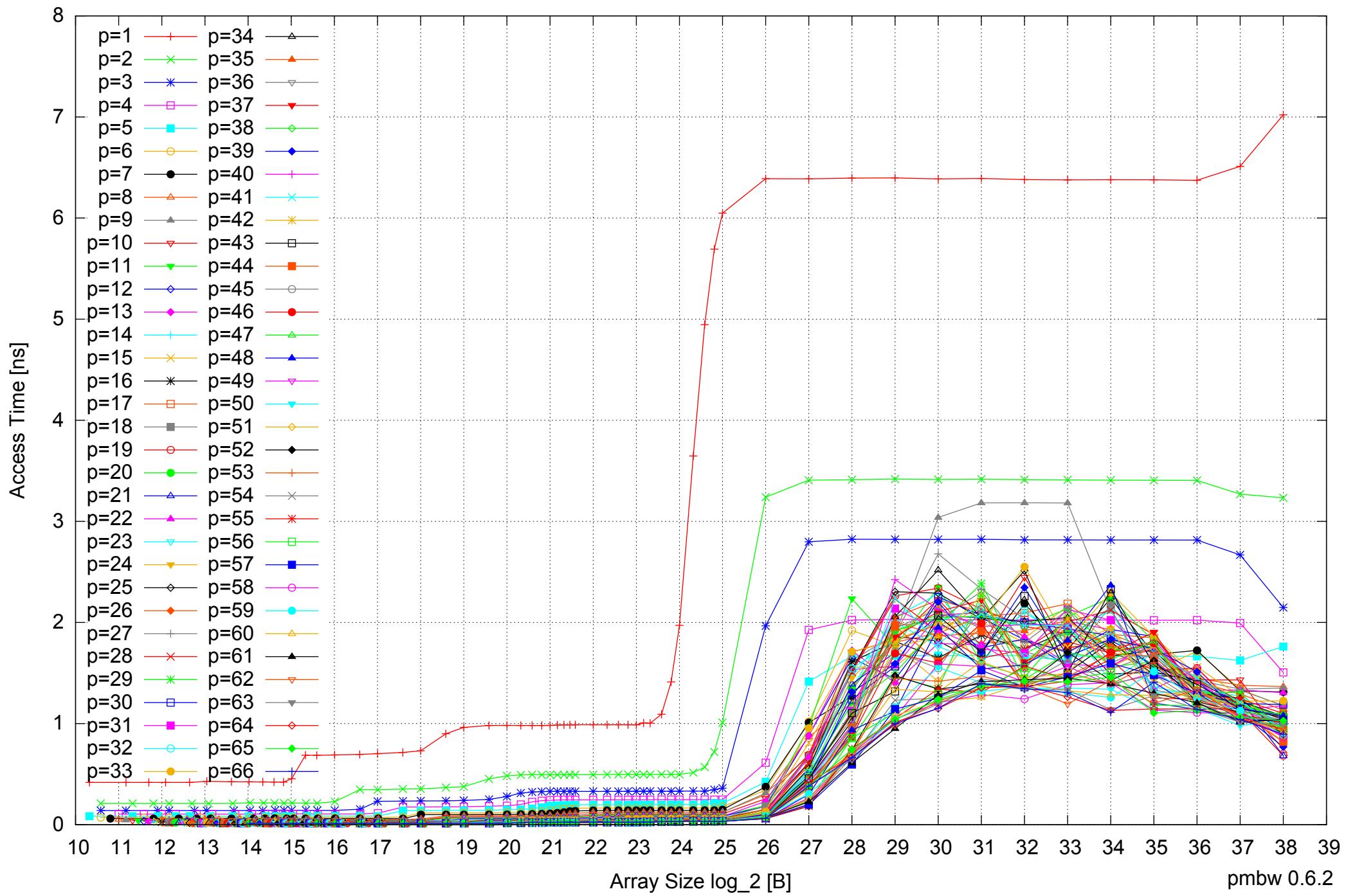
Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth (enlarged) - ScanWrite128PtrSimpleLoop



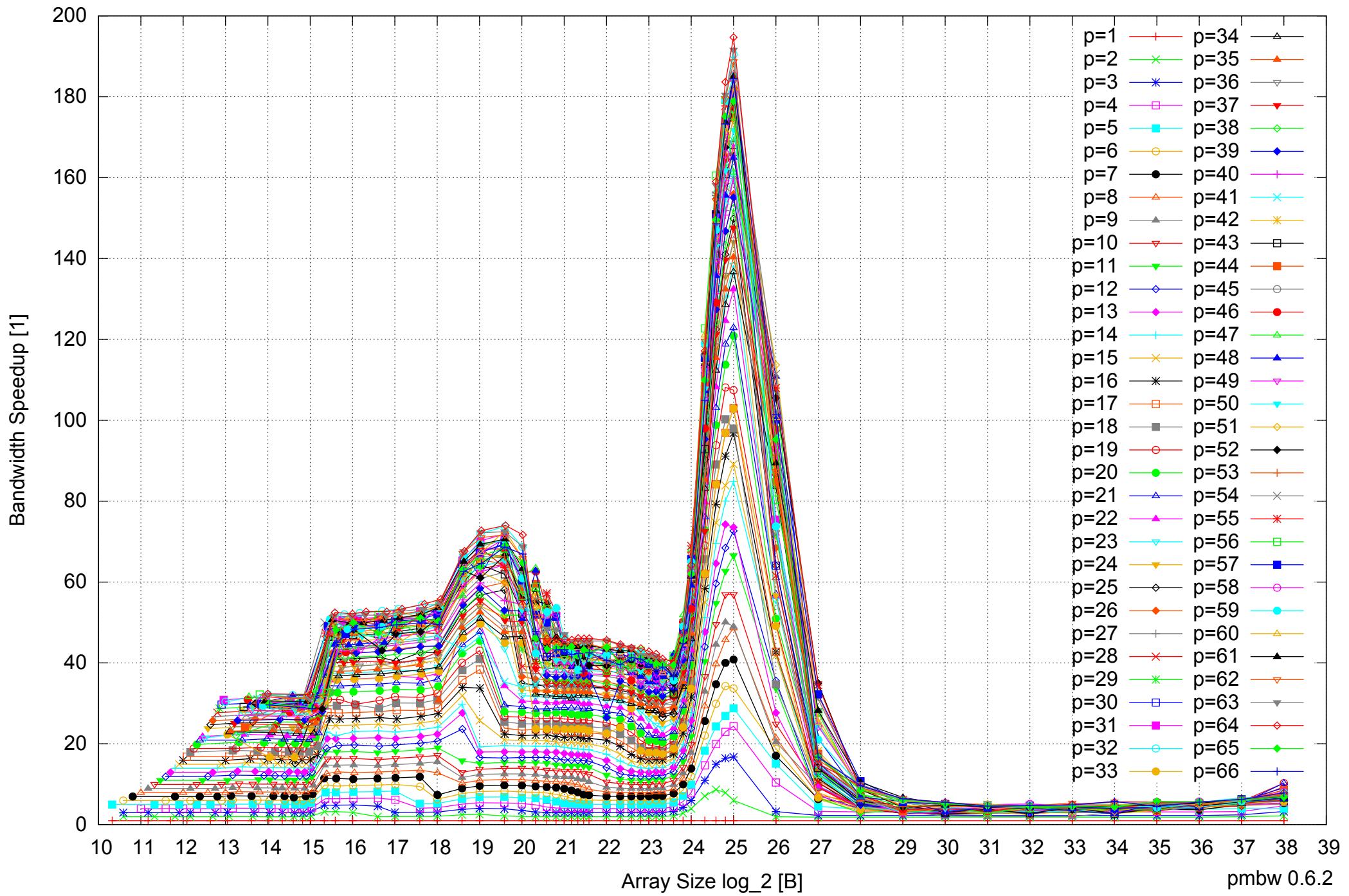
# Intel Xeon E5-4640 512GB - Parallel Memory Bandwidth - ScanWrite128PtrUnrollLoop



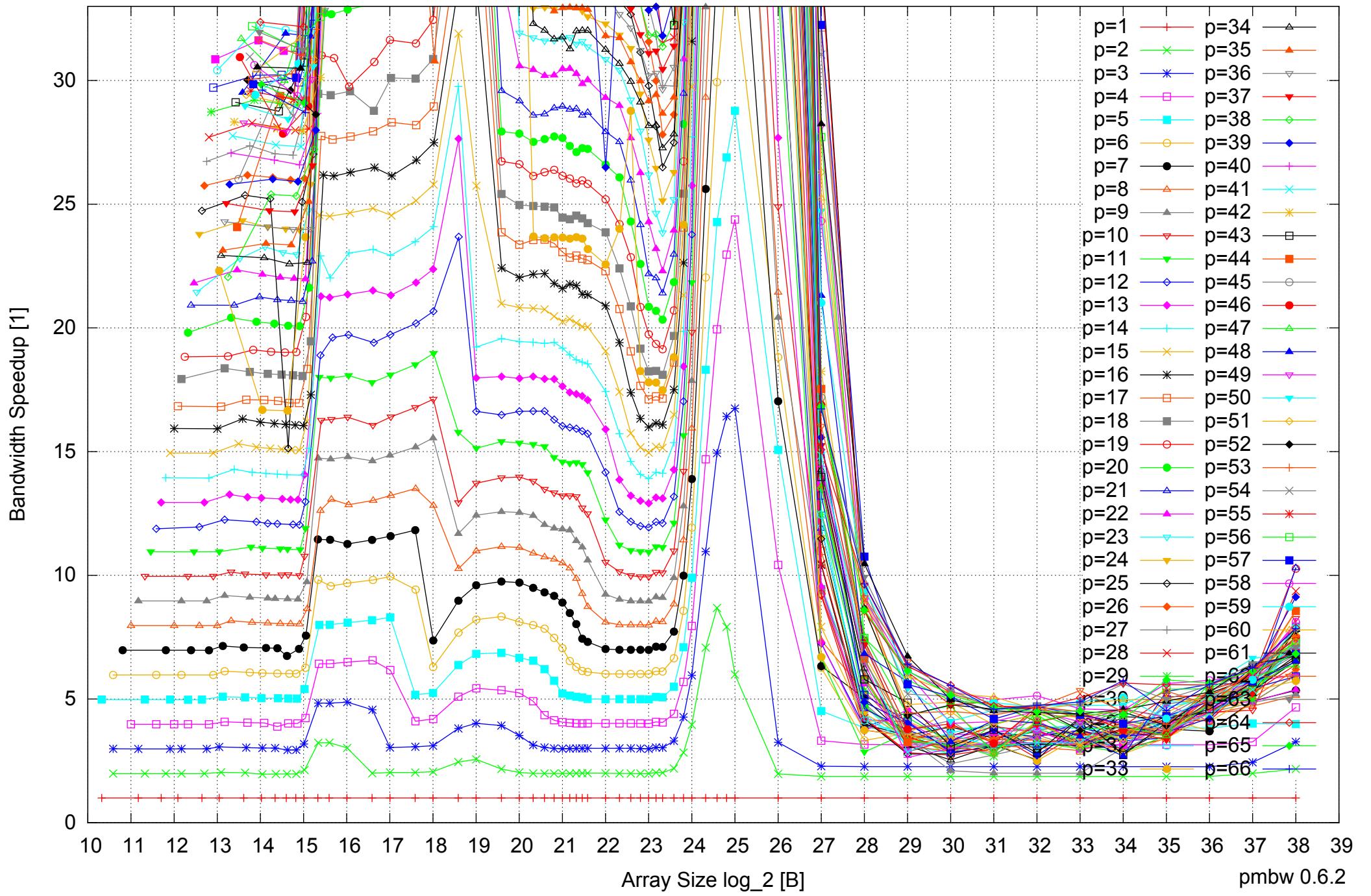
Intel Xeon E5-4640 512GB - Parallel Memory Access Time - ScanWrite128PtrUnrollLoop



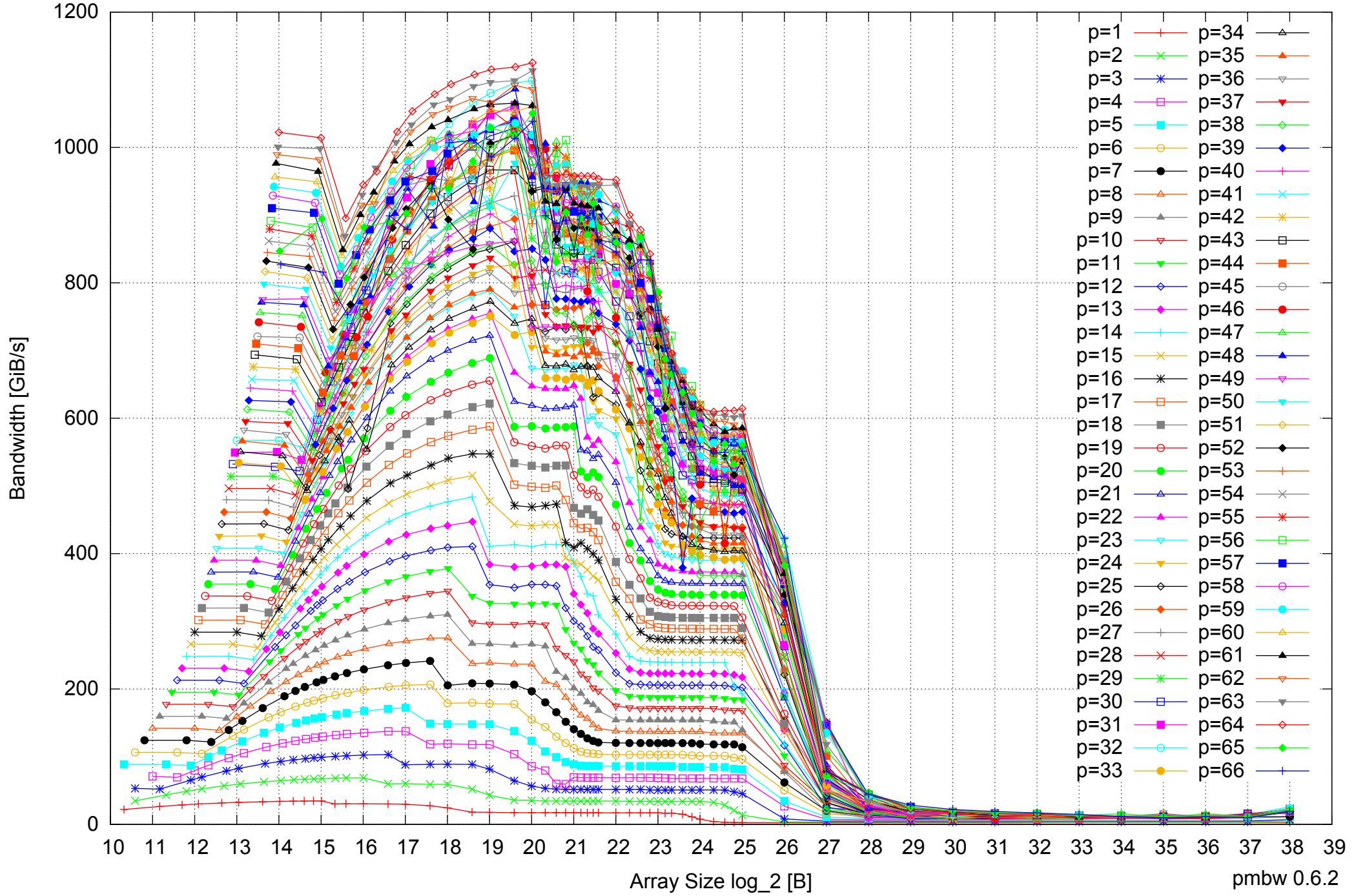
# Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth - ScanWrite128PtrUnrollLoop



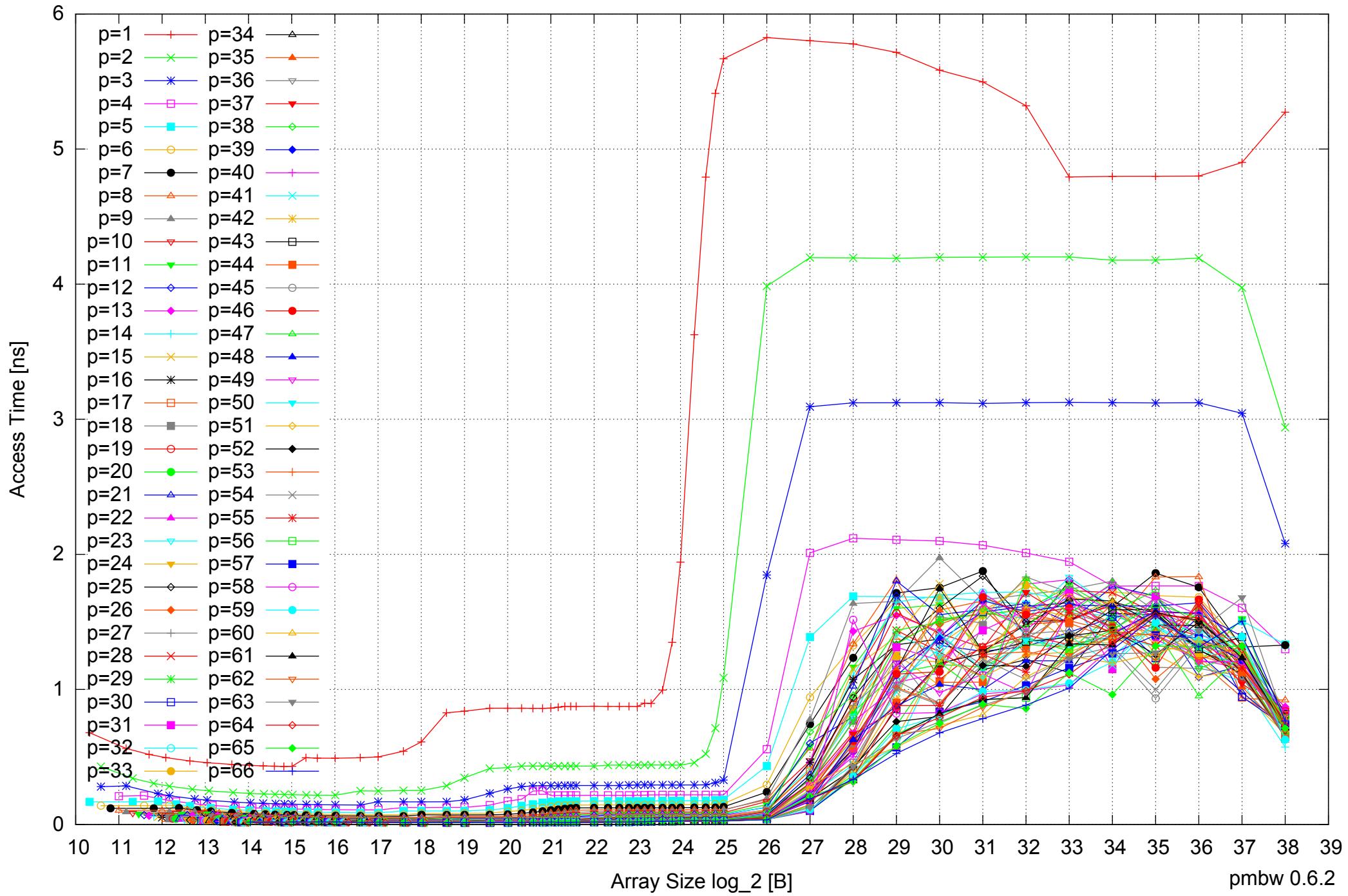
Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth (enlarged) - ScanWrite128PtrUnrollLoop



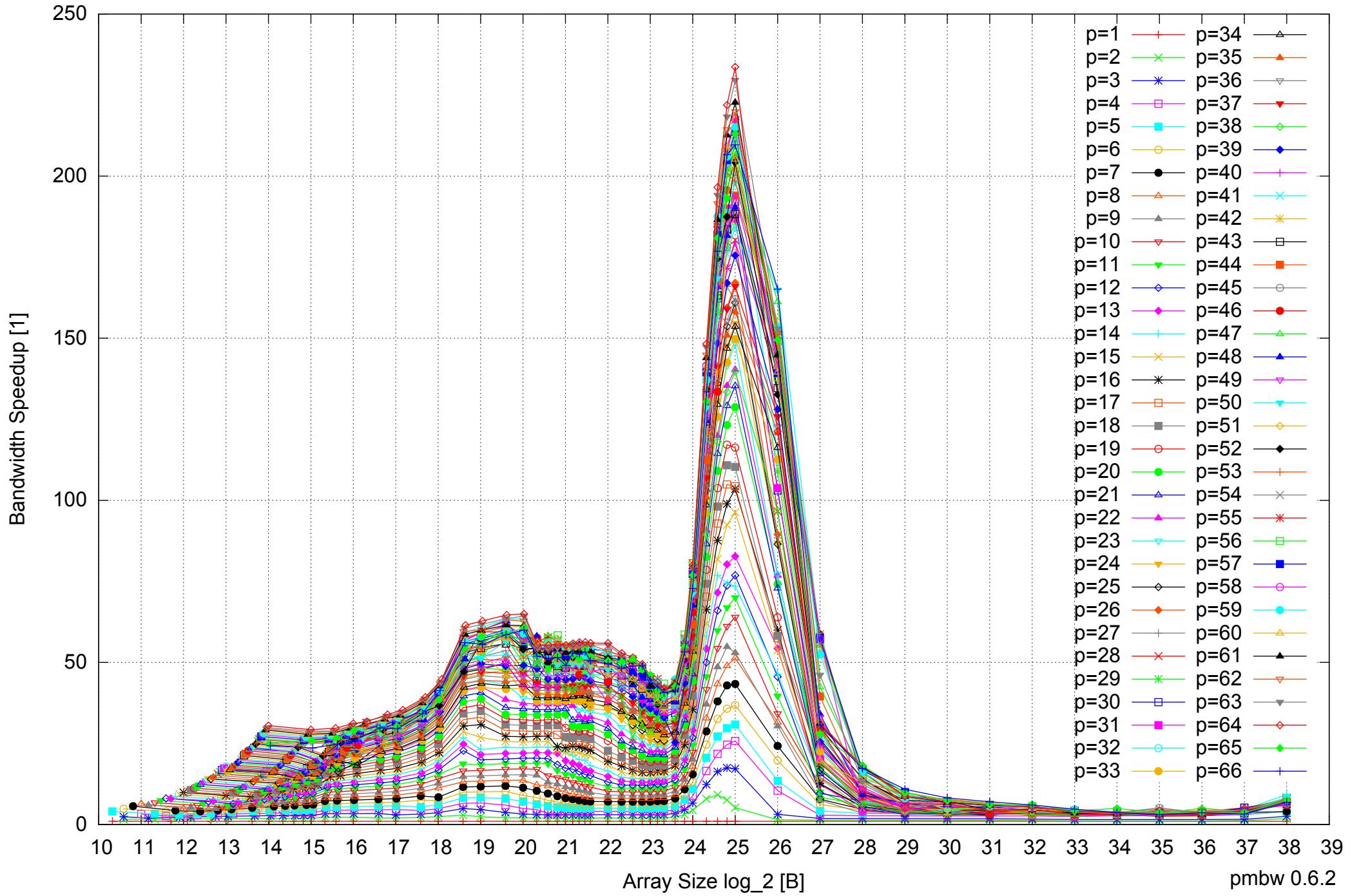
# Intel Xeon E5-4640 512GB - Parallel Memory Bandwidth - ScanRead128PtrSimpleLoop



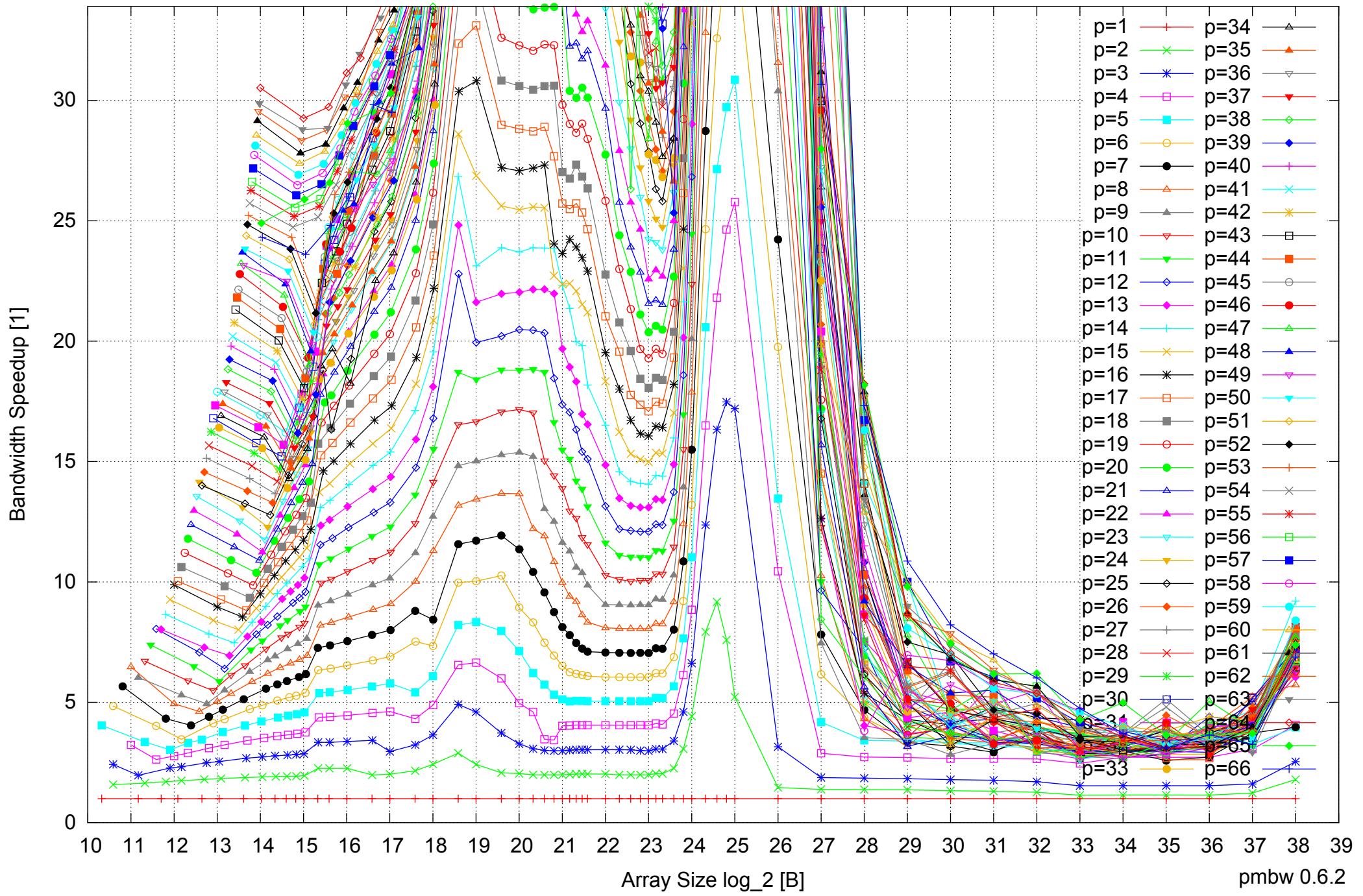
# Intel Xeon E5-4640 512GB - Parallel Memory Access Time - ScanRead128PtrSimpleLoop



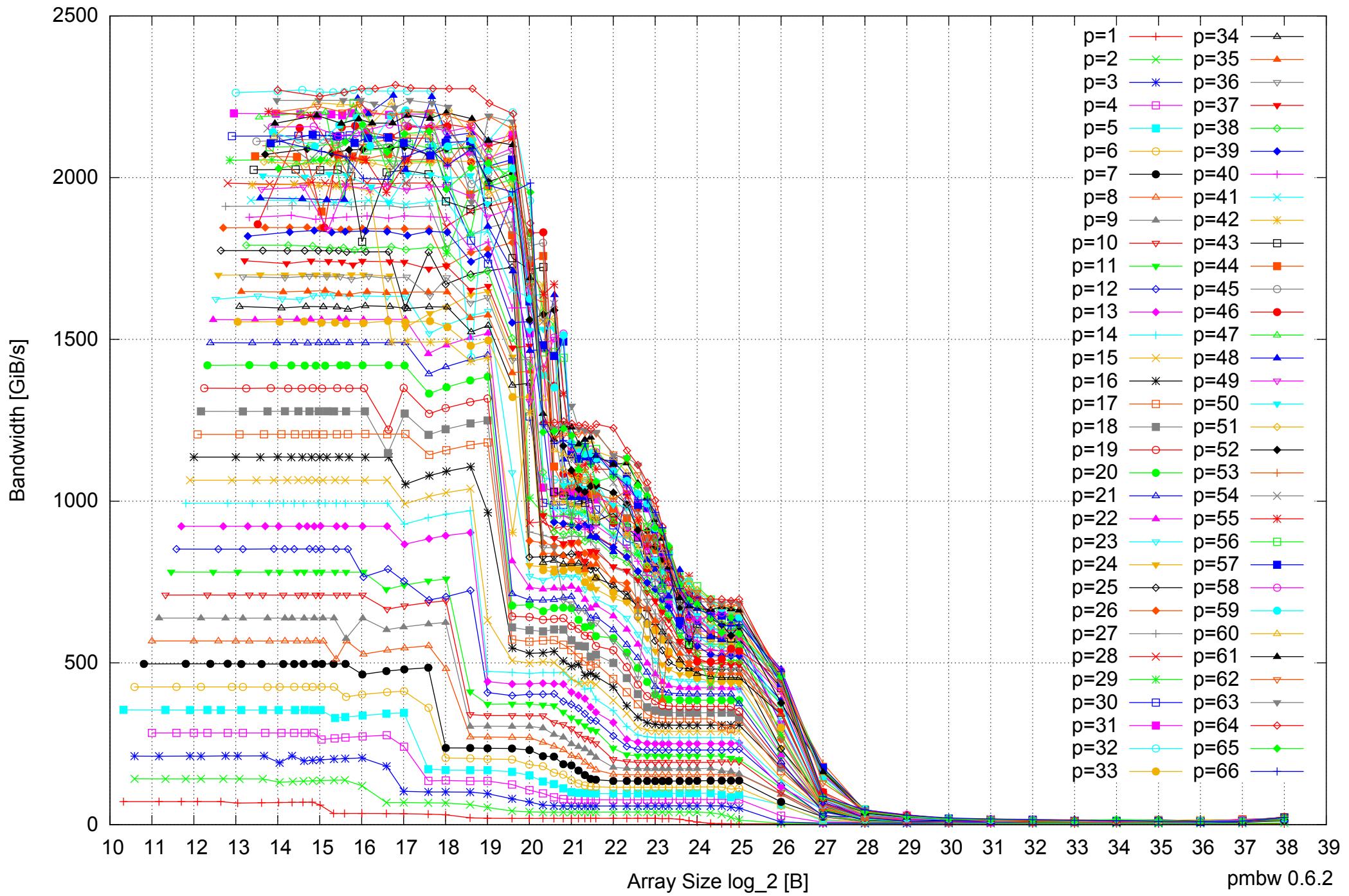
# Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth - ScanRead128PtrSimpleLoop



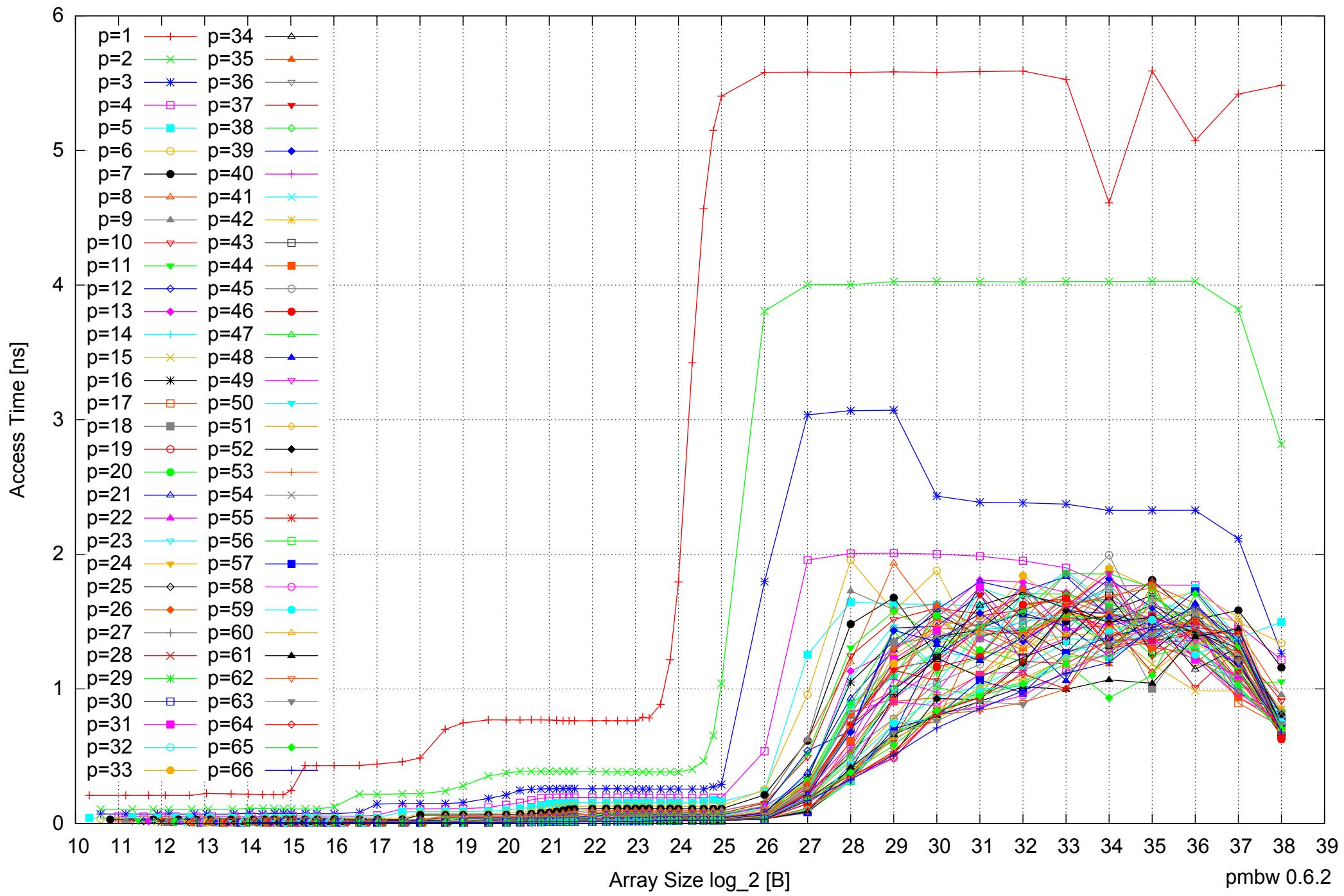
Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth (enlarged) - ScanRead128PtrSimpleLoop



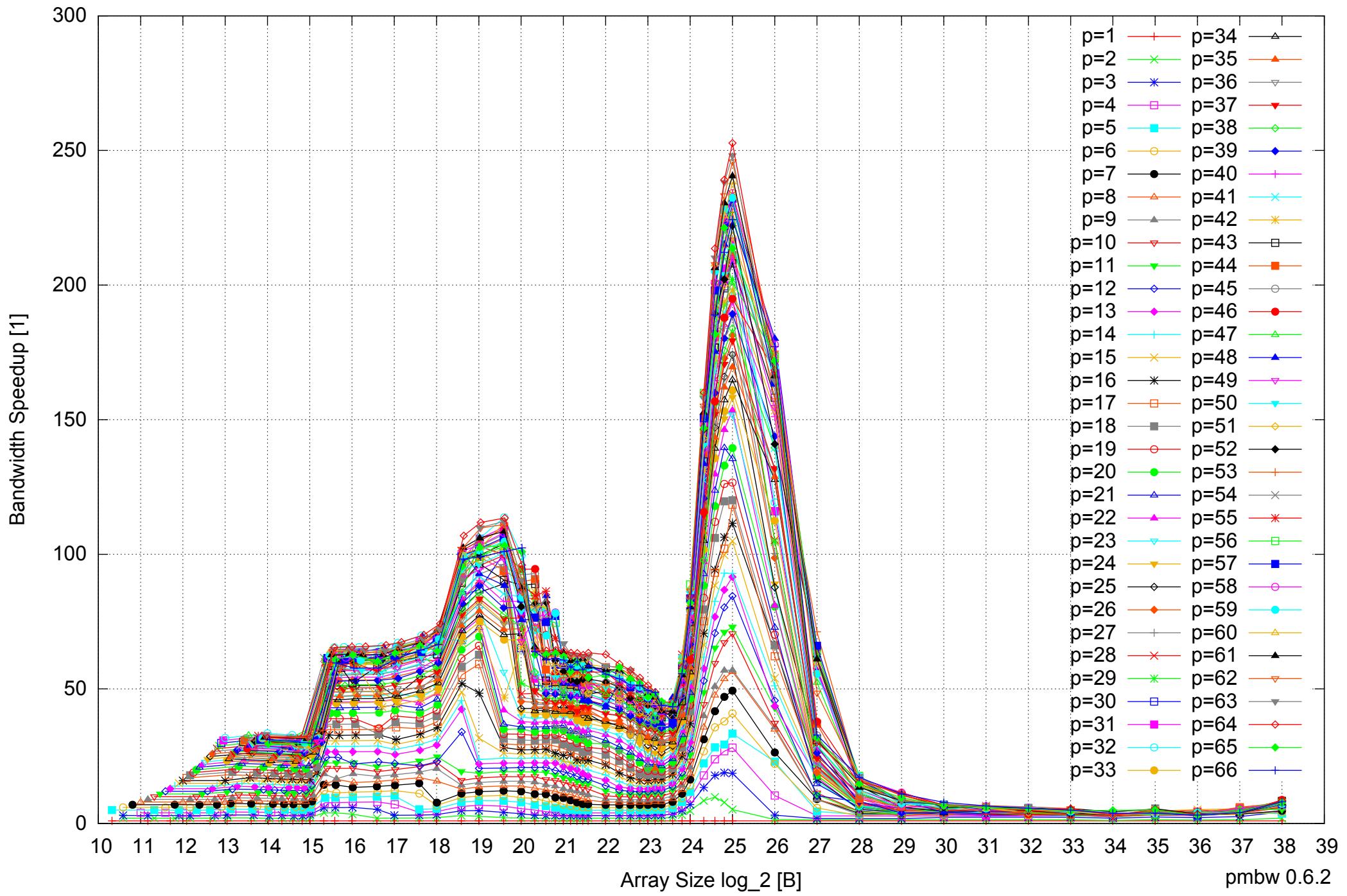
# Intel Xeon E5-4640 512GB - Parallel Memory Bandwidth - ScanRead128PtrUnrollLoop



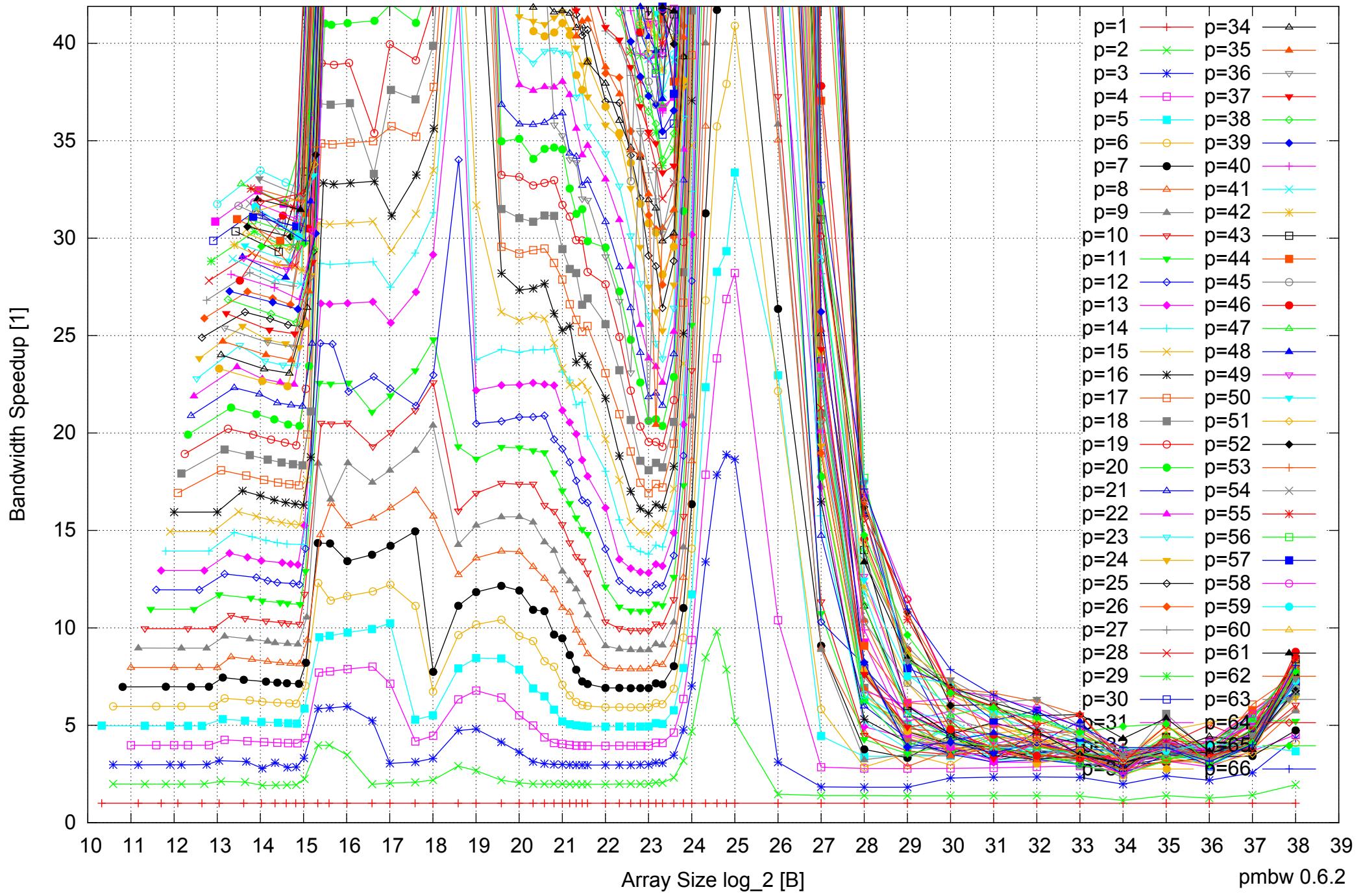
# Intel Xeon E5-4640 512GB - Parallel Memory Access Time - ScanRead128PtrUnrollLoop



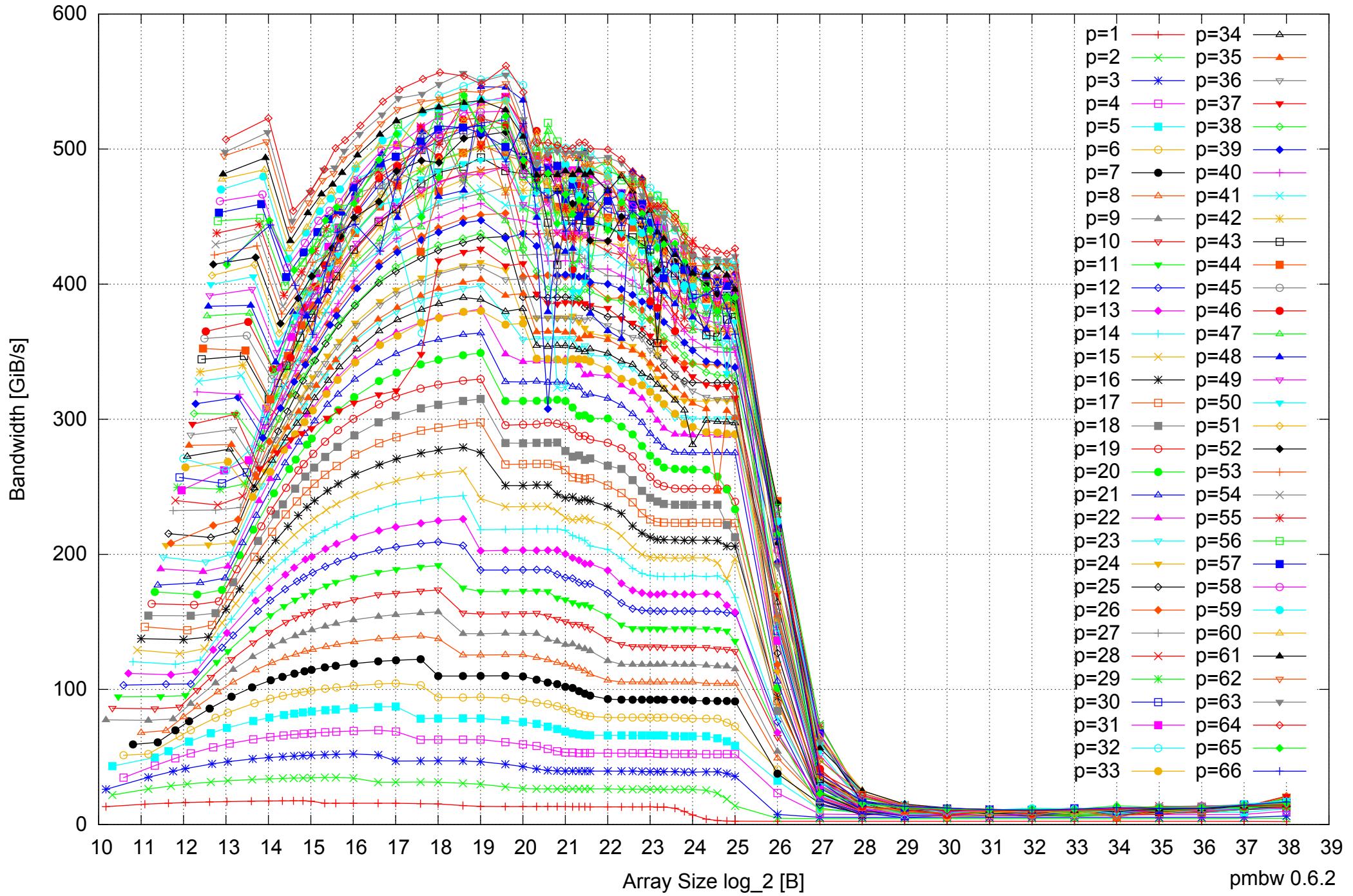
# Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth - ScanRead128PtrUnrollLoop



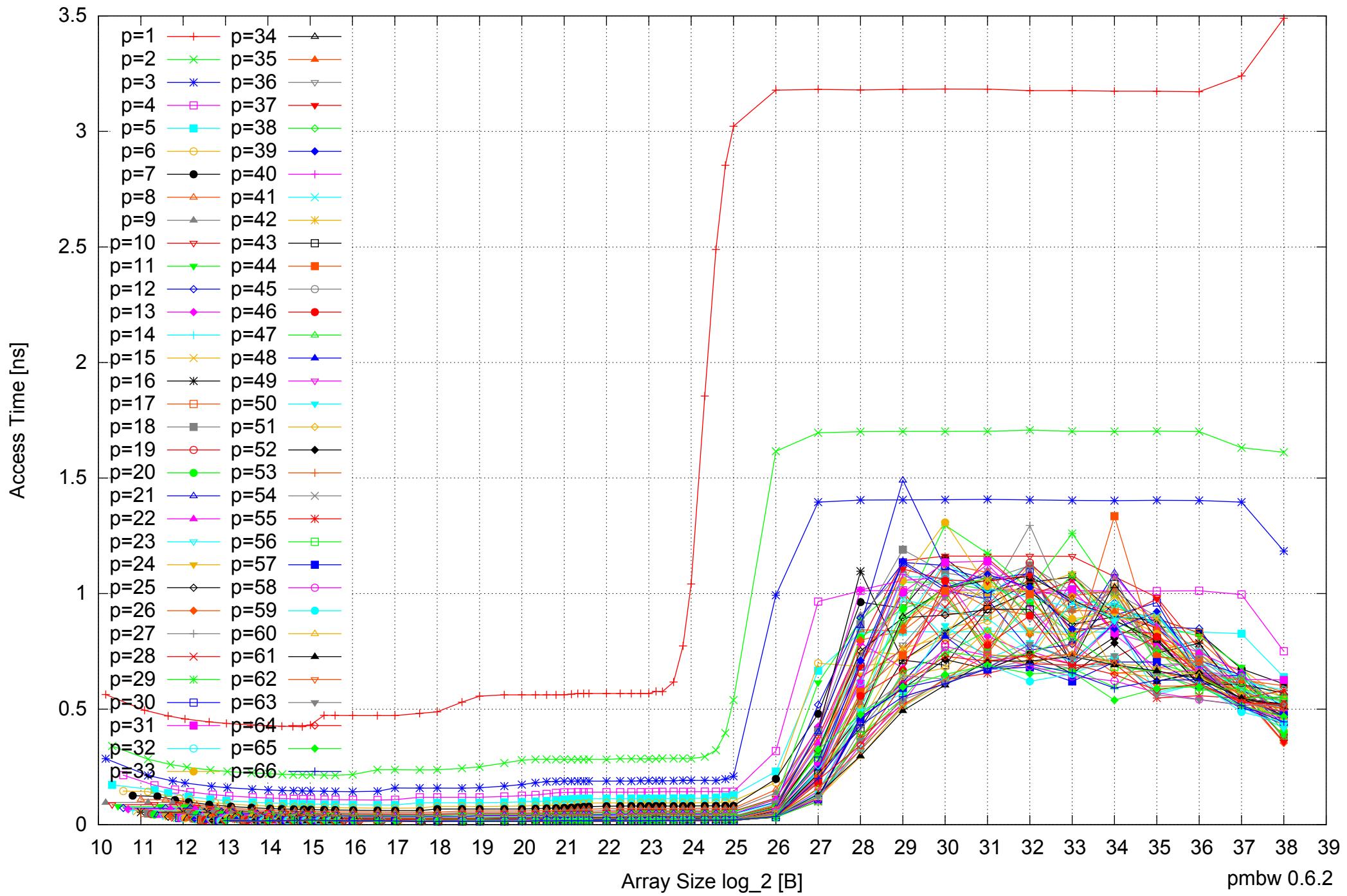
Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth (enlarged) - ScanRead128PtrUnrollLoop



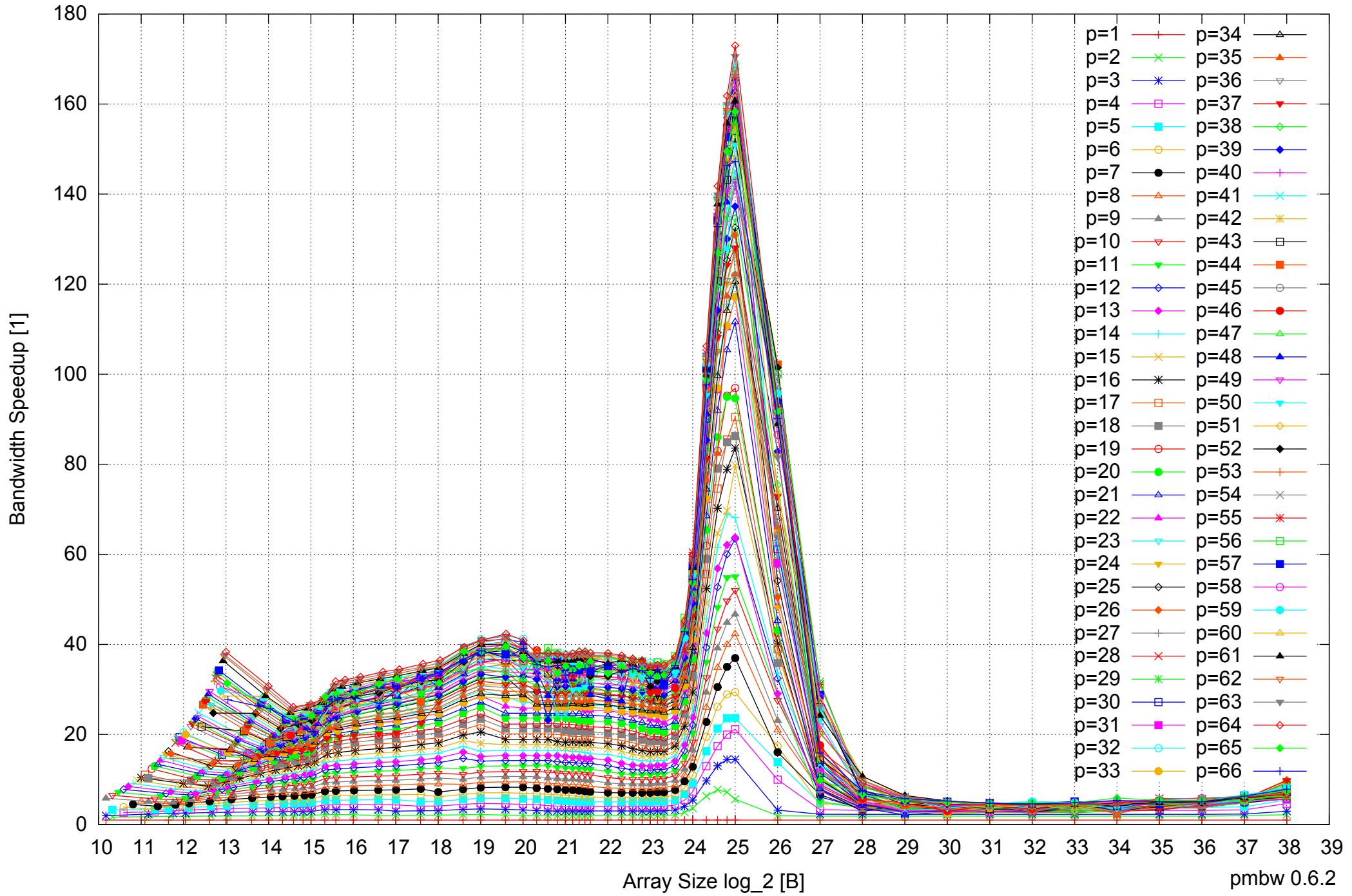
# Intel Xeon E5-4640 512GB - Parallel Memory Bandwidth - ScanWrite64PtrSimpleLoop



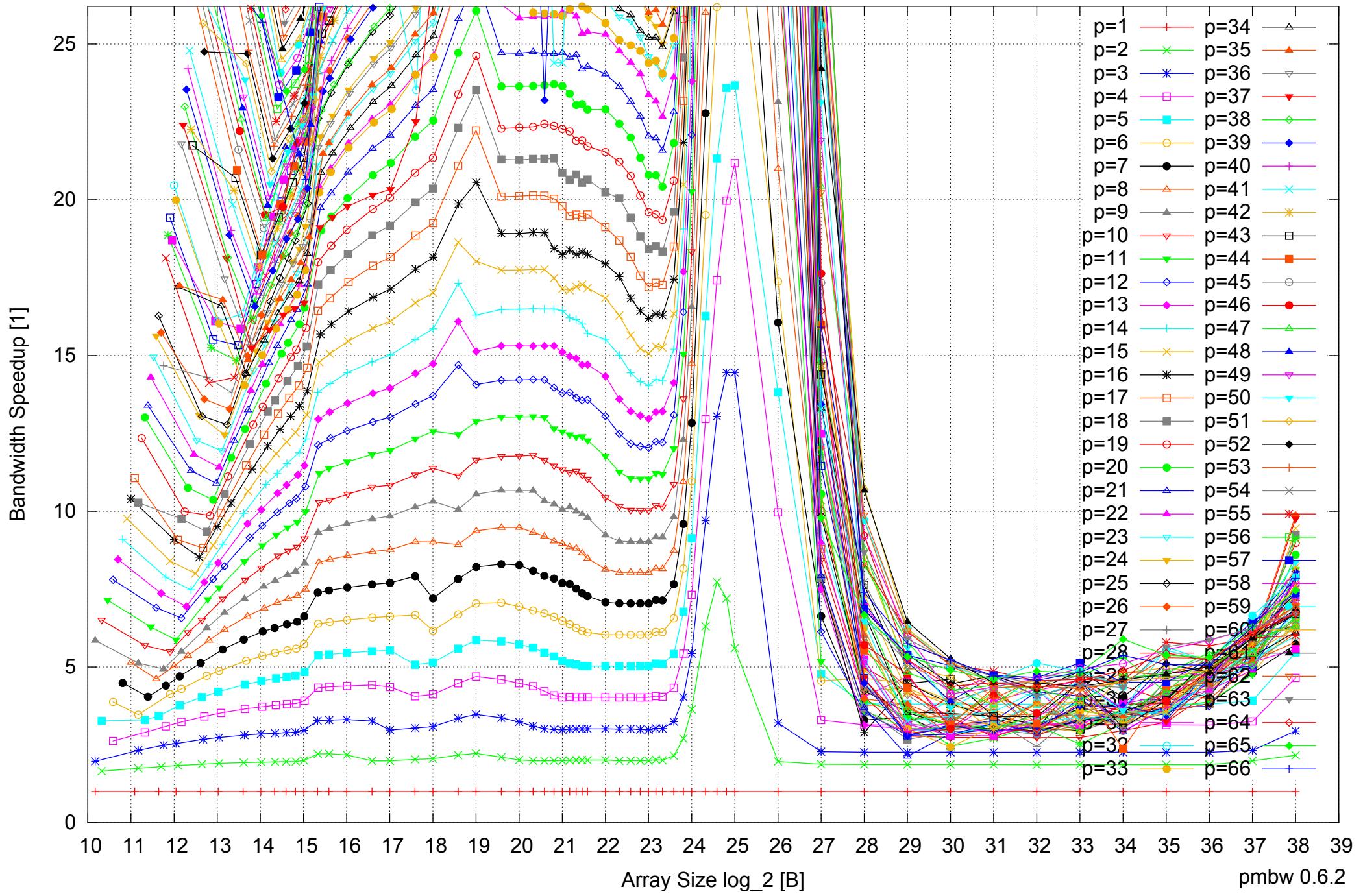
# Intel Xeon E5-4640 512GB - Parallel Memory Access Time - ScanWrite64PtrSimpleLoop



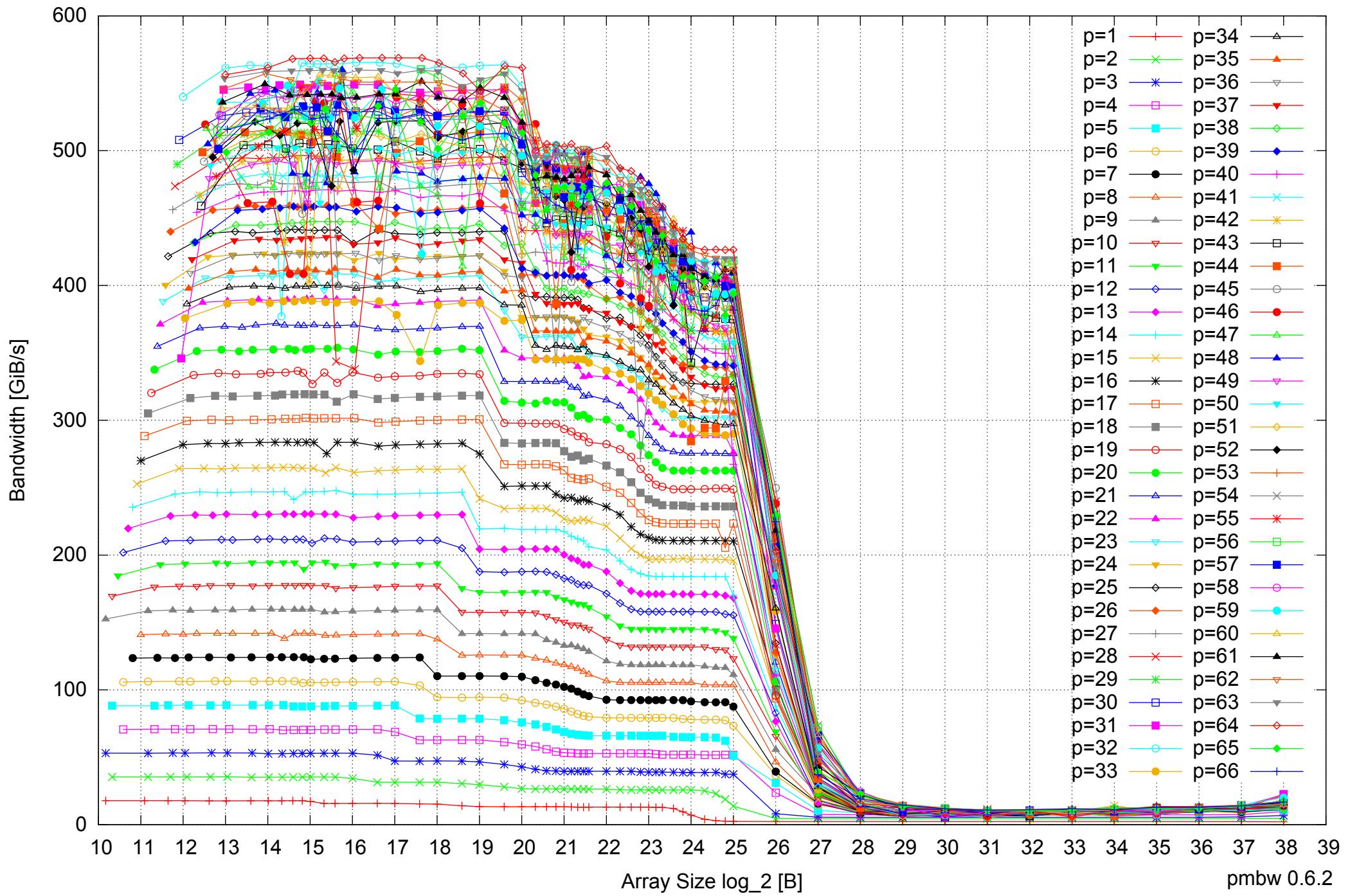
# Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth - ScanWrite64PtrSimpleLoop



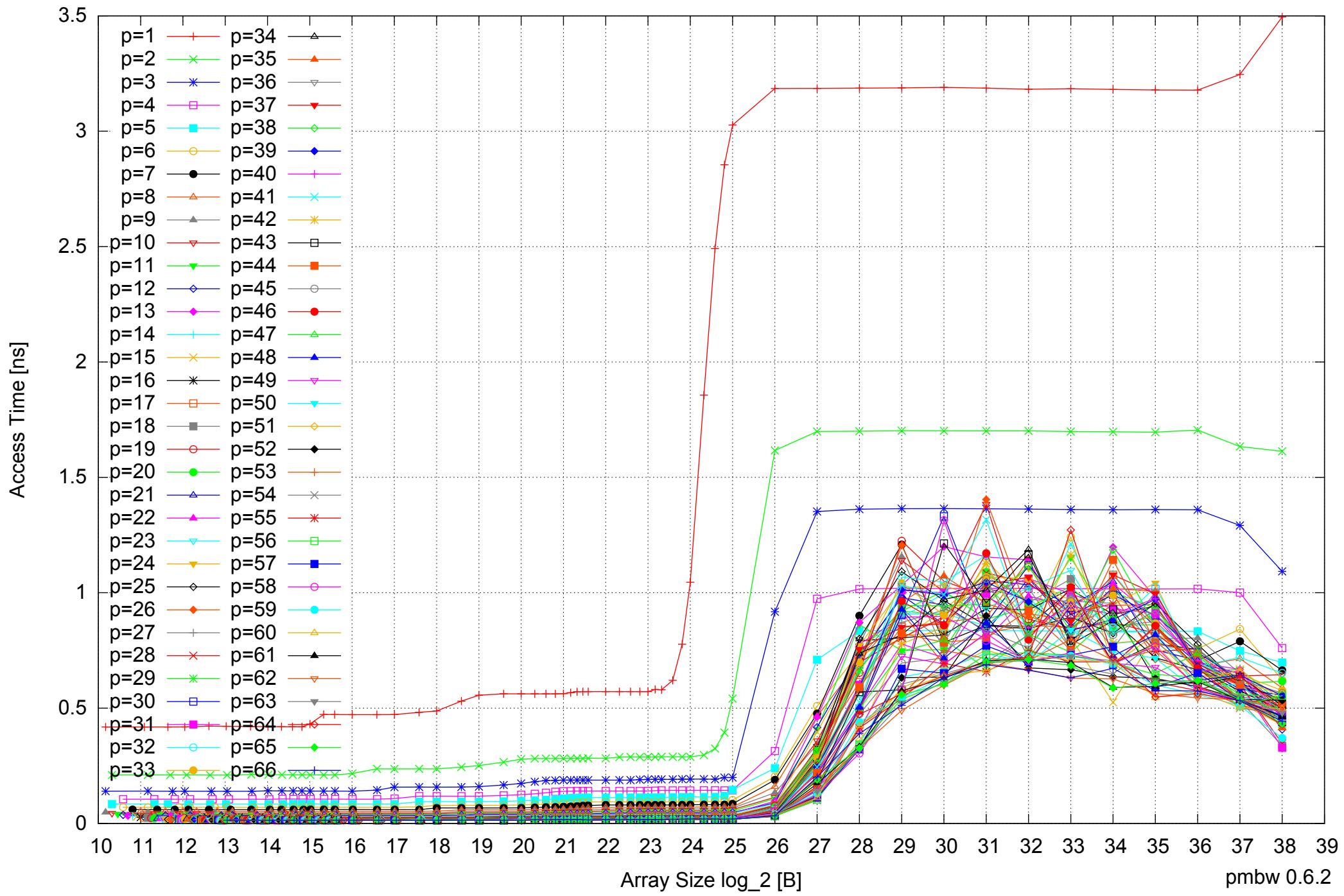
Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth (enlarged) - ScanWrite64PtrSimpleLoop



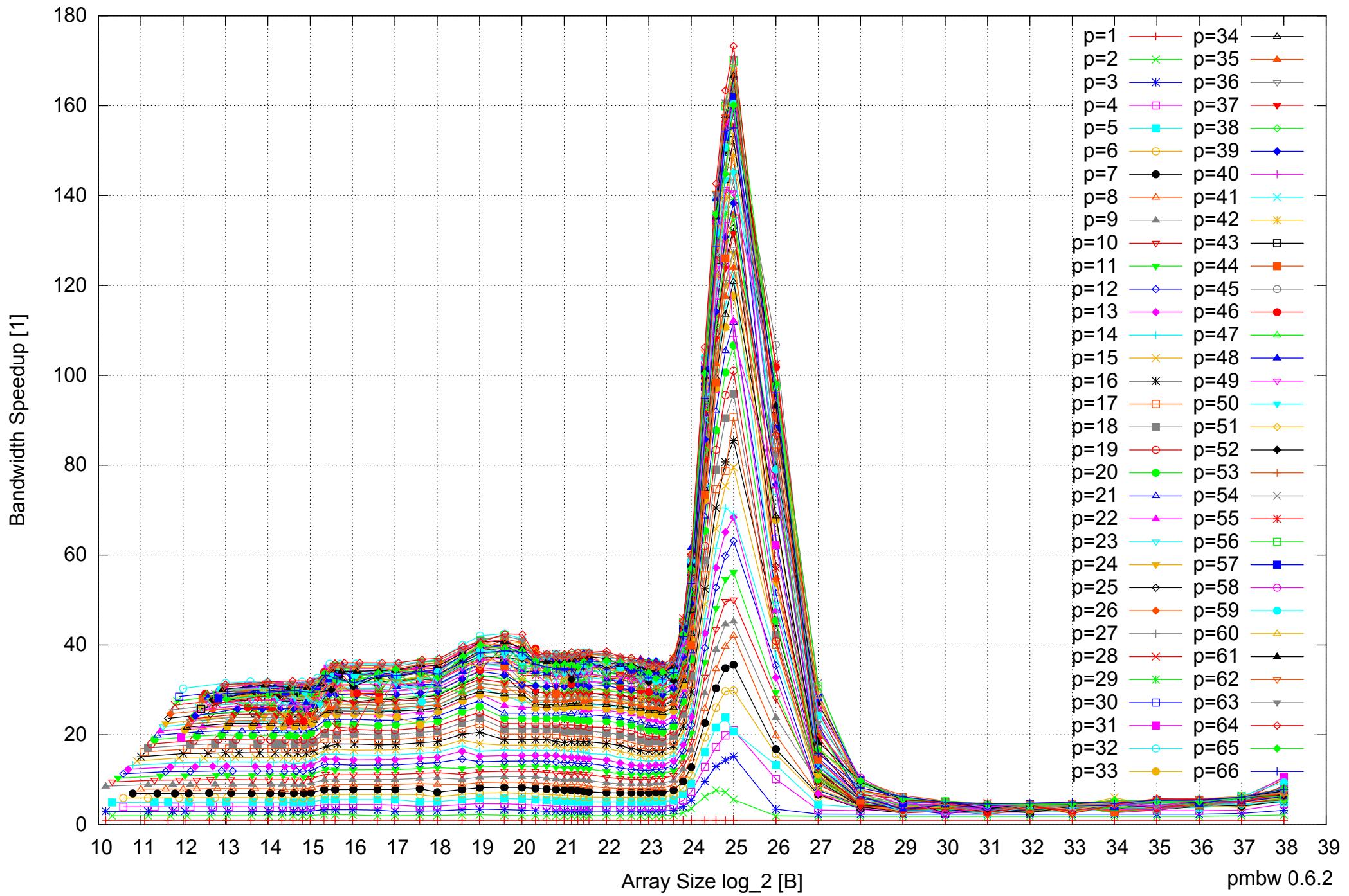
# Intel Xeon E5-4640 512GB - Parallel Memory Bandwidth - ScanWrite64PtrUnrollLoop



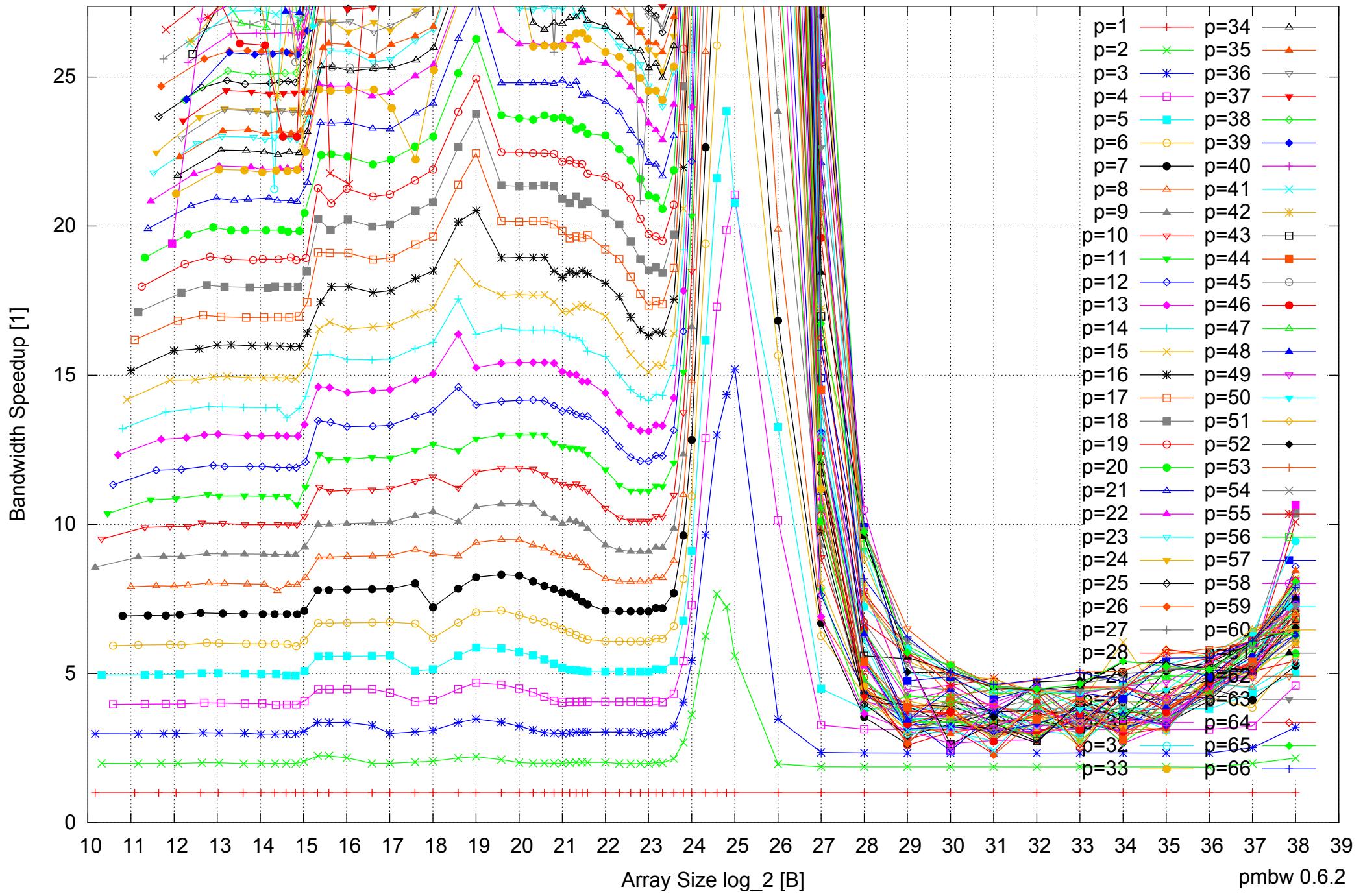
# Intel Xeon E5-4640 512GB - Parallel Memory Access Time - ScanWrite64PtrUnrollLoop



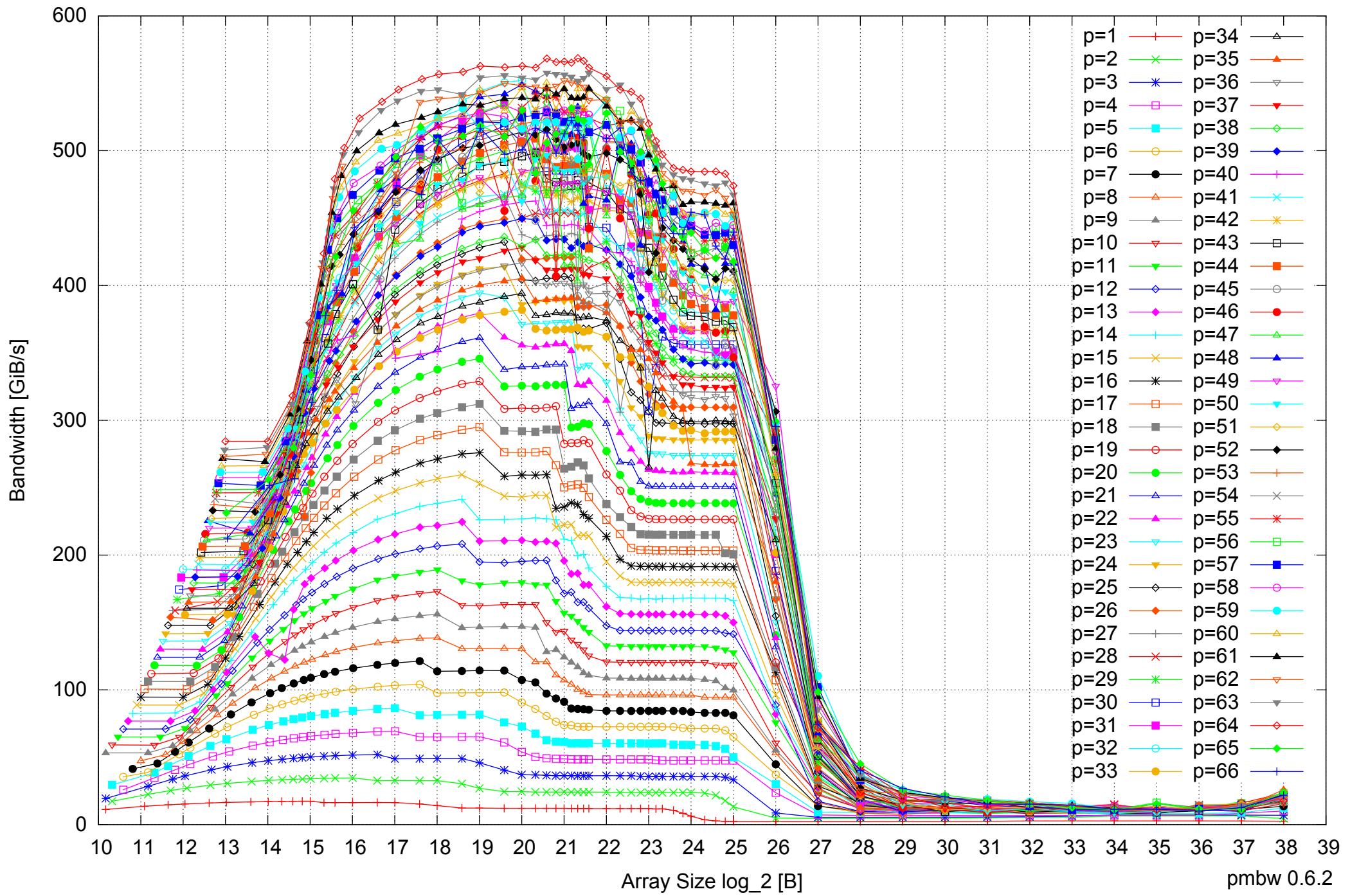
# Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth - ScanWrite64PtrUnrollLoop



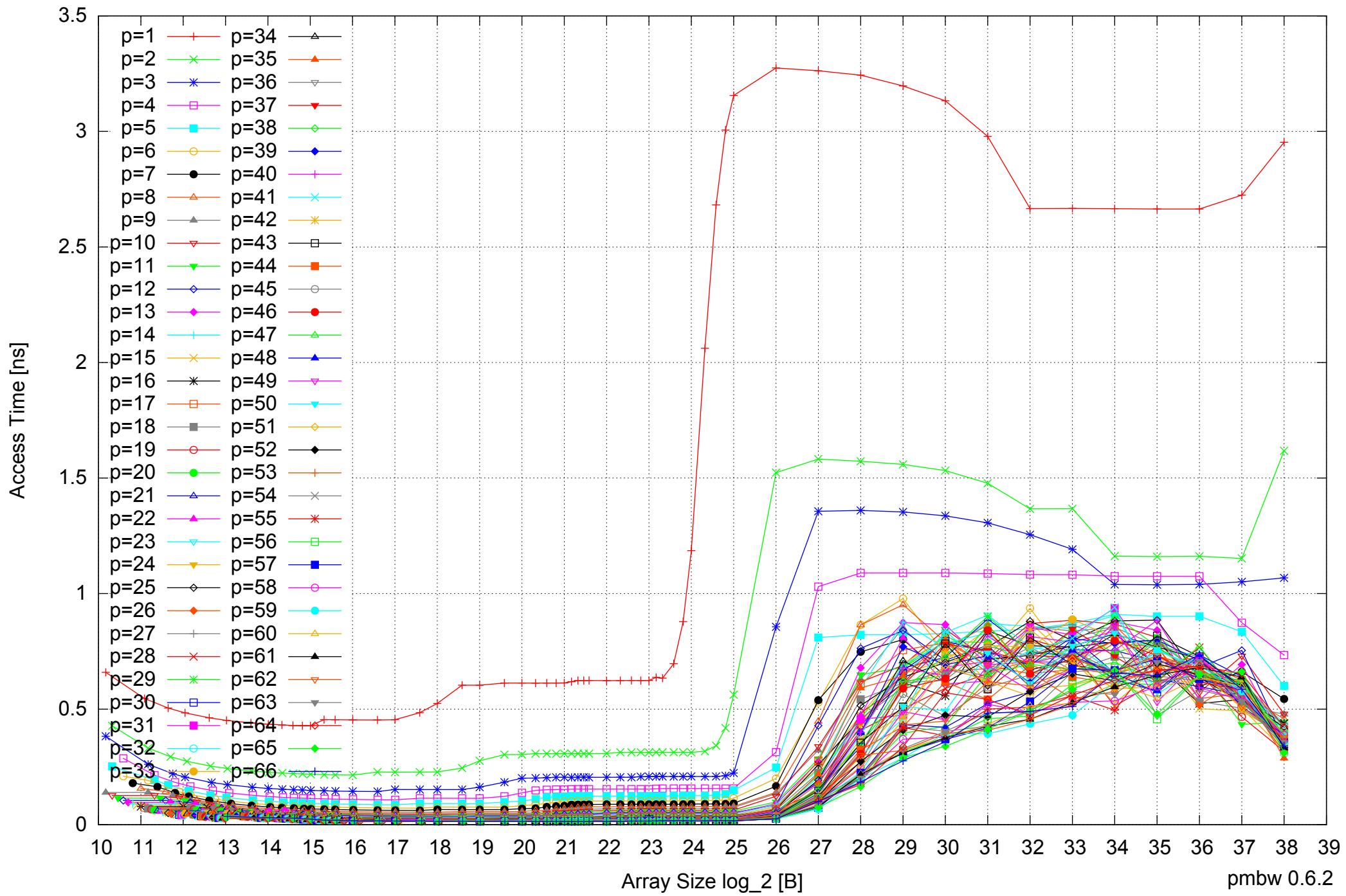
Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth (enlarged) - ScanWrite64PtrUnrollLoop



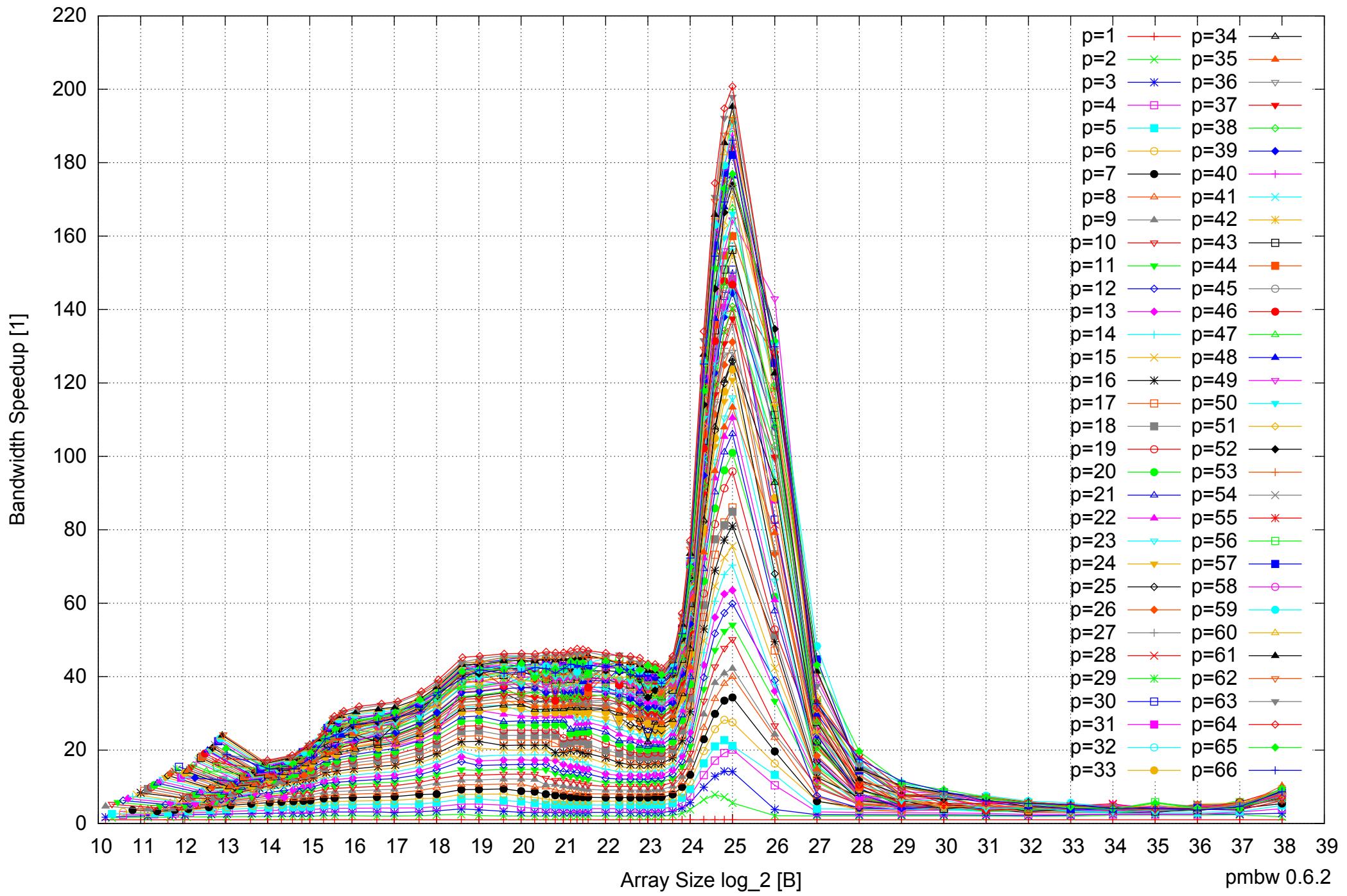
# Intel Xeon E5-4640 512GB - Parallel Memory Bandwidth - ScanRead64PtrSimpleLoop



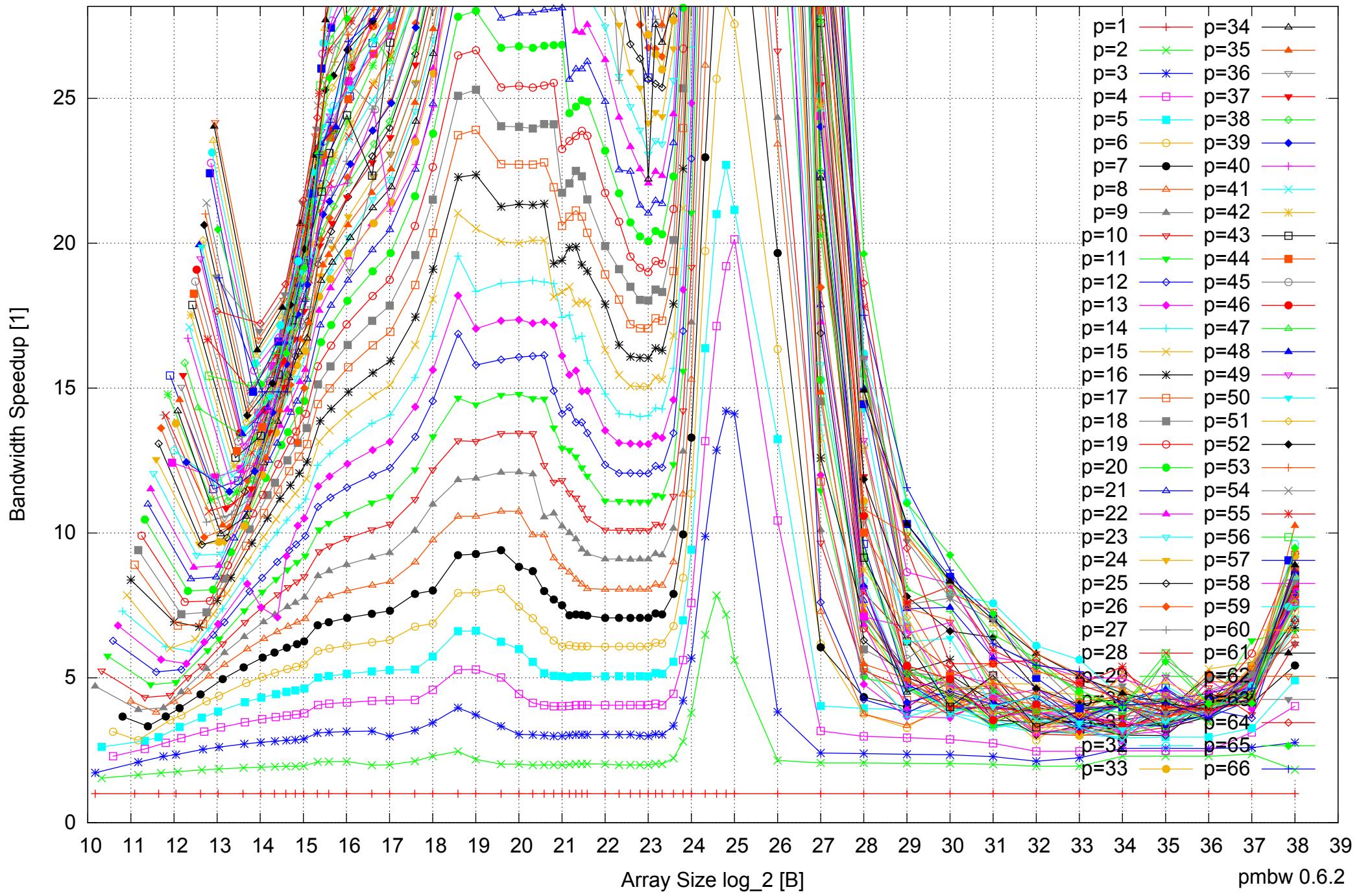
Intel Xeon E5-4640 512GB - Parallel Memory Access Time - ScanRead64PtrSimpleLoop



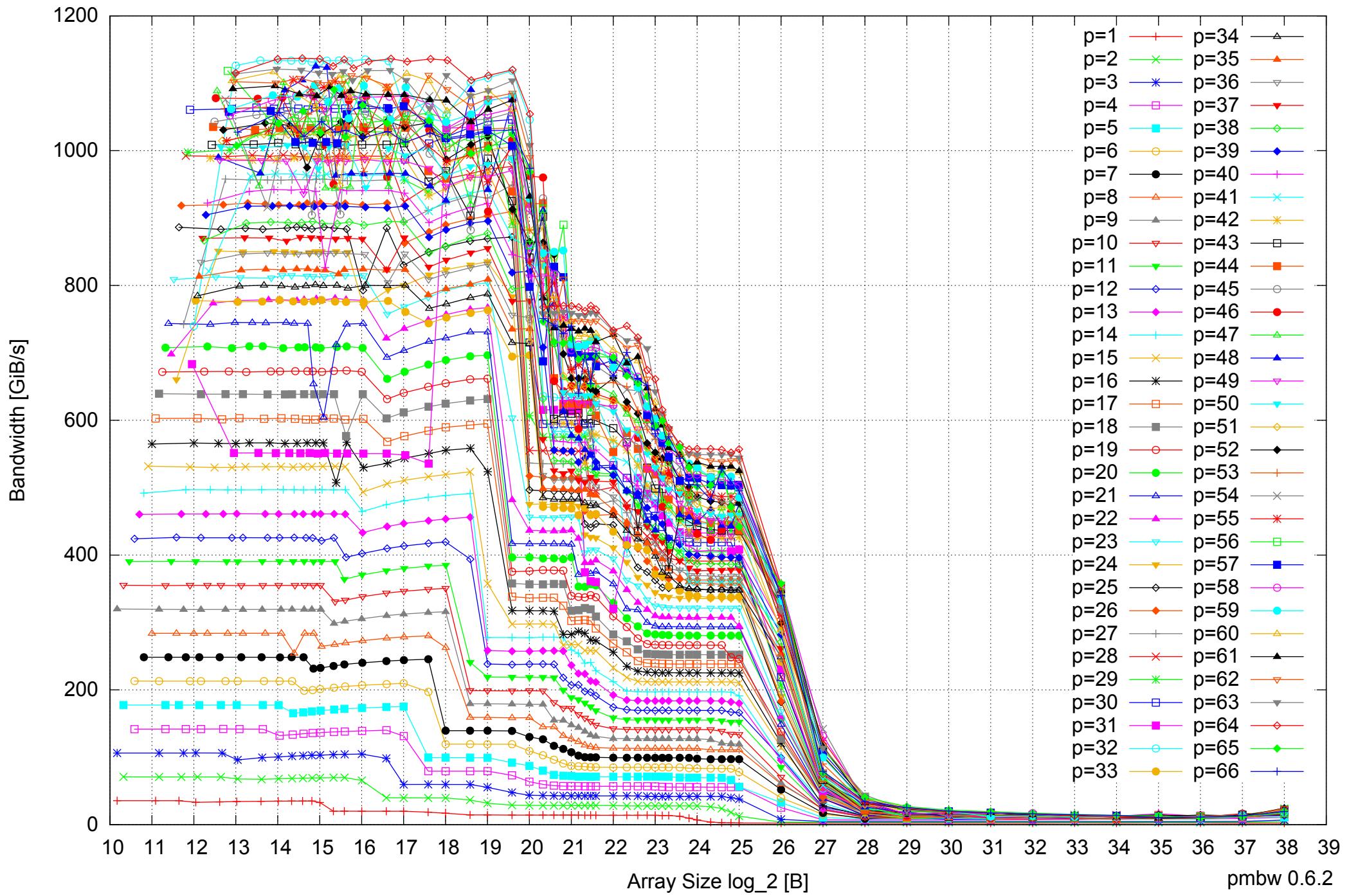
# Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth - ScanRead64PtrSimpleLoop



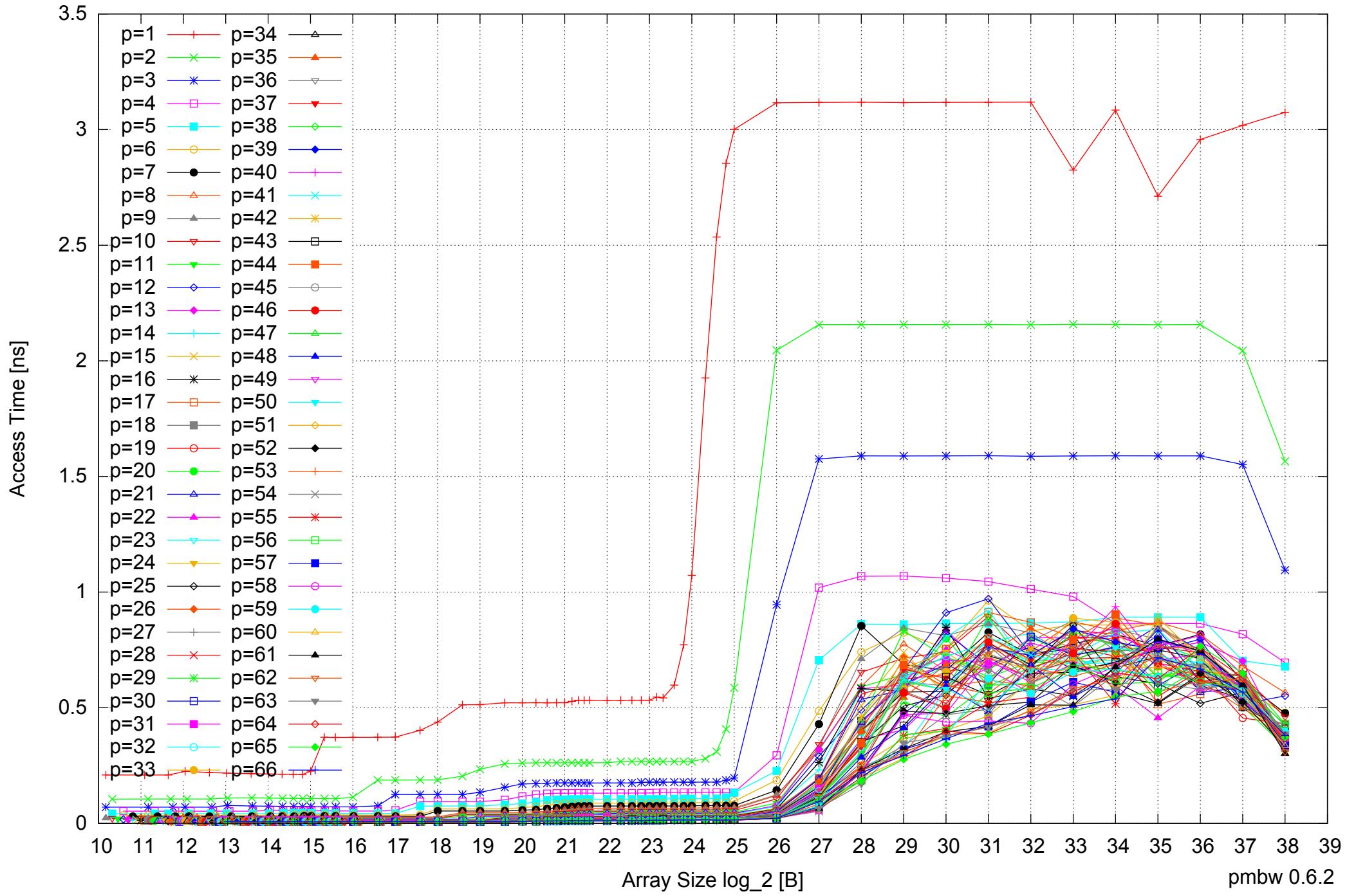
Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth (enlarged) - ScanRead64PtrSimpleLoop



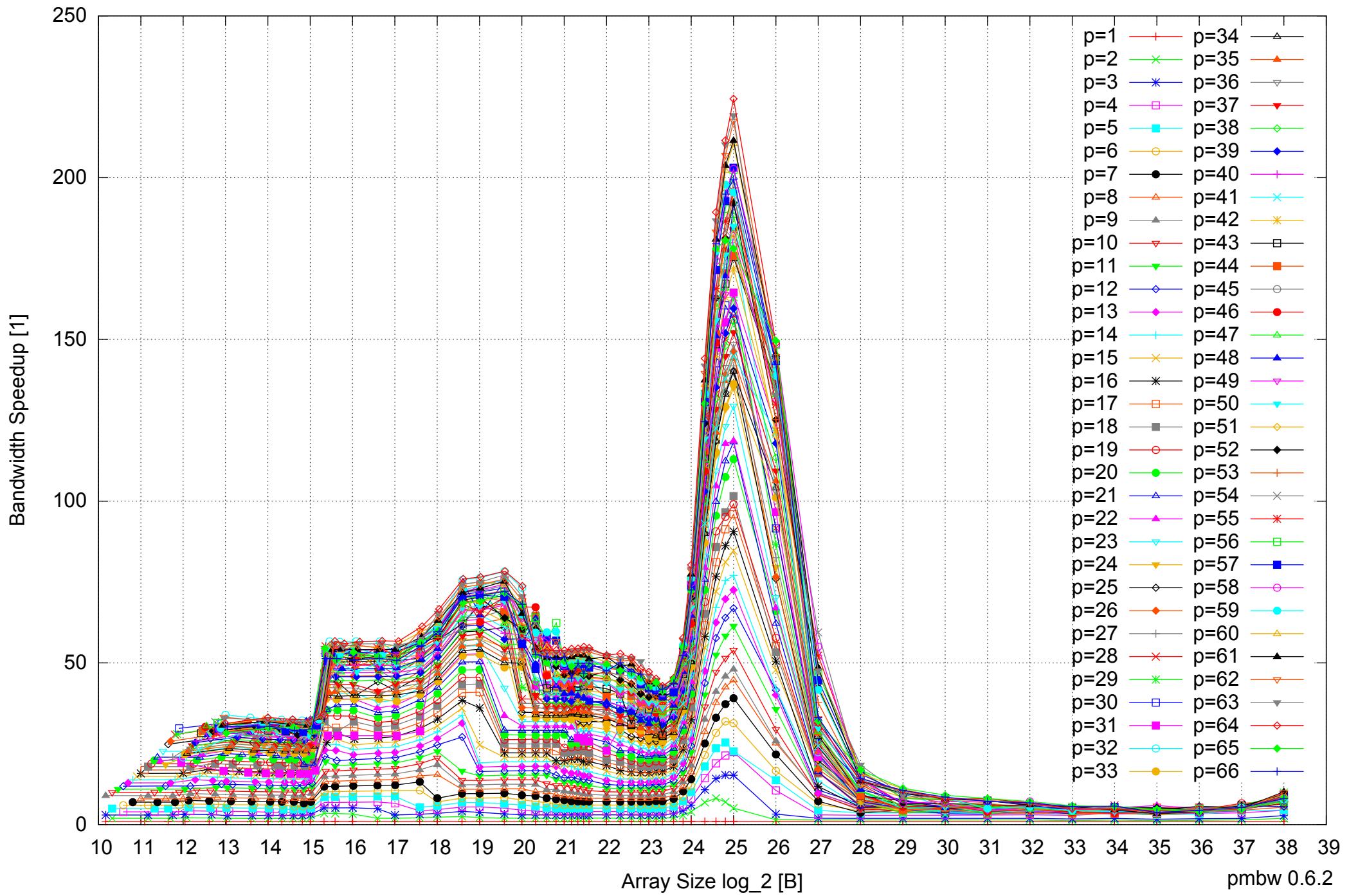
# Intel Xeon E5-4640 512GB - Parallel Memory Bandwidth - ScanRead64PtrUnrollLoop



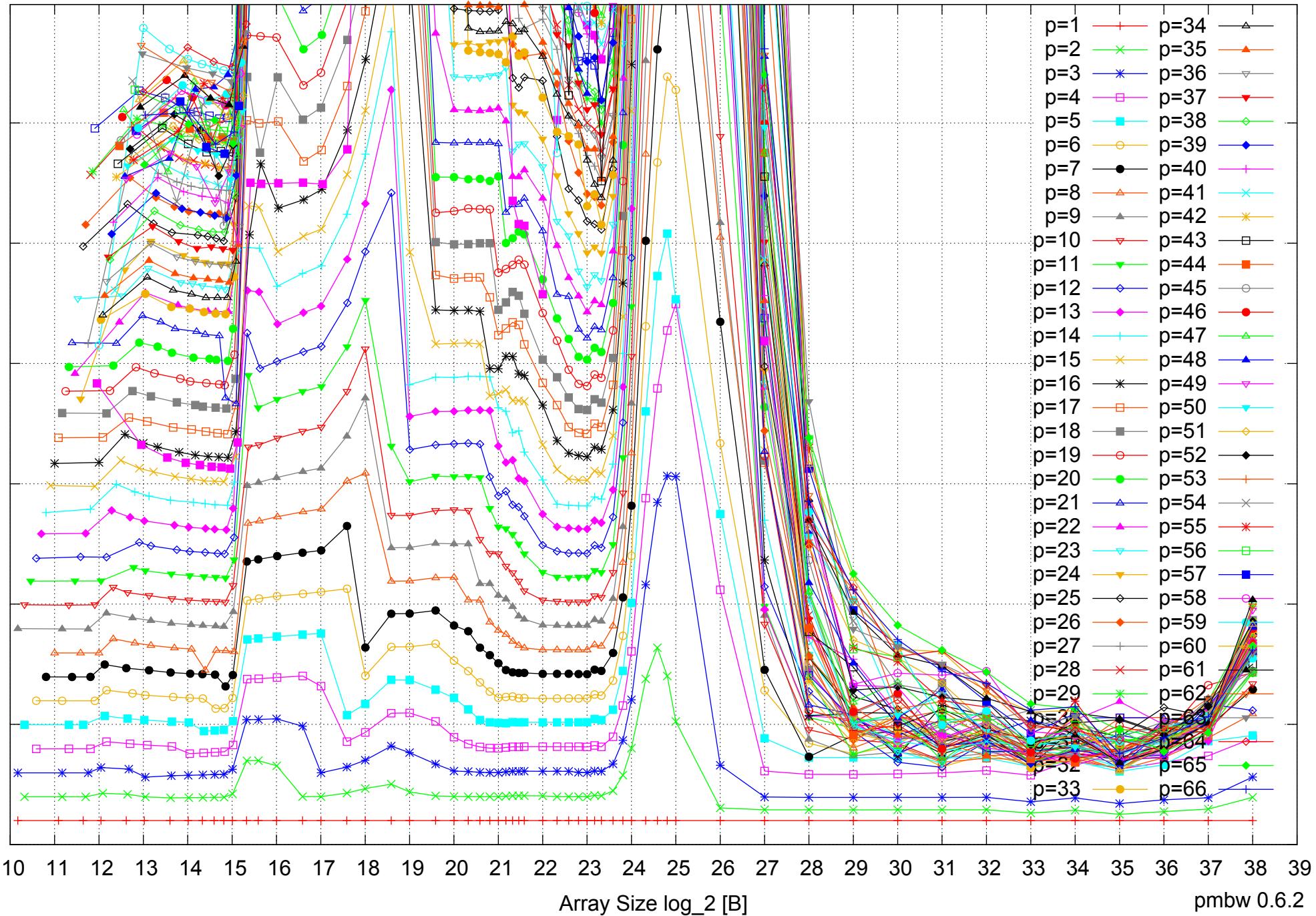
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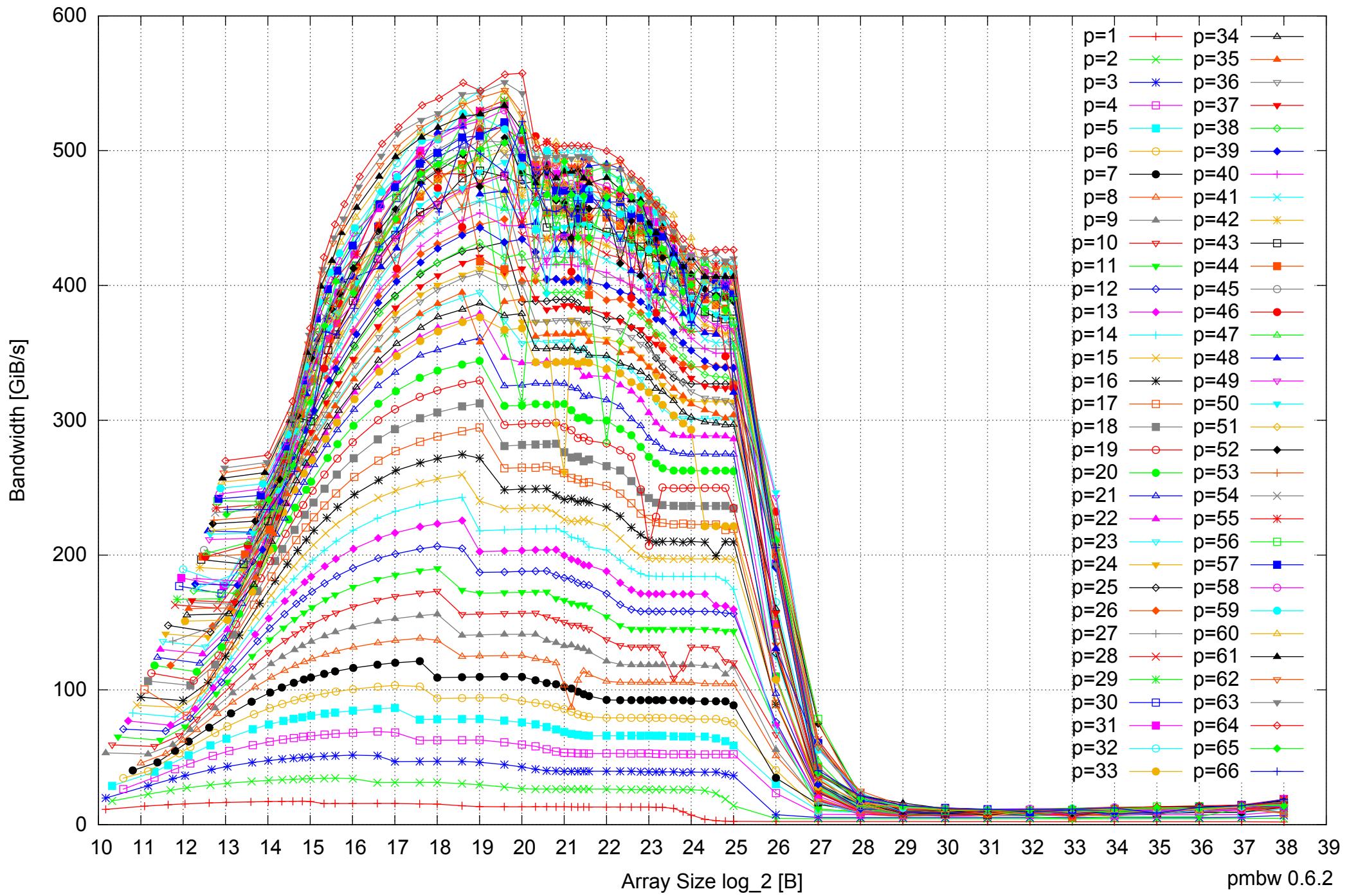
# Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth - ScanRead64PtrUnrollLoop



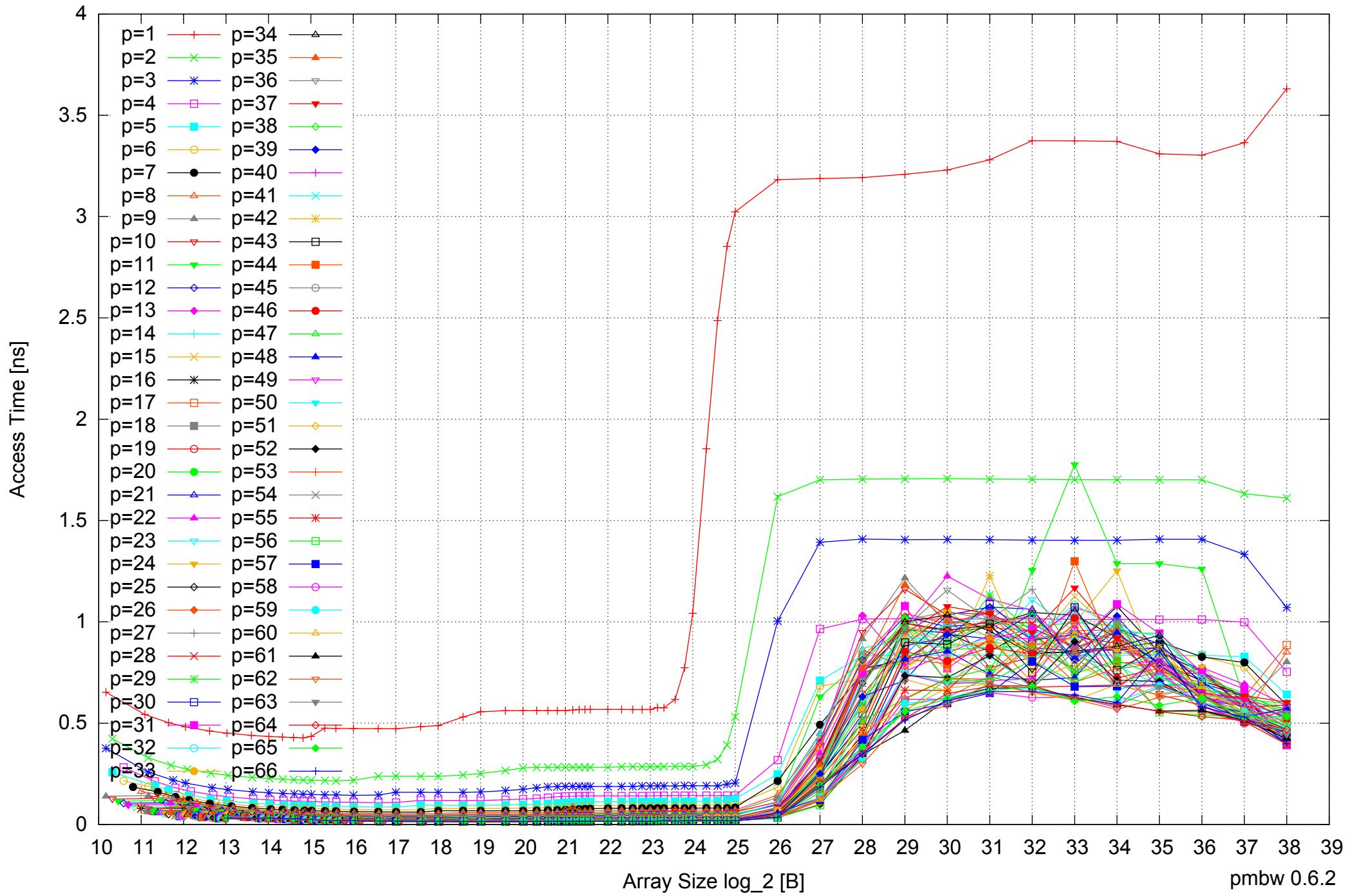
Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth (enlarged) - ScanRead64PtrUnrollLoop



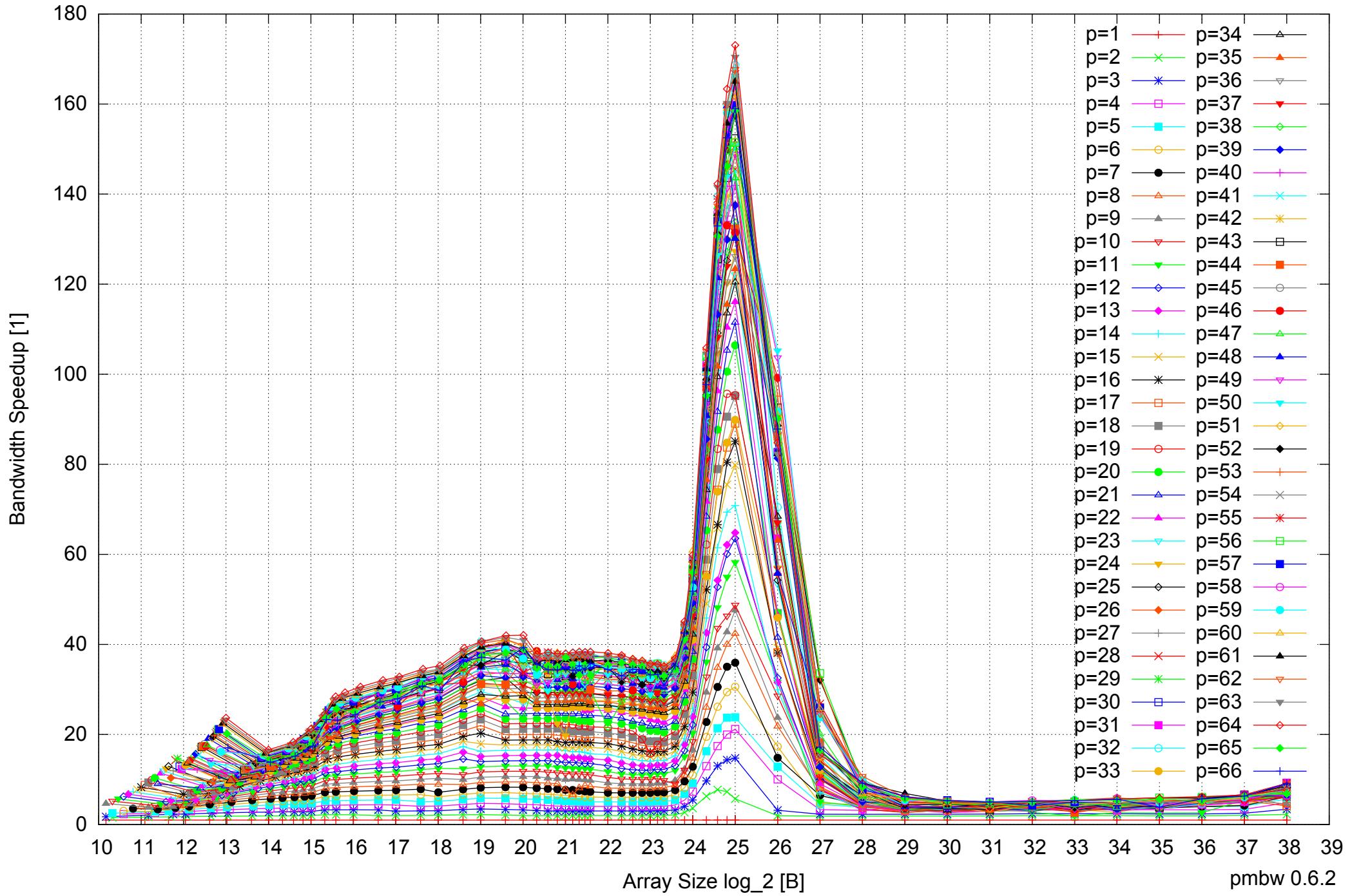
# Intel Xeon E5-4640 512GB - Parallel Memory Bandwidth - ScanWrite64IndexSimpleLoop



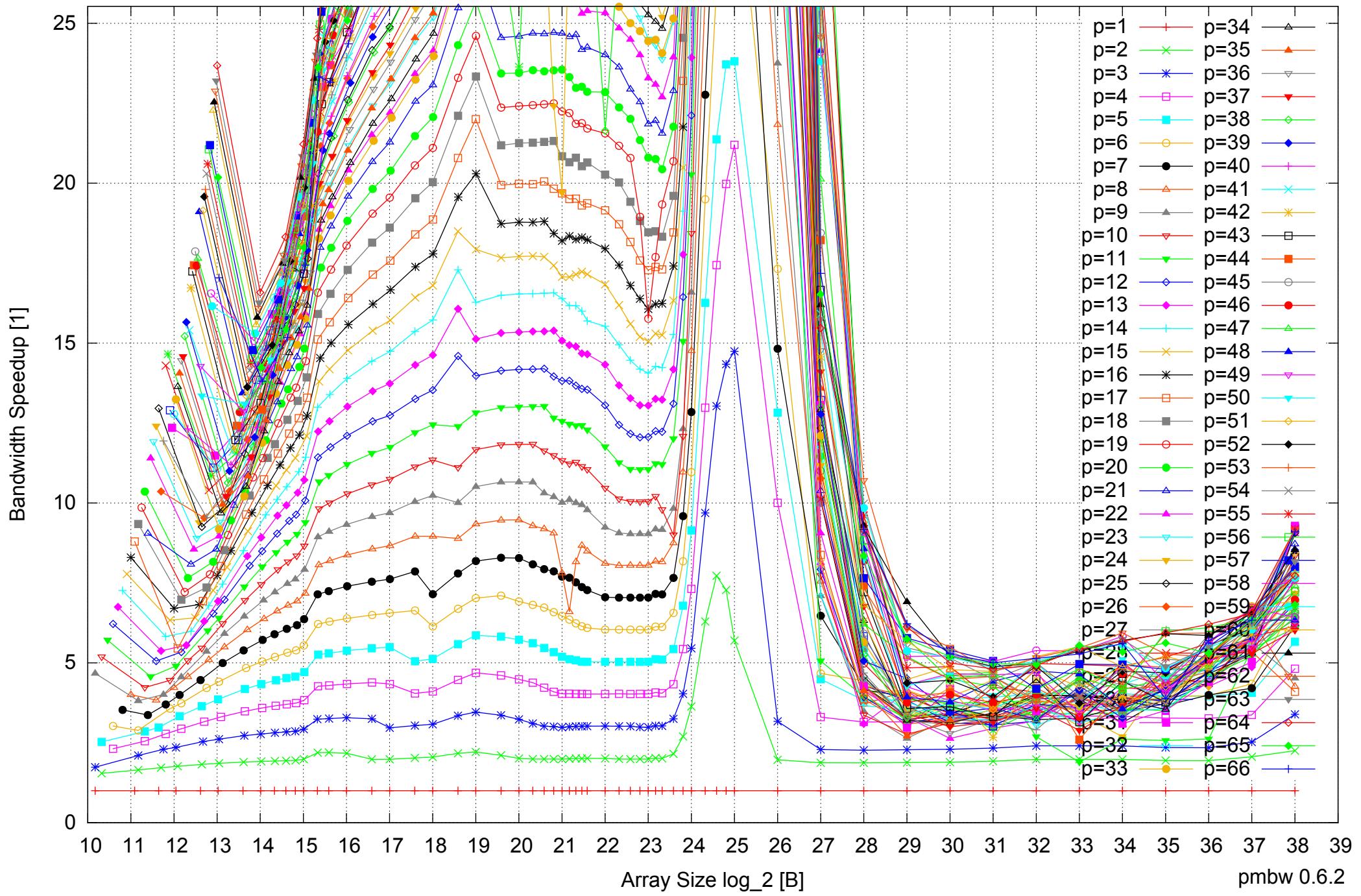
# Intel Xeon E5-4640 512GB - Parallel Memory Access Time - ScanWrite64IndexSimpleLoop



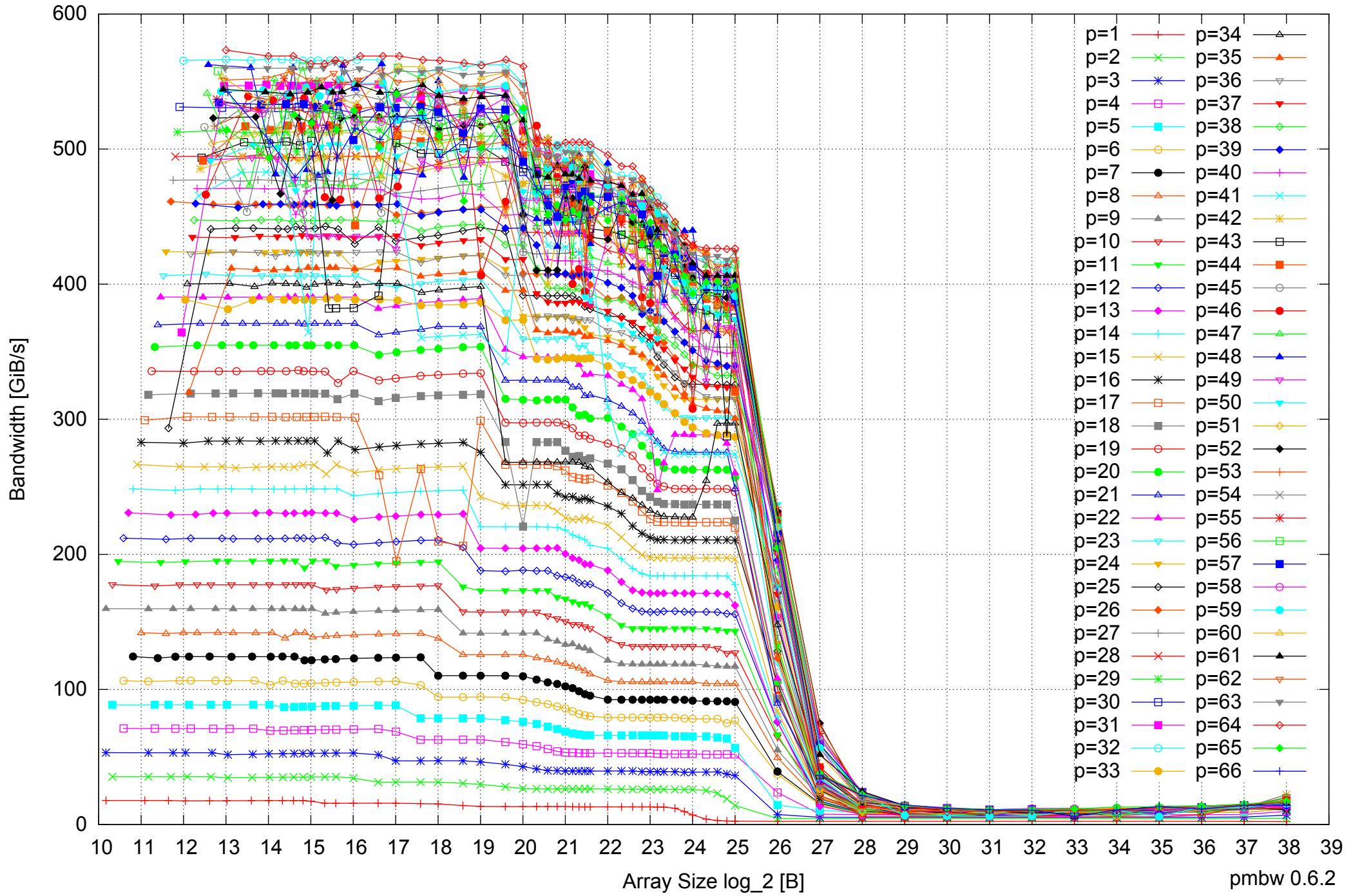
# Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth - ScanWrite64IndexSimpleLoop



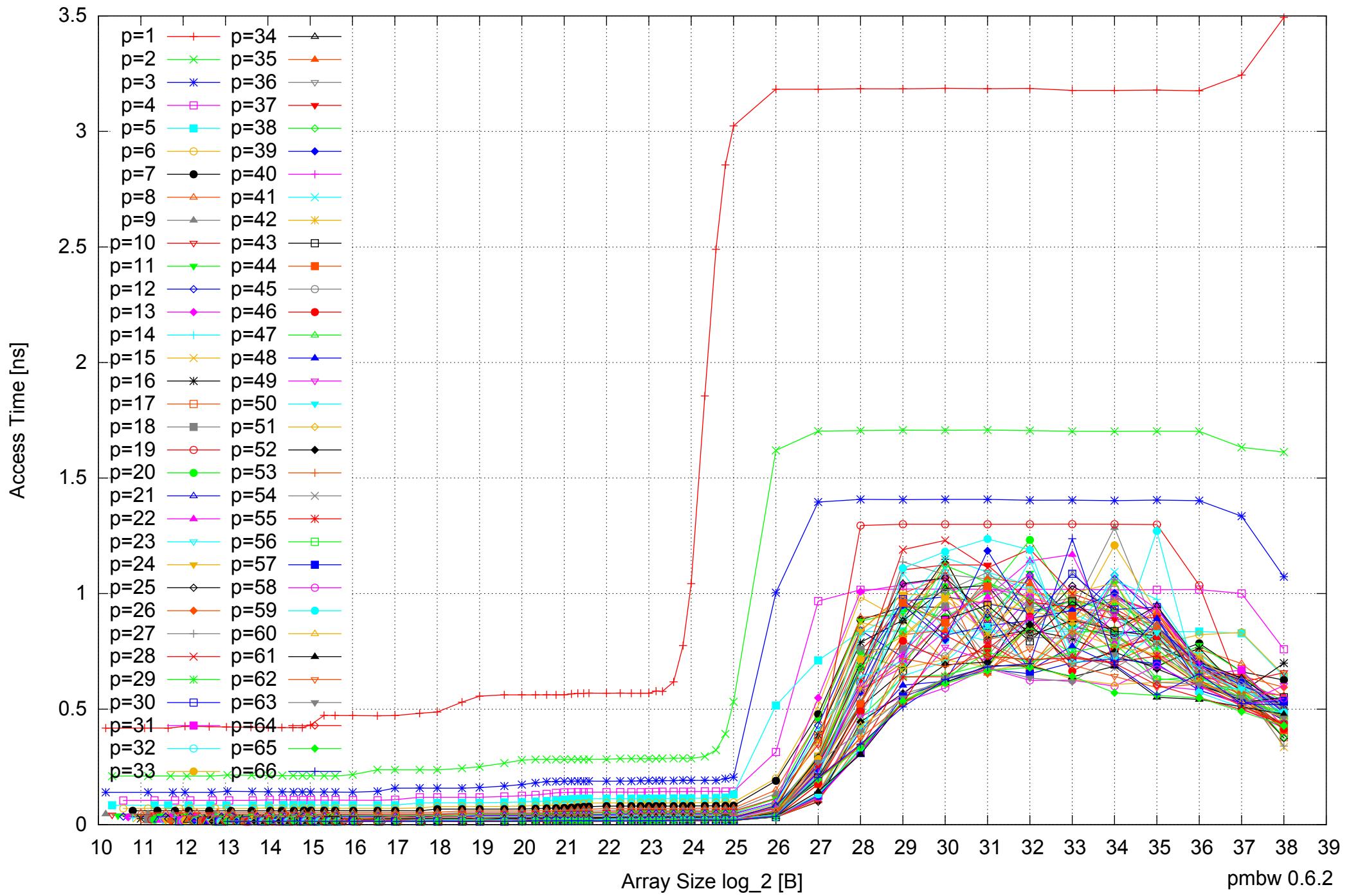
Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth (enlarged) - ScanWrite64IndexSimpleLoop



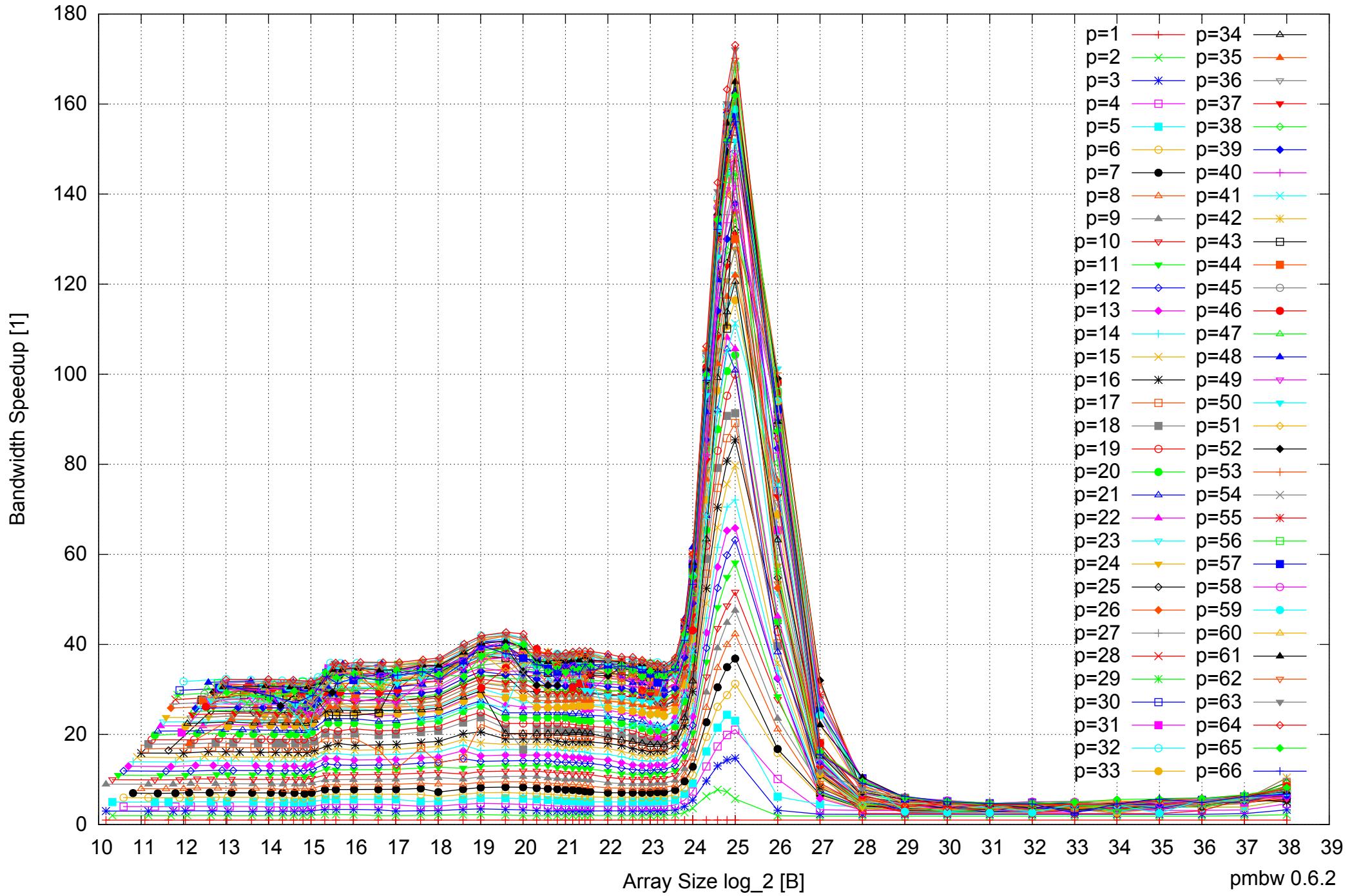
# Intel Xeon E5-4640 512GB - Parallel Memory Bandwidth - ScanWrite64IndexUnrollLoop



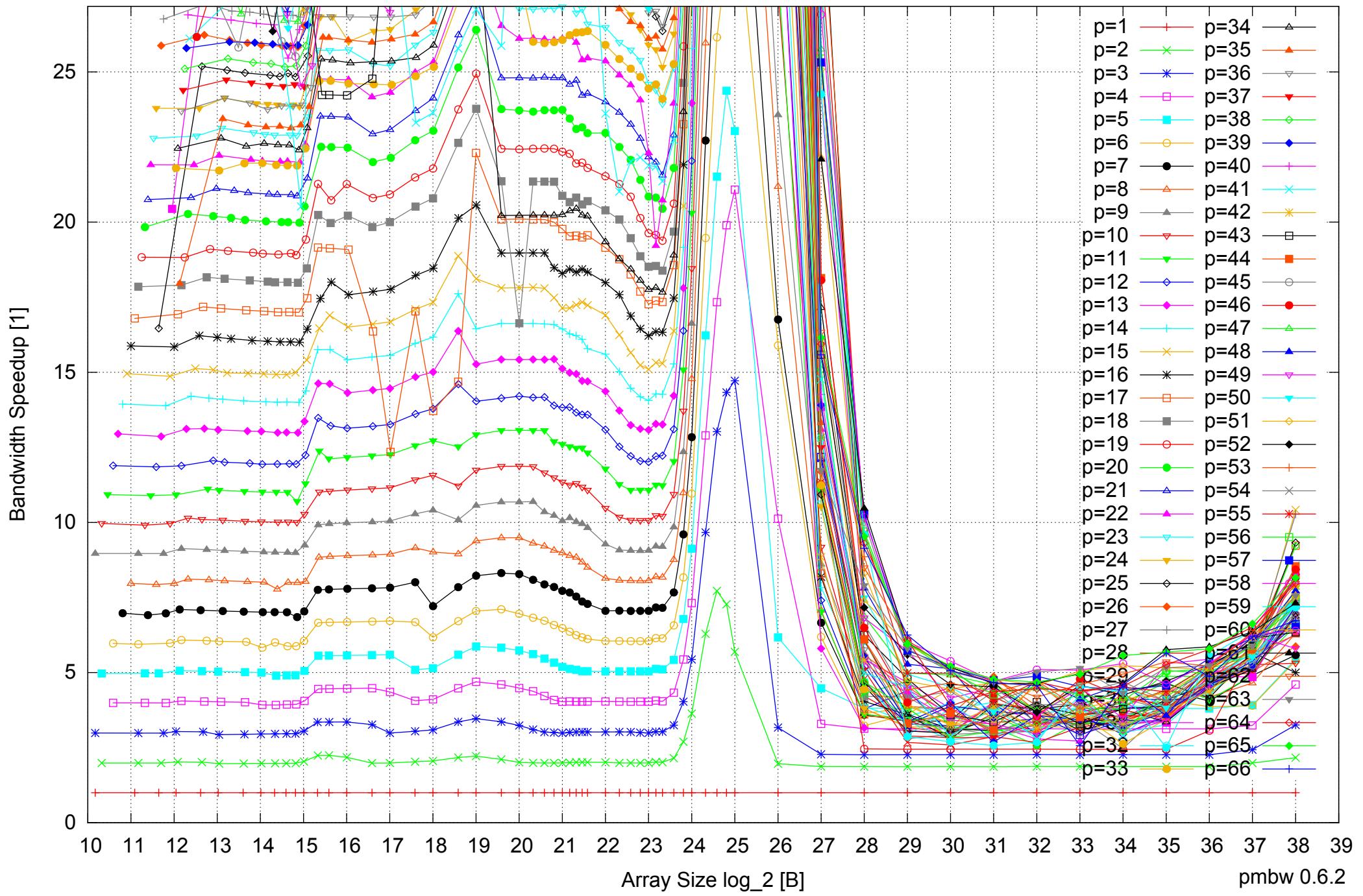
# Intel Xeon E5-4640 512GB - Parallel Memory Access Time - ScanWrite64IndexUnrollLoop



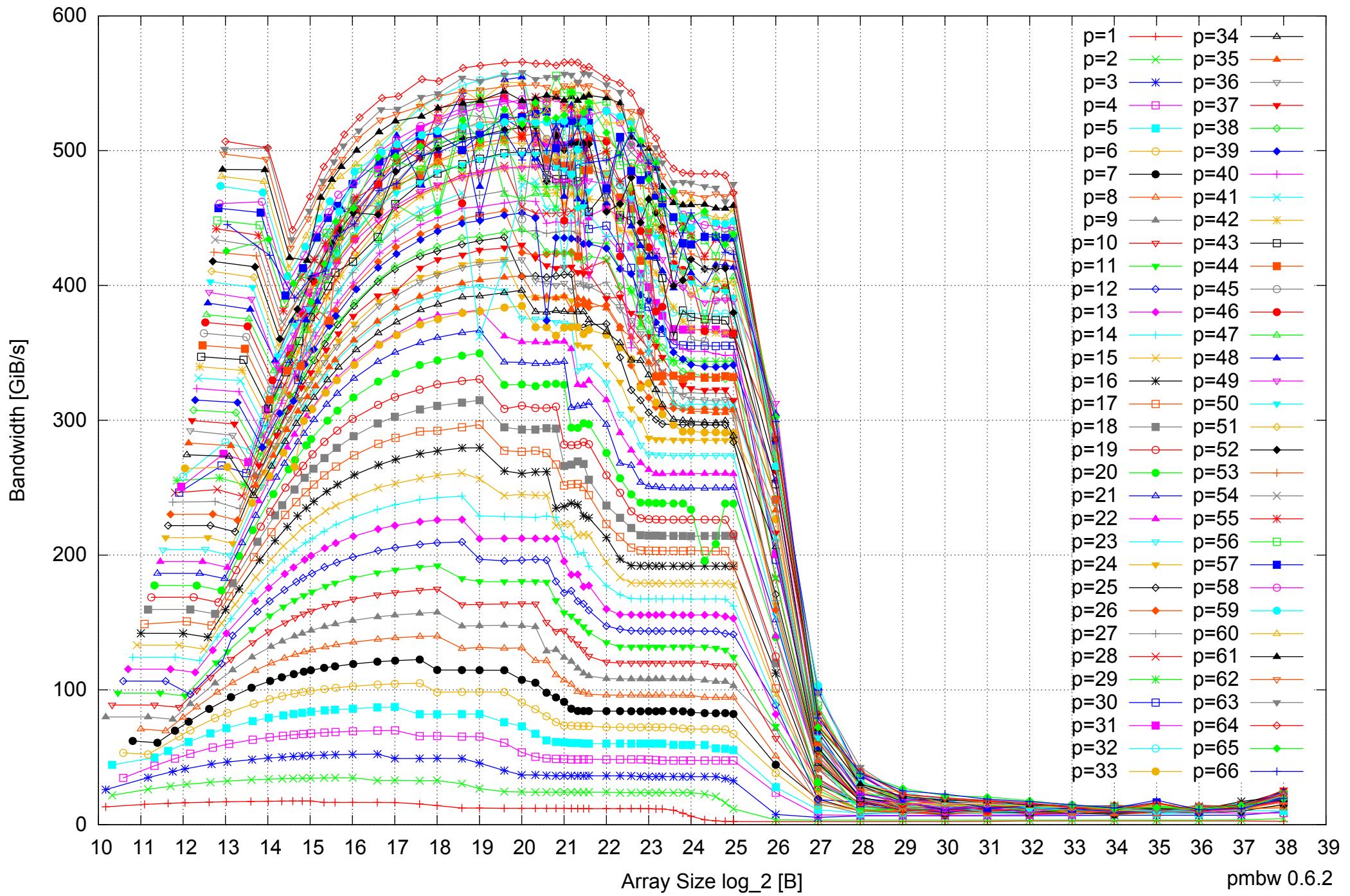
# Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth - ScanWrite64IndexUnrollLoop



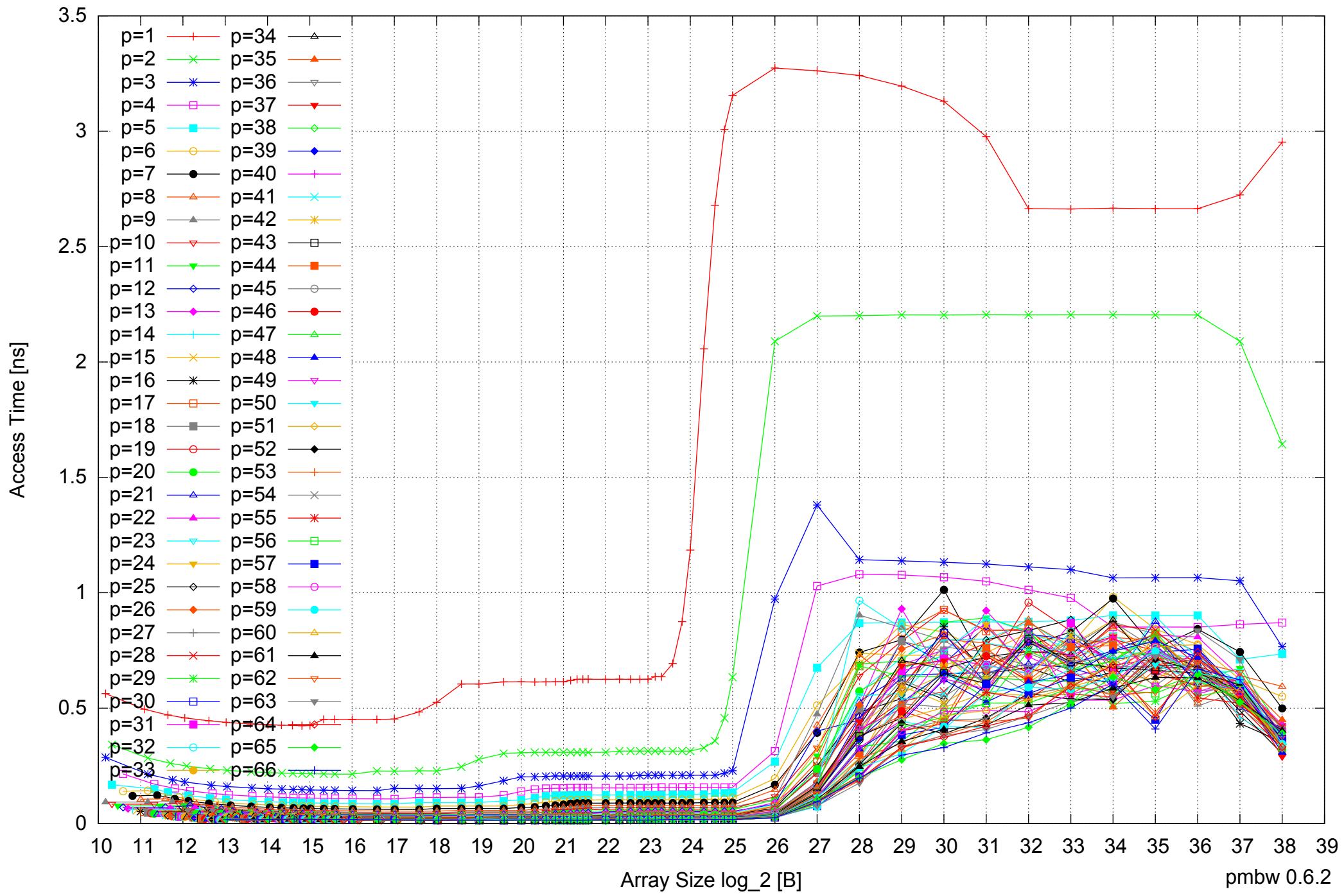
Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth (enlarged) - ScanWrite64IndexUnrollLoop



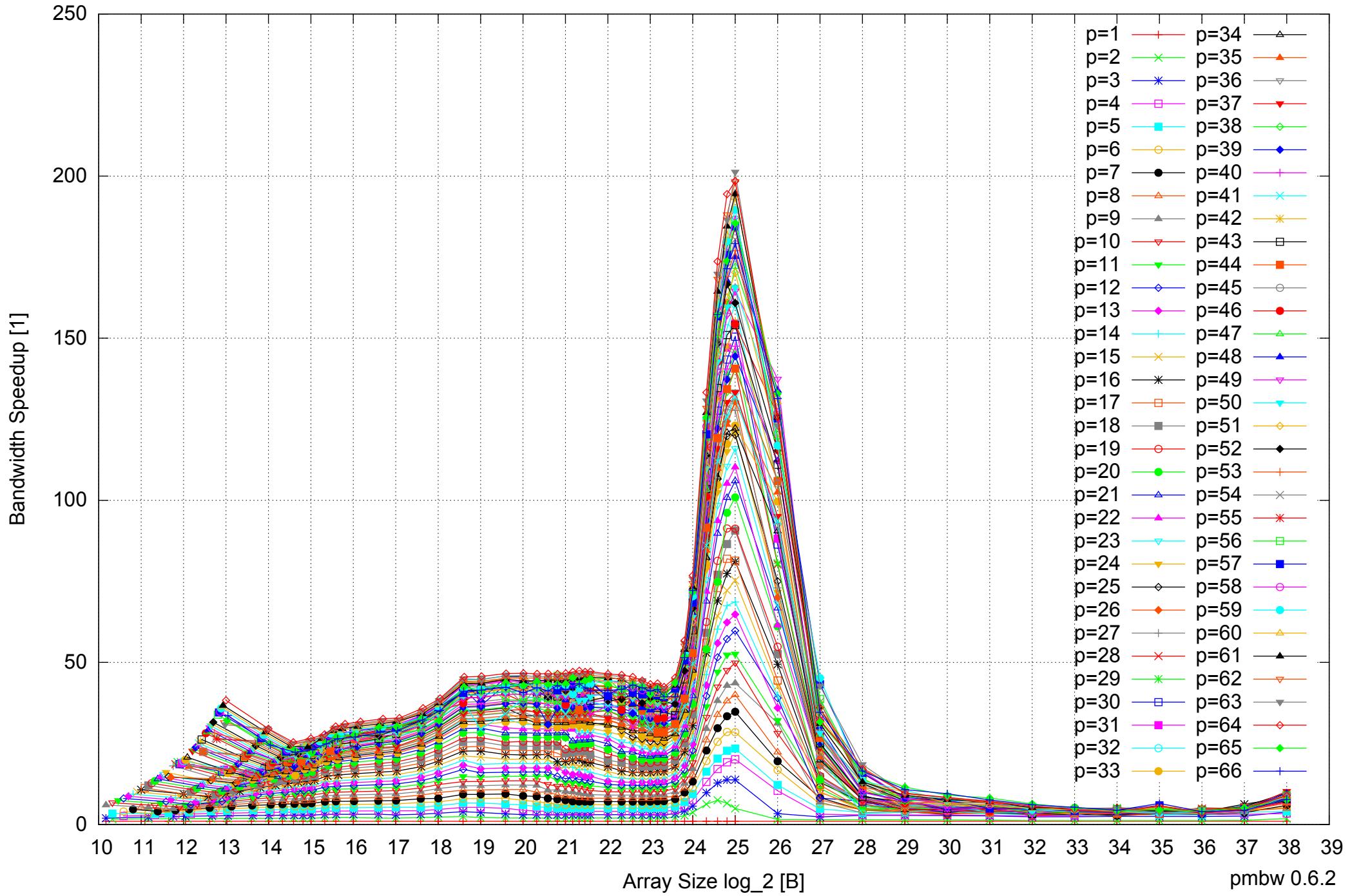
# Intel Xeon E5-4640 512GB - Parallel Memory Bandwidth - ScanRead64IndexSimpleLoop



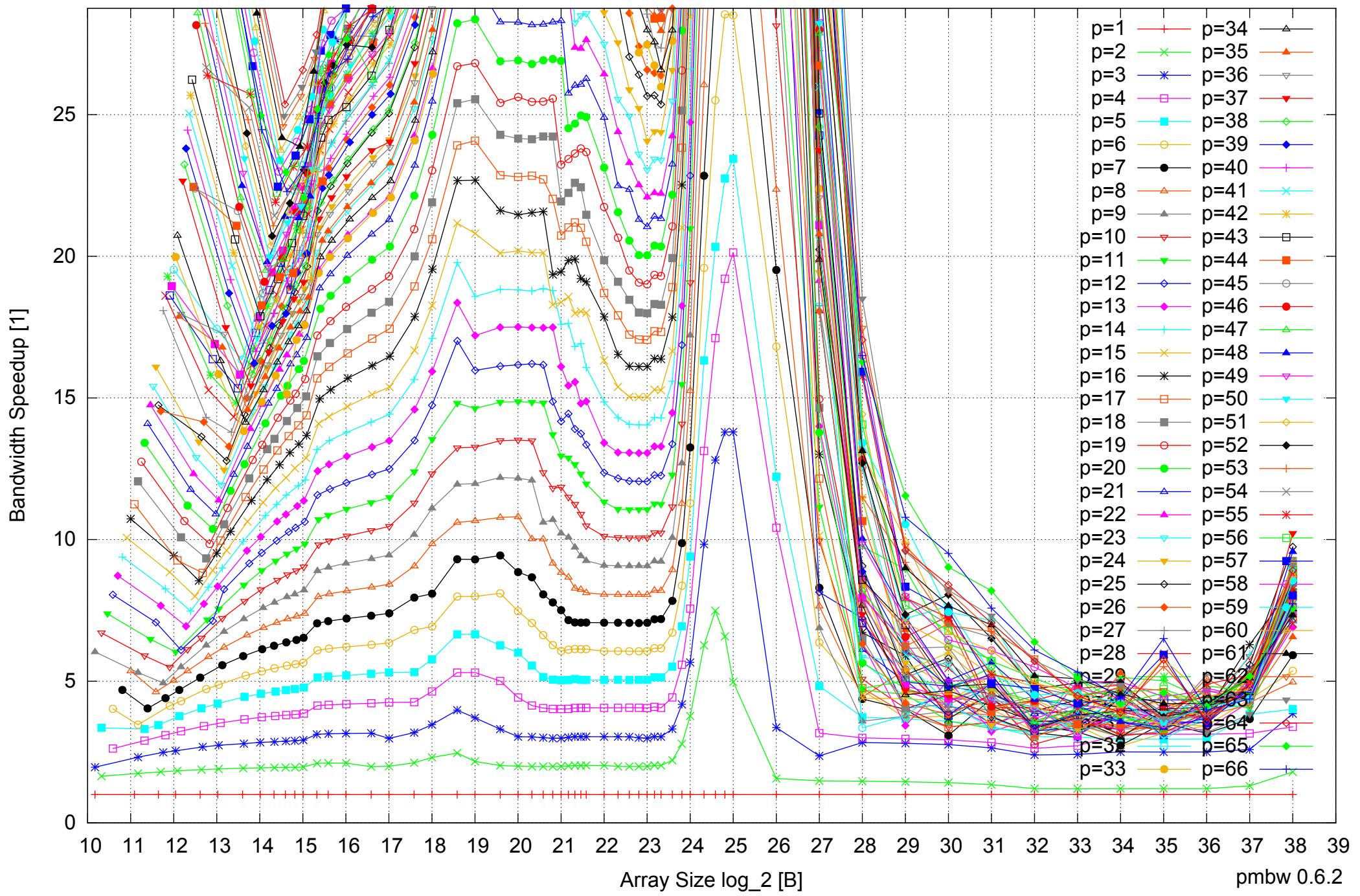
# Intel Xeon E5-4640 512GB - Parallel Memory Access Time - ScanRead64IndexSimpleLoop



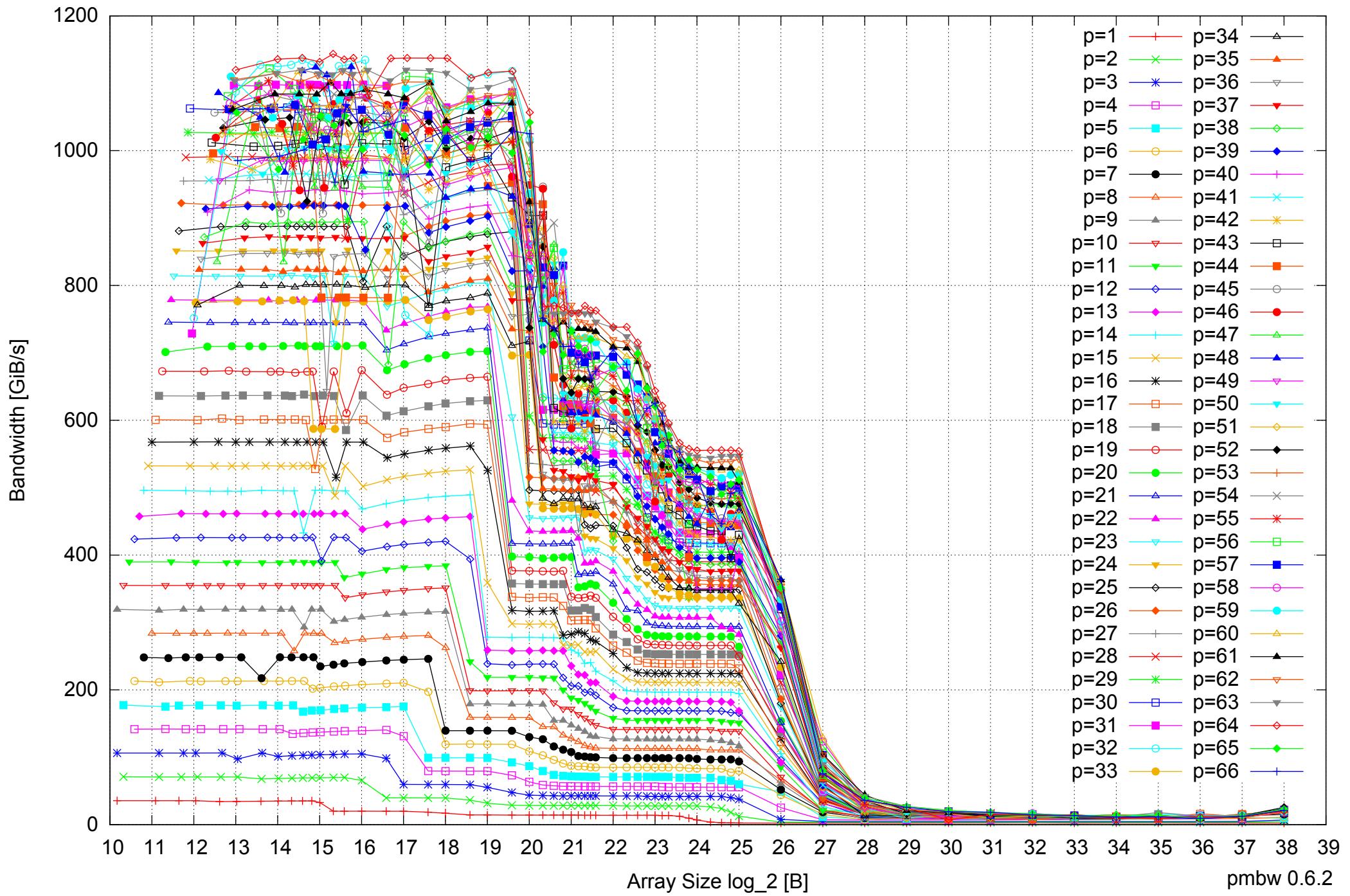
# Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth - ScanRead64IndexSimpleLoop



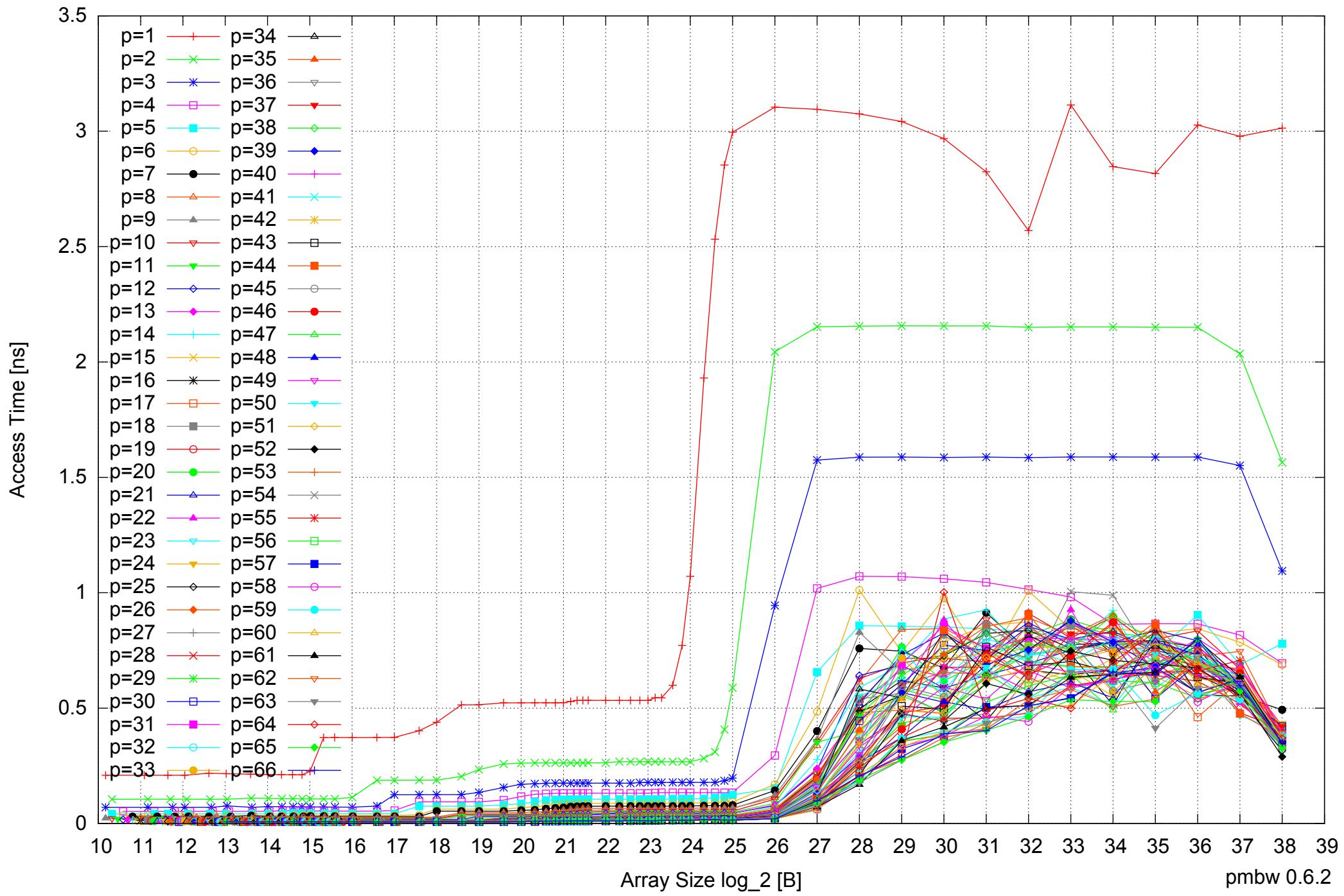
Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth (enlarged) - ScanRead64IndexSimpleLoop



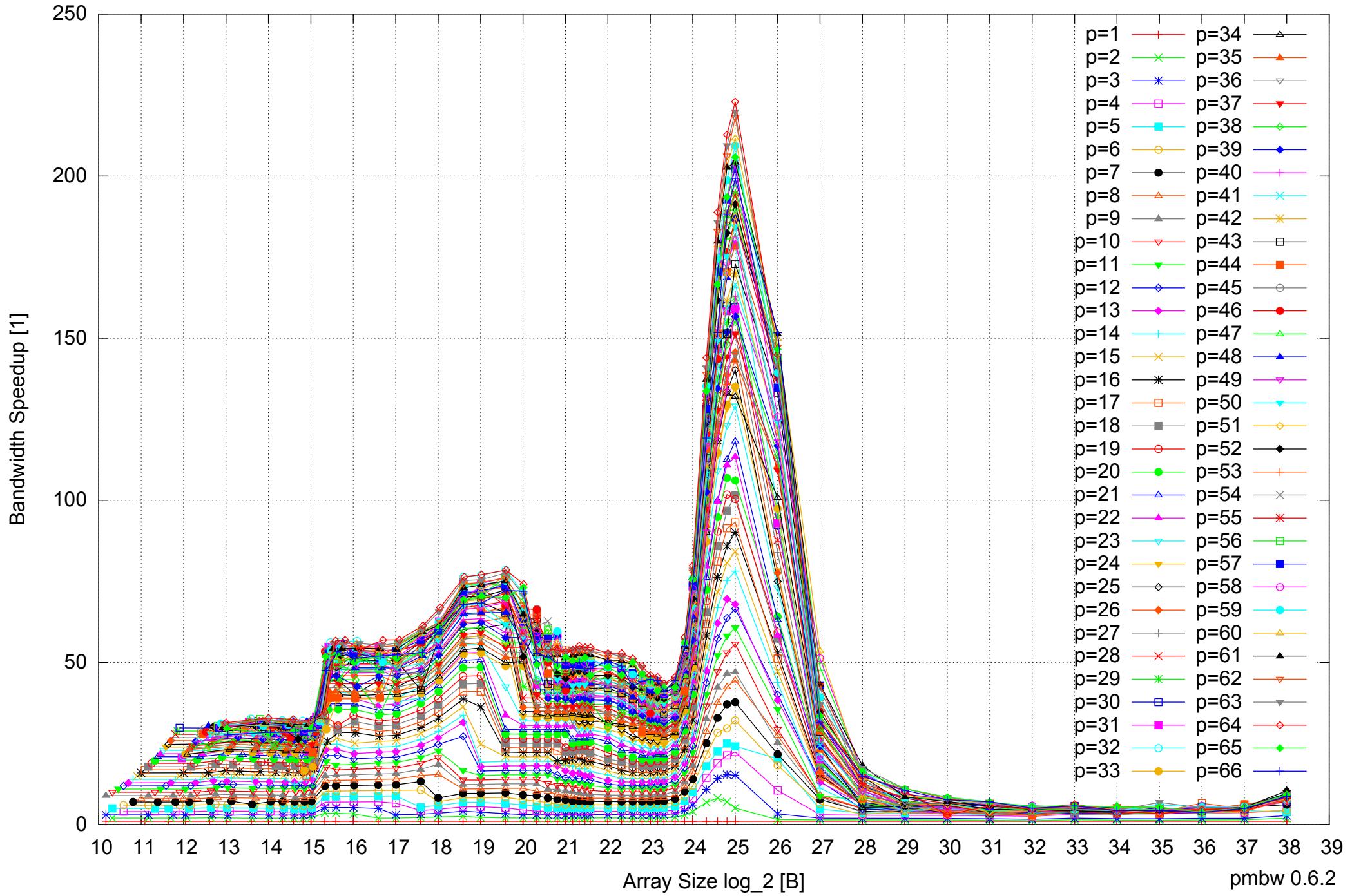
# Intel Xeon E5-4640 512GB - Parallel Memory Bandwidth - ScanRead64IndexUnrollLoop



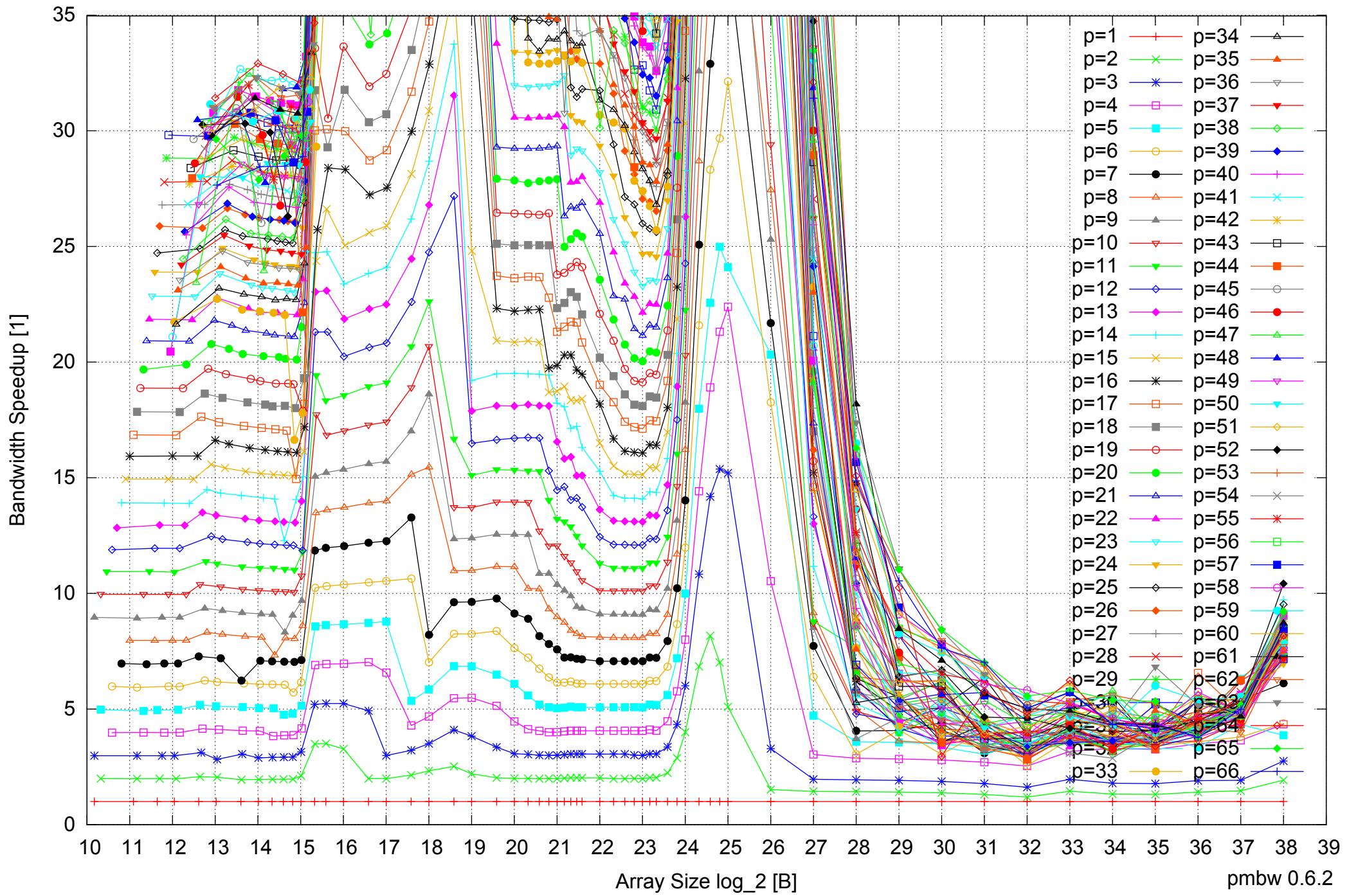
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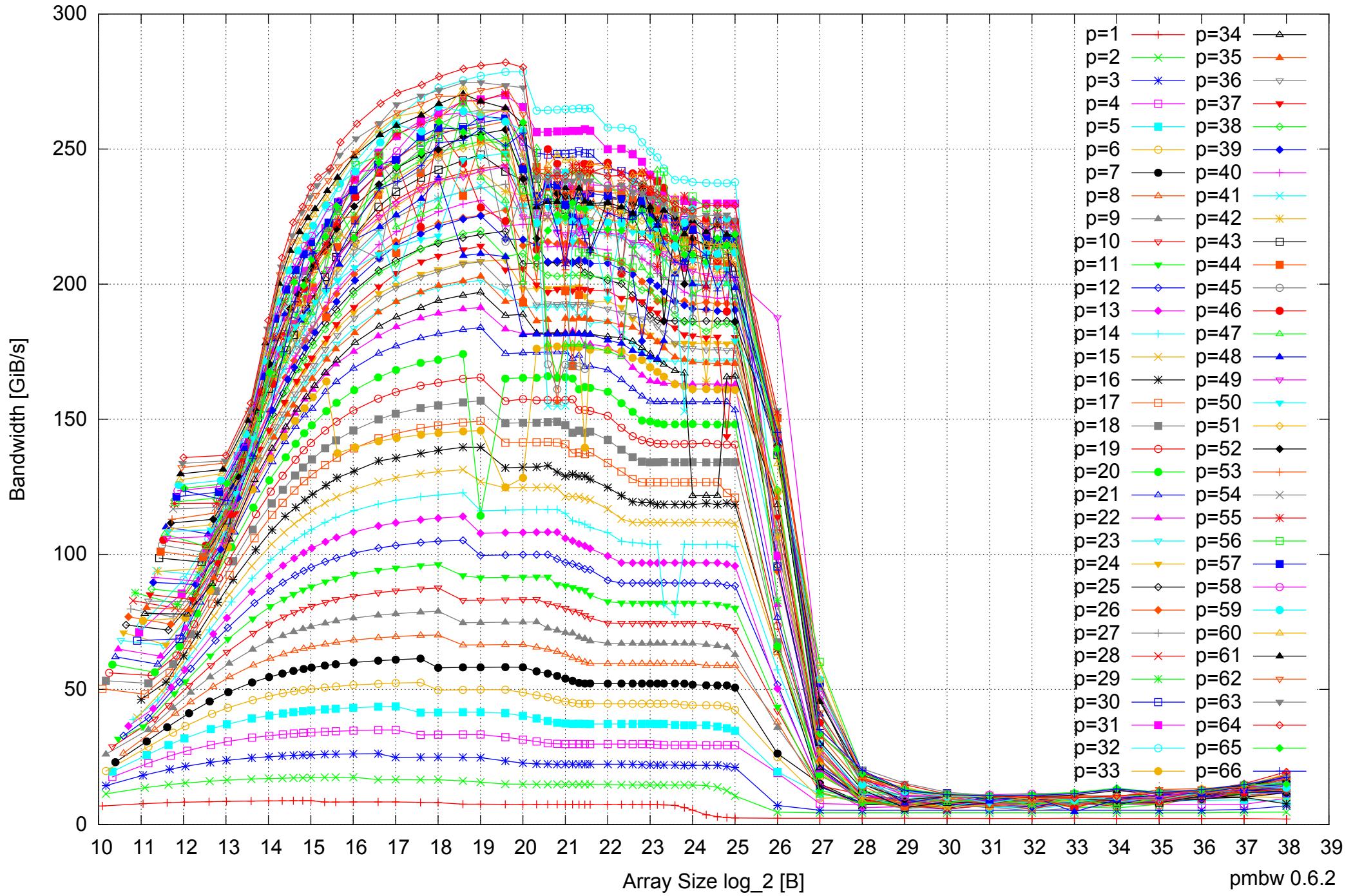
# Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth - ScanRead64IndexUnrollLoop



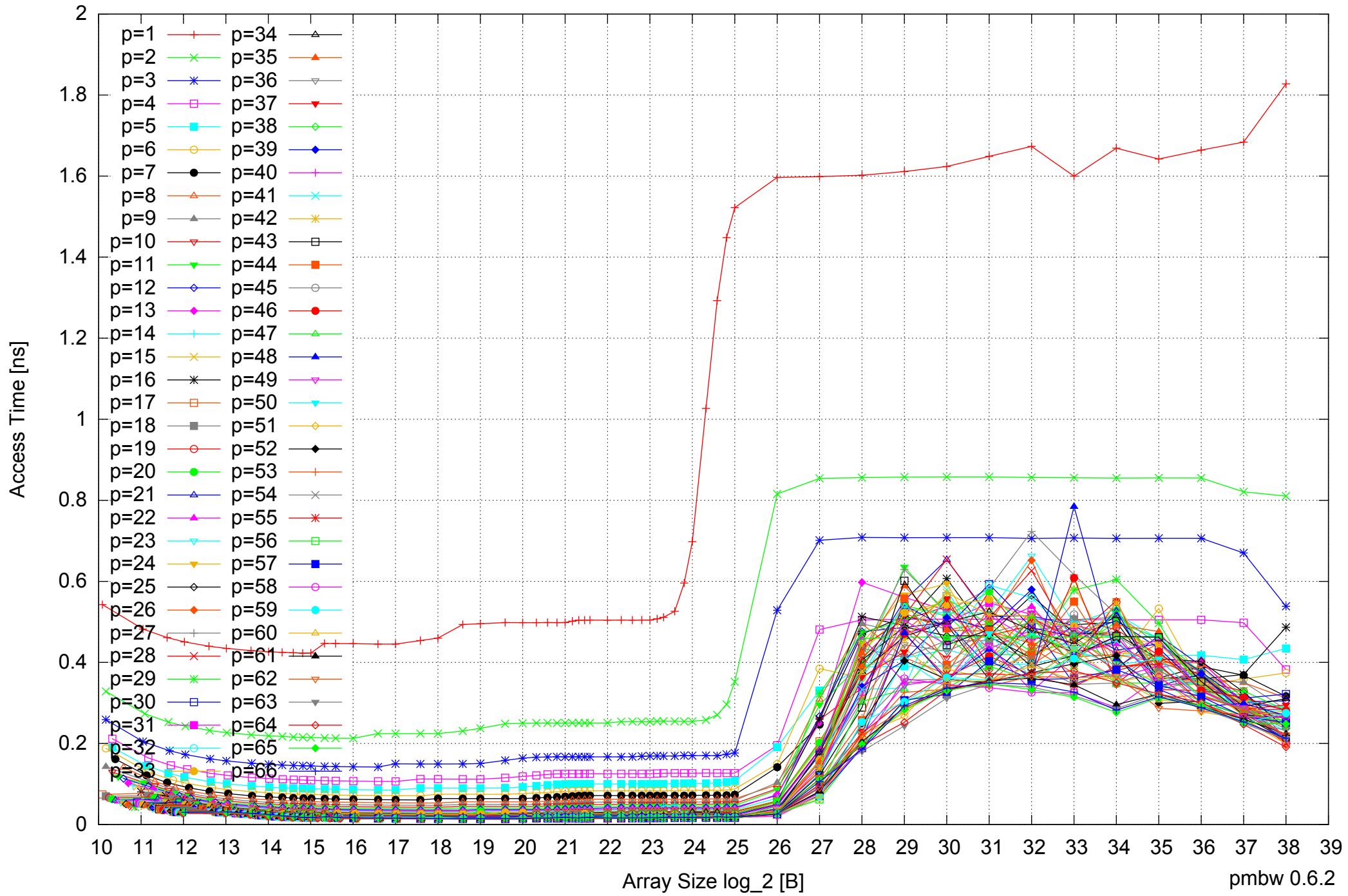
Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth (enlarged) - ScanRead64IndexUnrollLoop



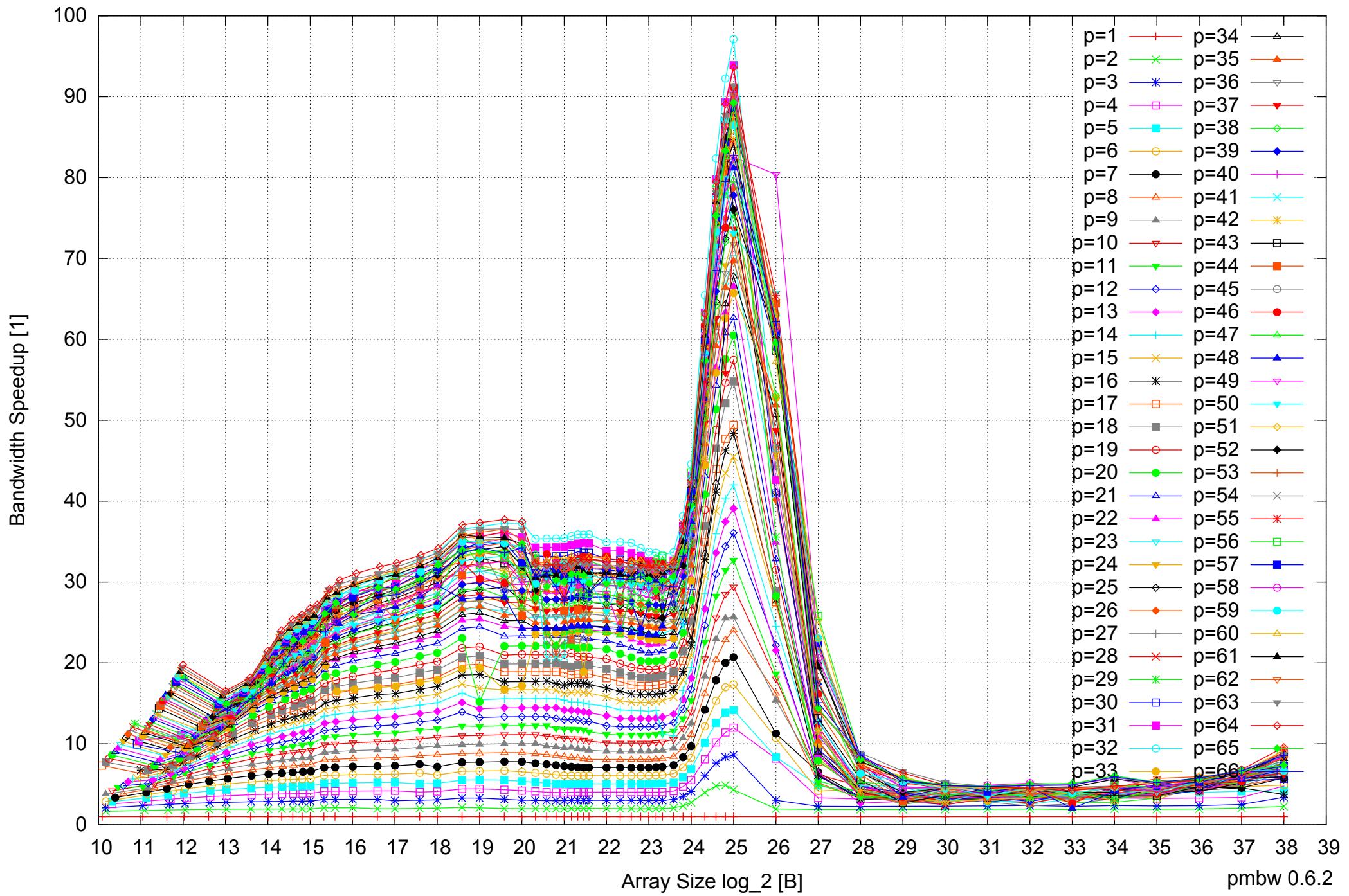
# Intel Xeon E5-4640 512GB - Parallel Memory Bandwidth - ScanWrite32PtrSimpleLoop



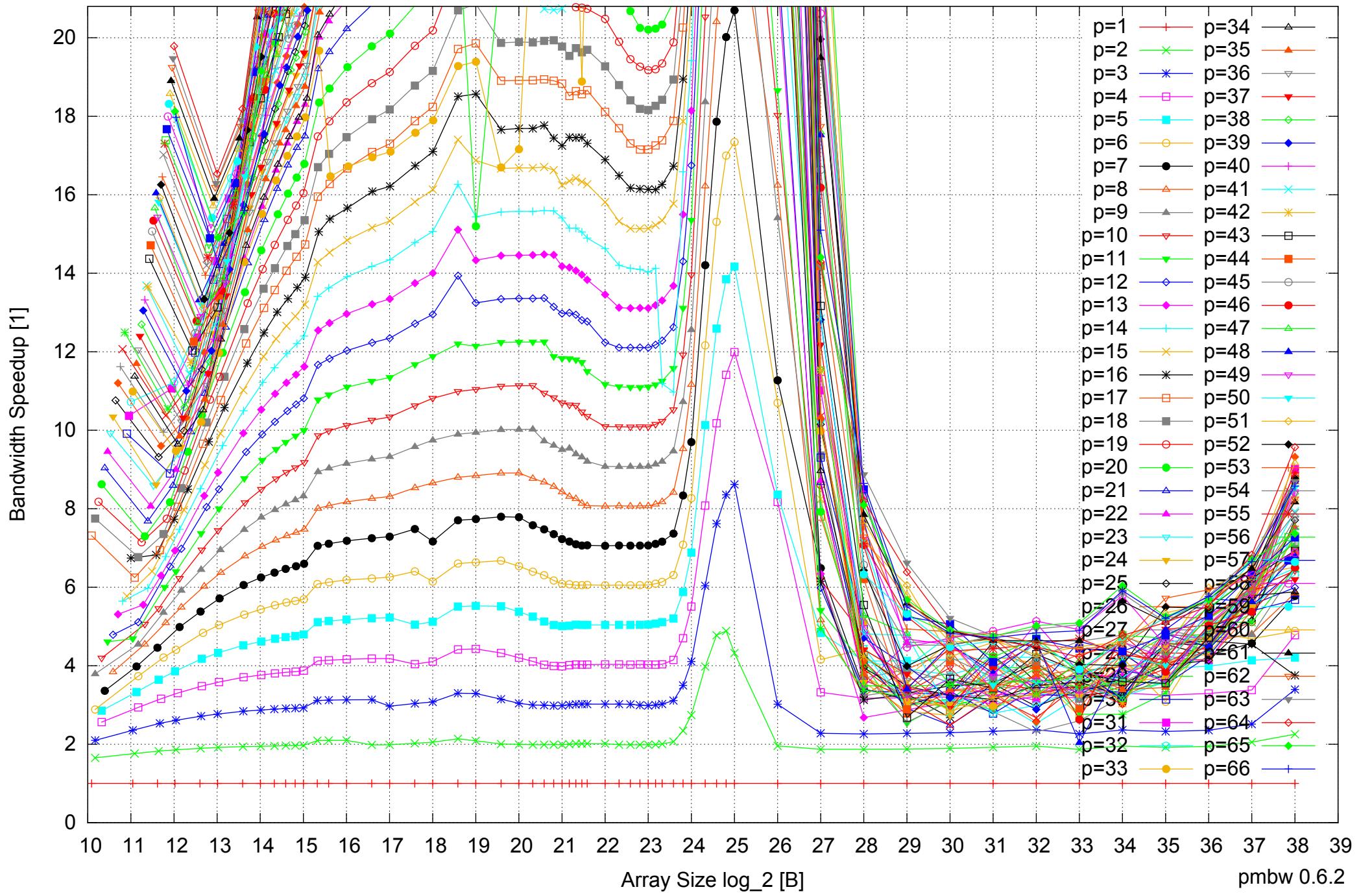
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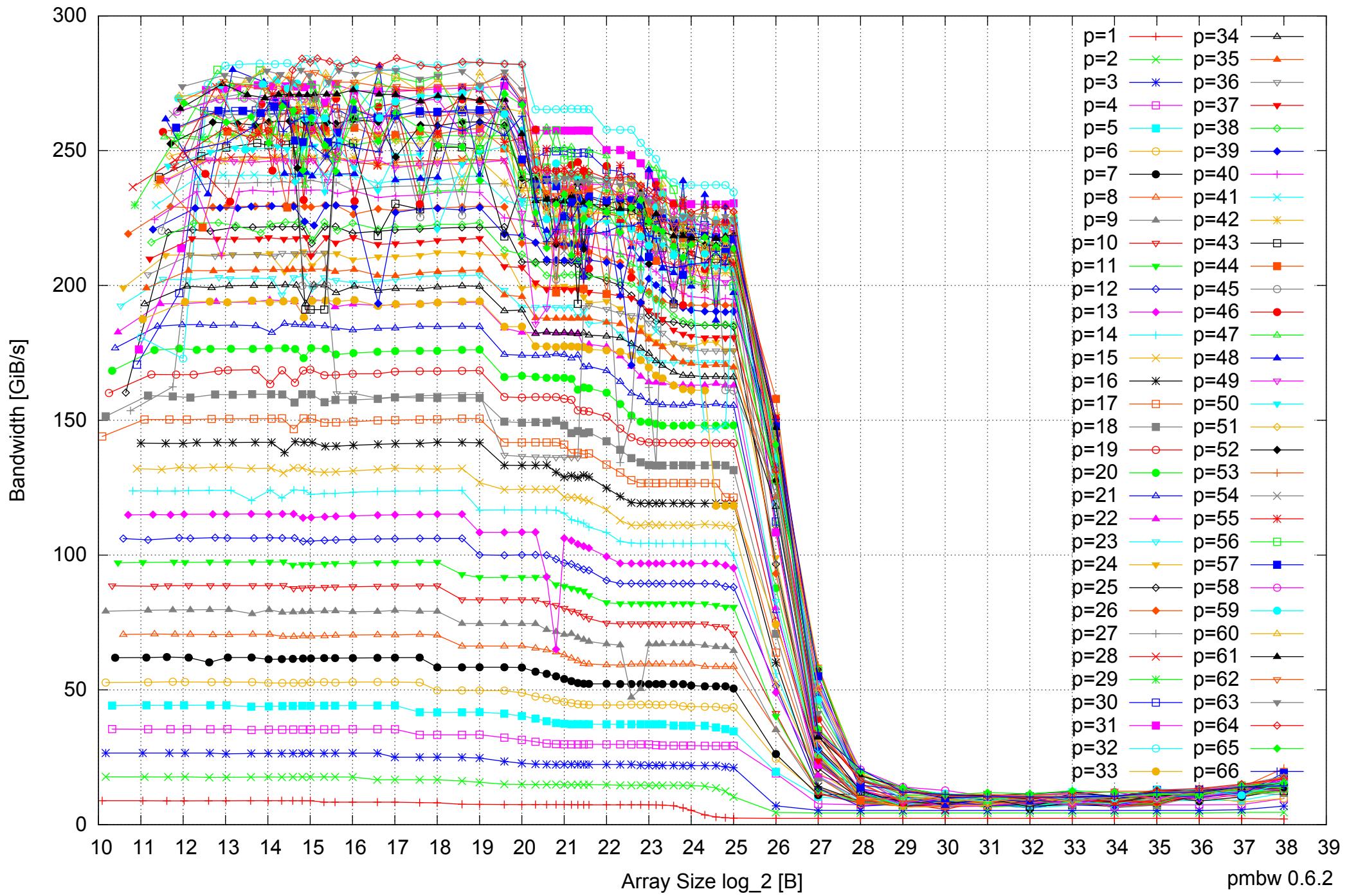
# Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth - ScanWrite32PtrSimpleLoop



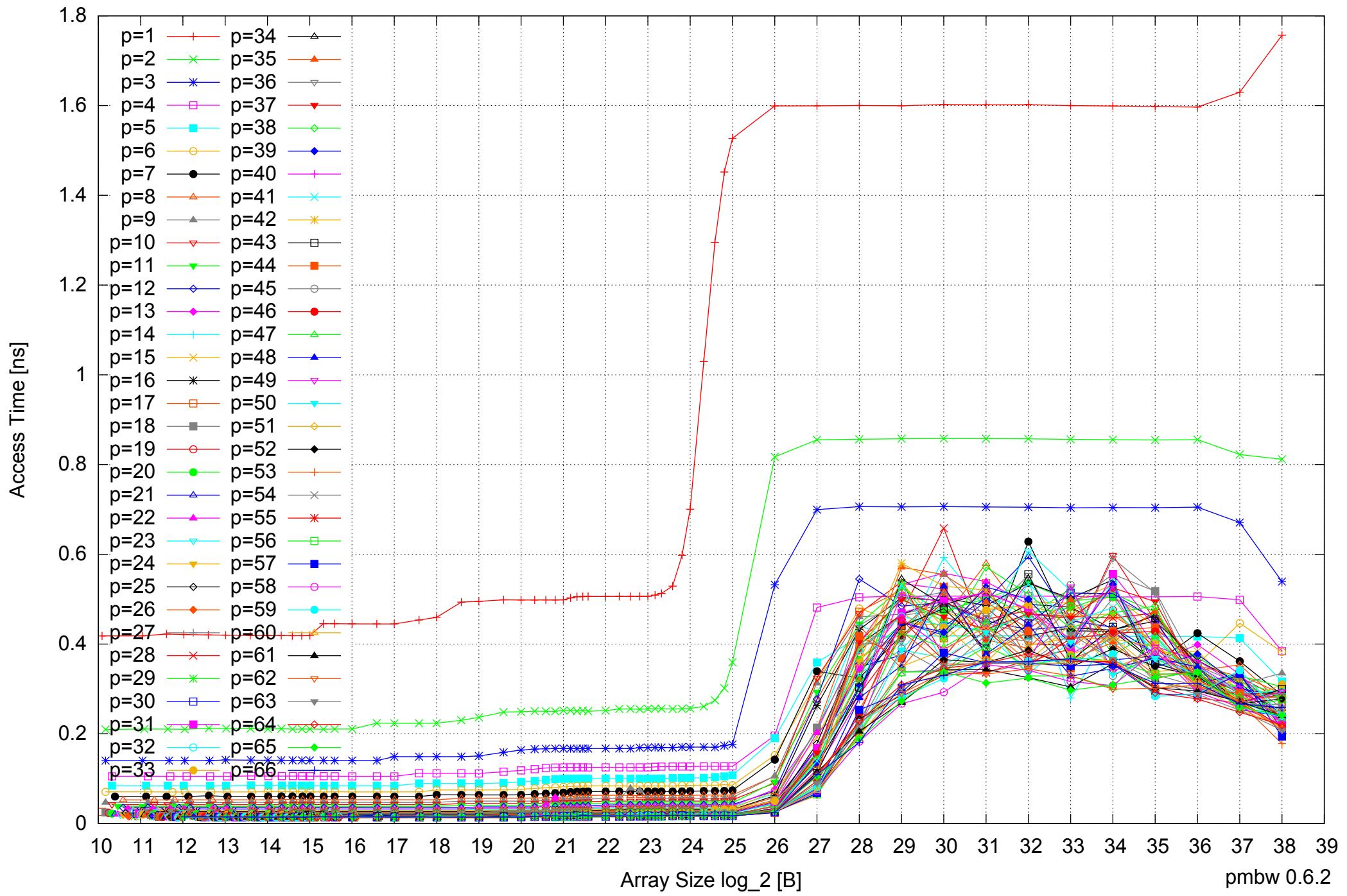
## Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth (enlarged) - ScanWrite32PtrSimpleLoop



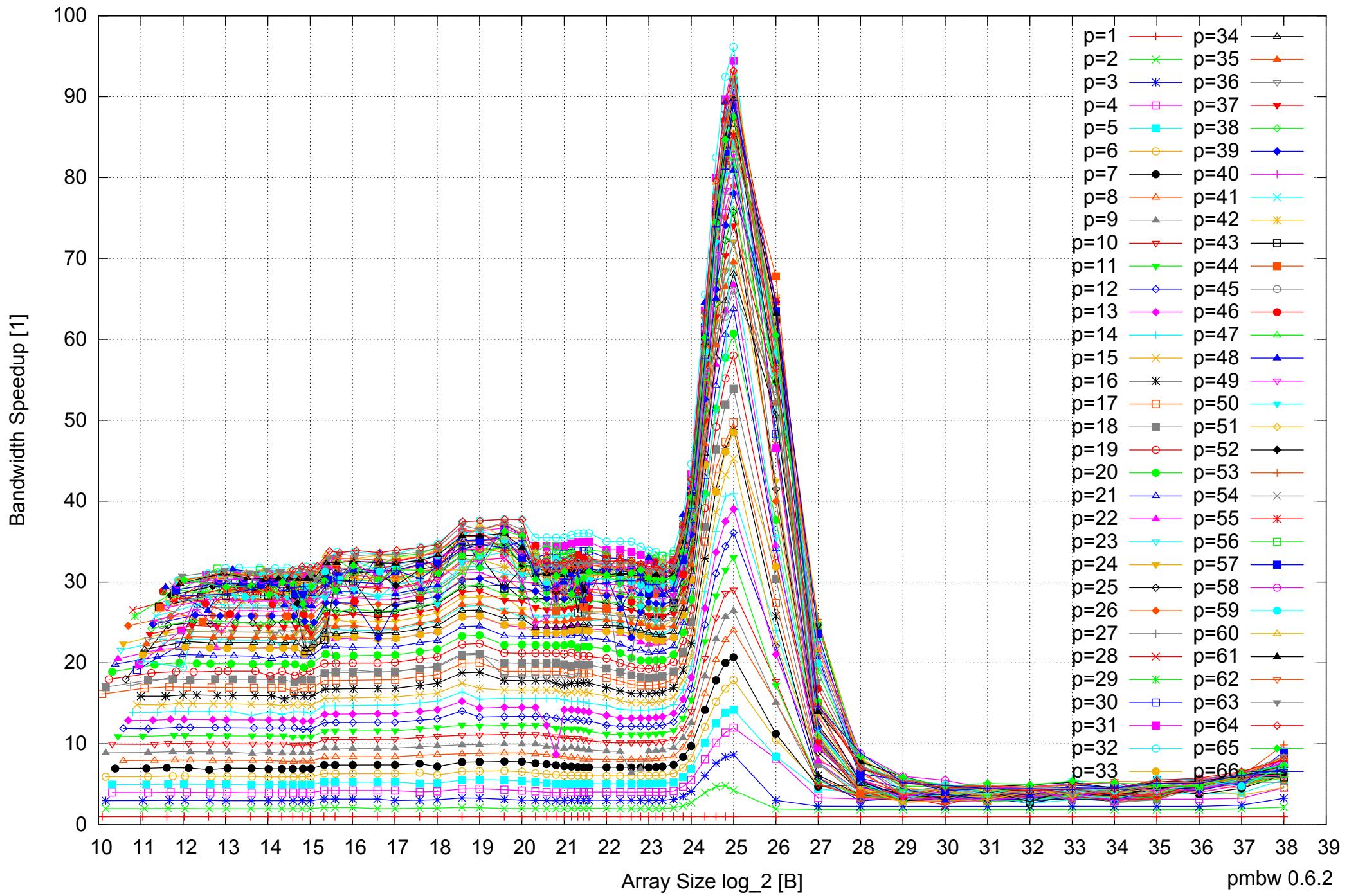
# Intel Xeon E5-4640 512GB - Parallel Memory Bandwidth - ScanWrite32PtrUnrollLoop



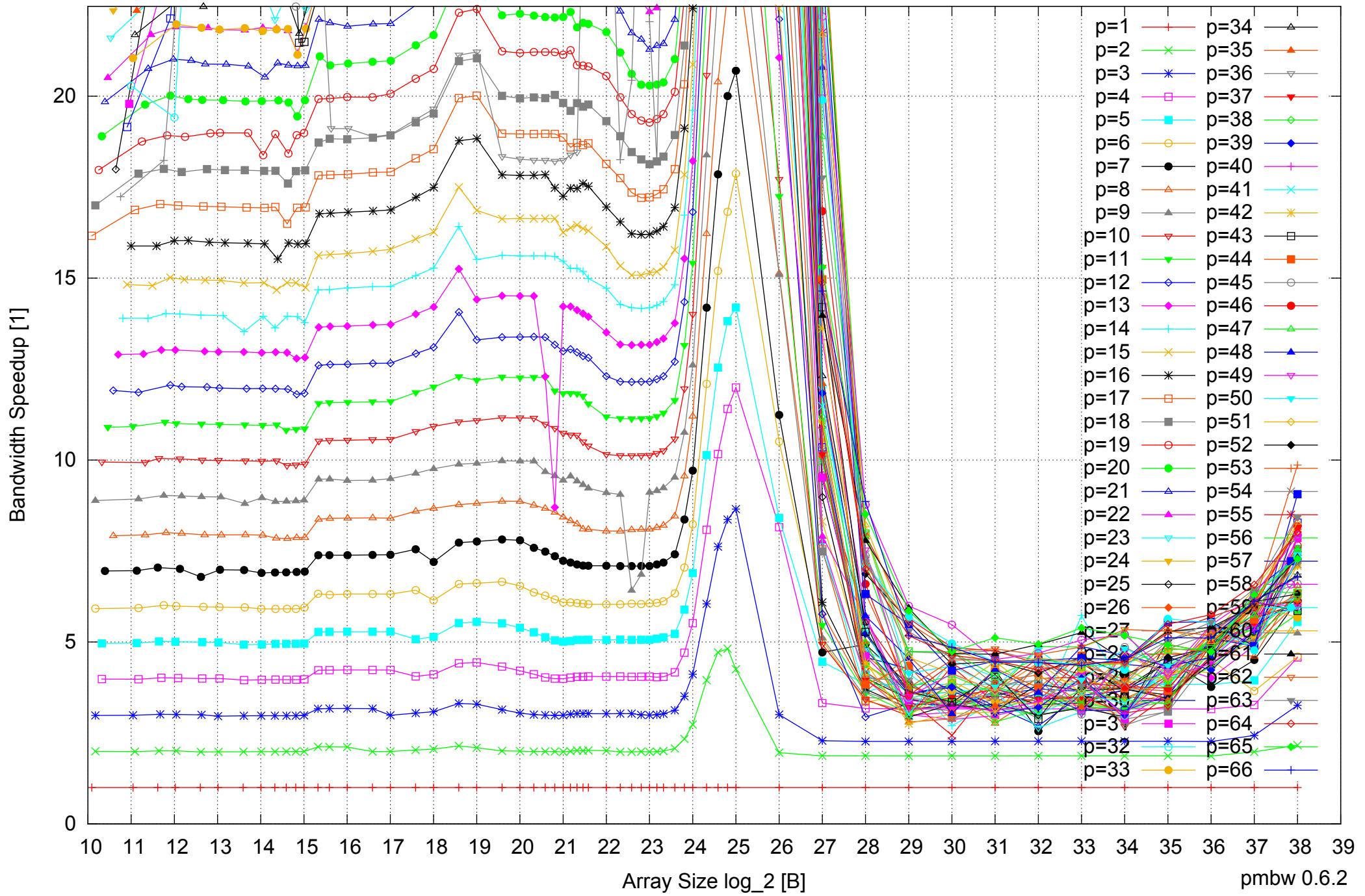
# Intel Xeon E5-4640 512GB - Parallel Memory Access Time - ScanWrite32PtrUnrollLoop



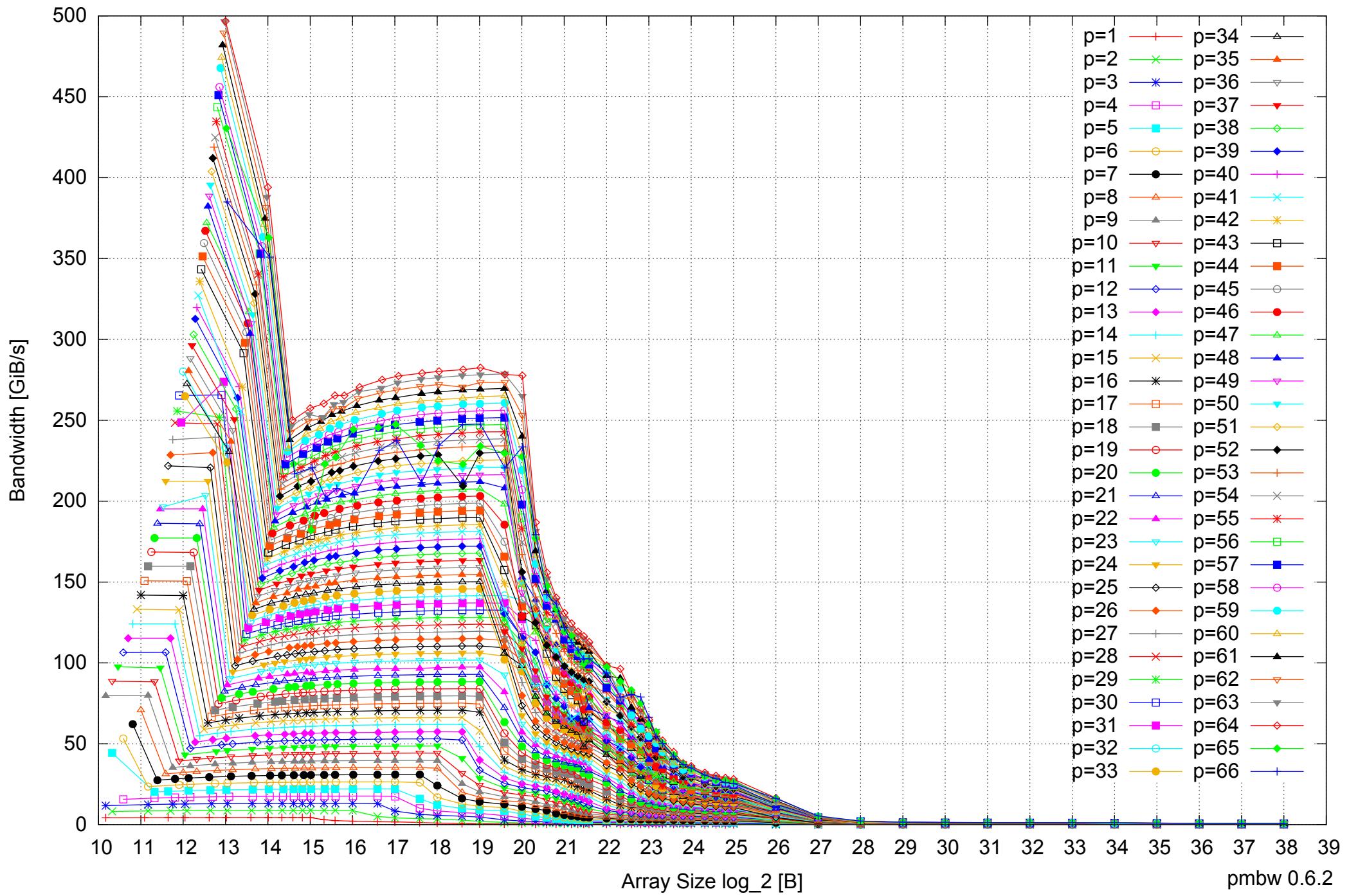
# Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth - ScanWrite32PtrUnrollLoop



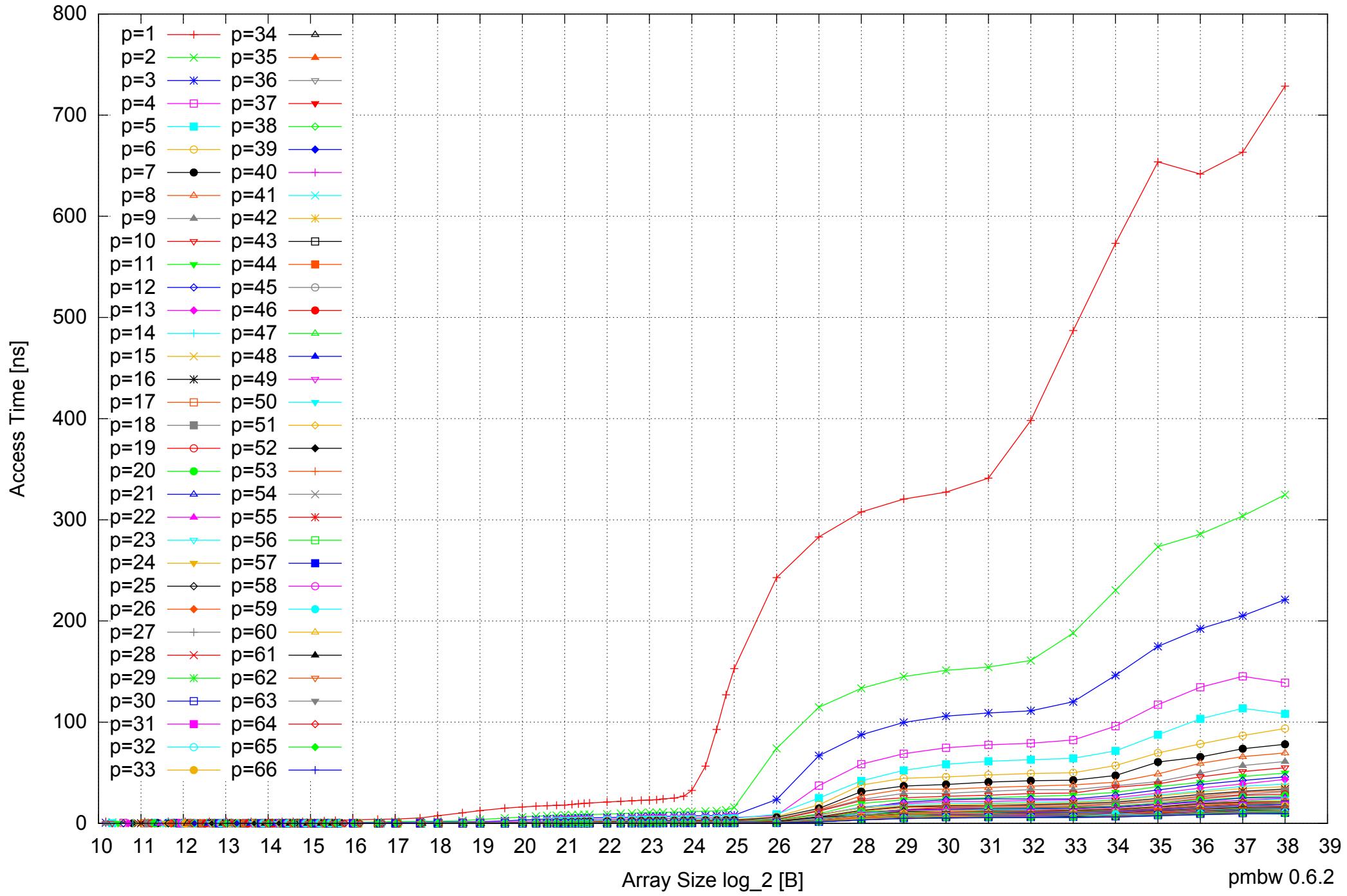
Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth (enlarged) - ScanWrite32PtrUnrollLoop



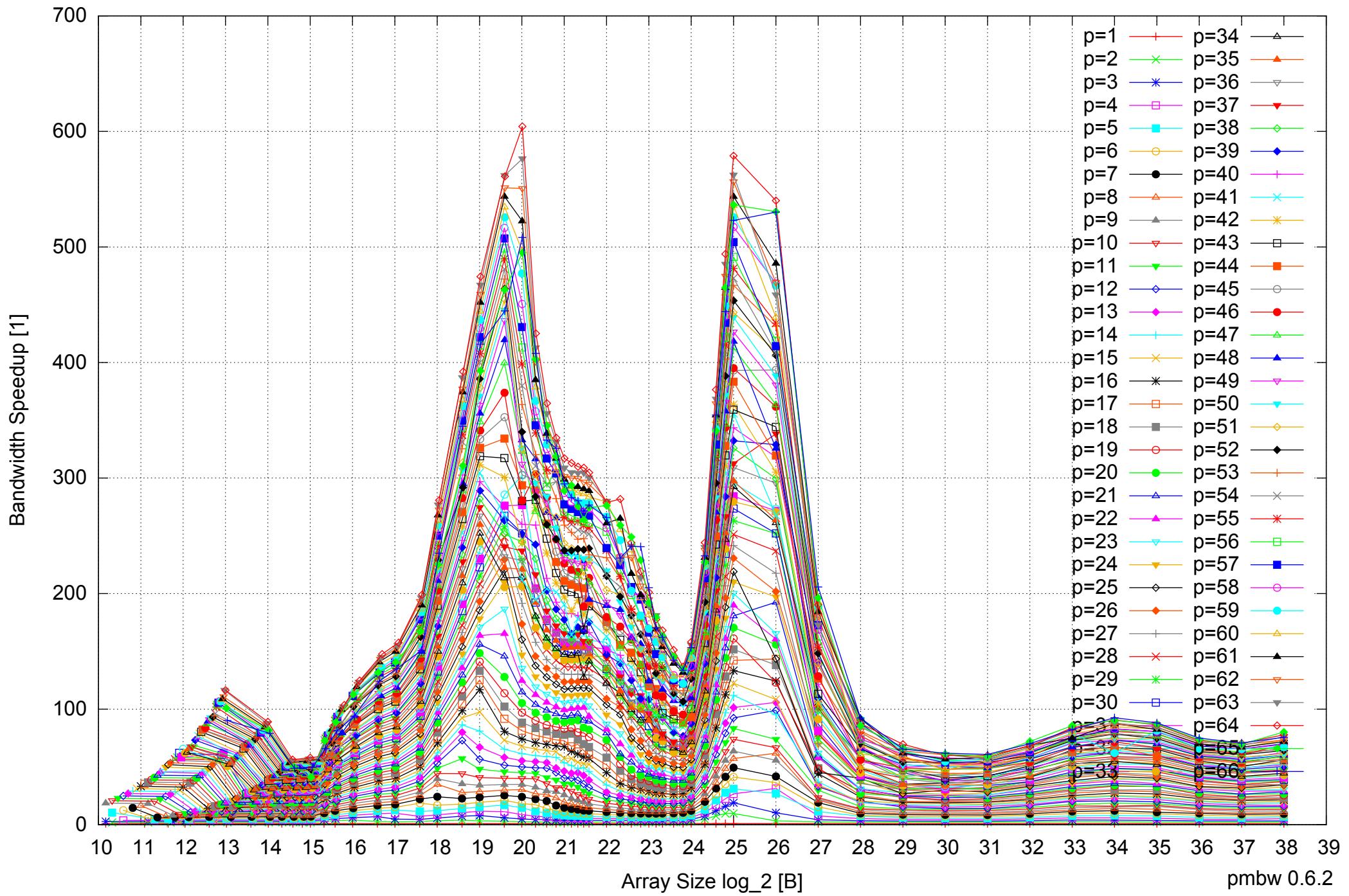
# Intel Xeon E5-4640 512GB - Parallel Memory Bandwidth - PermRead64SimpleLoop



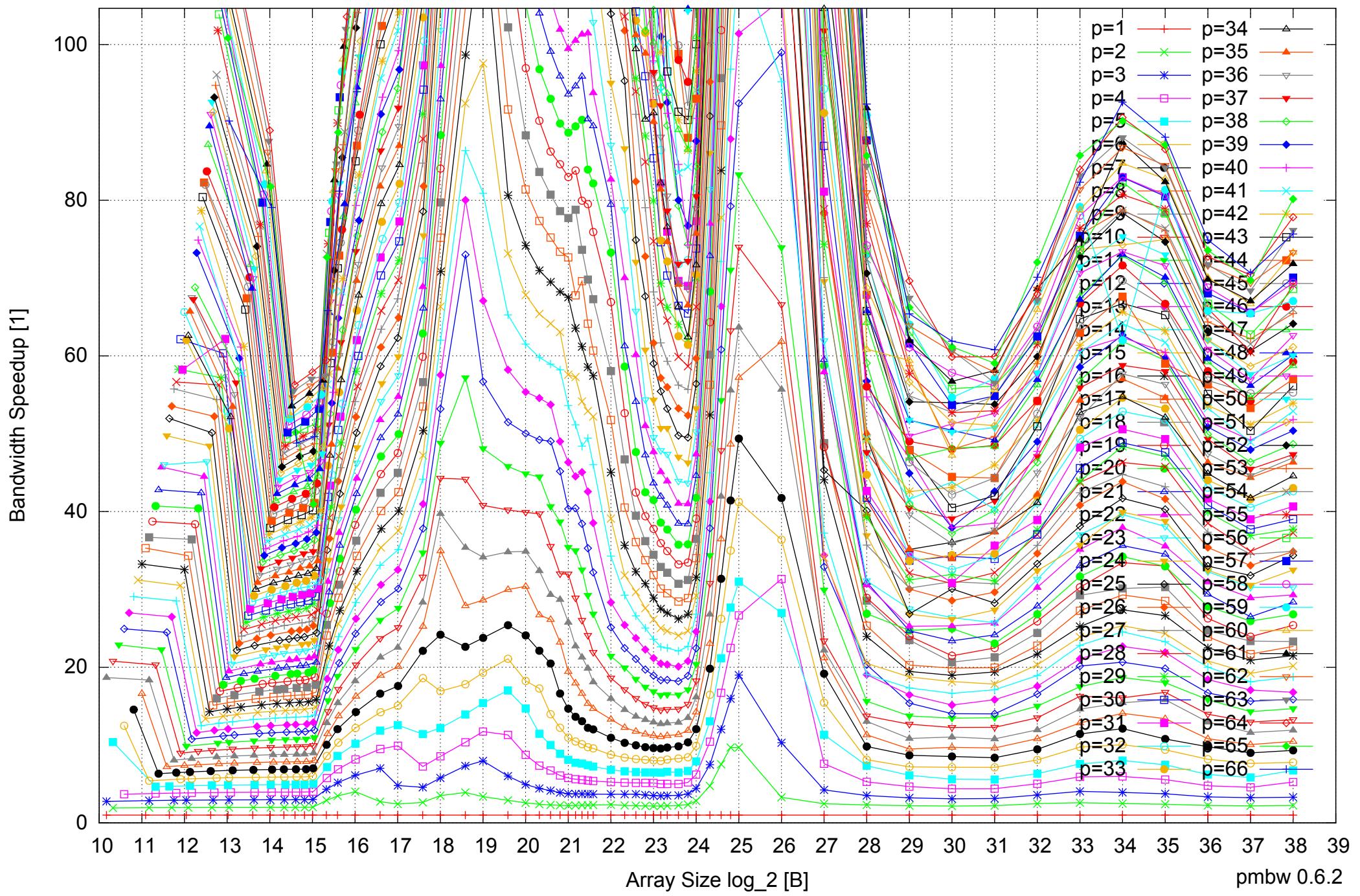
# Intel Xeon E5-4640 512GB - Parallel Memory Access Time - PermRead64SimpleLoop



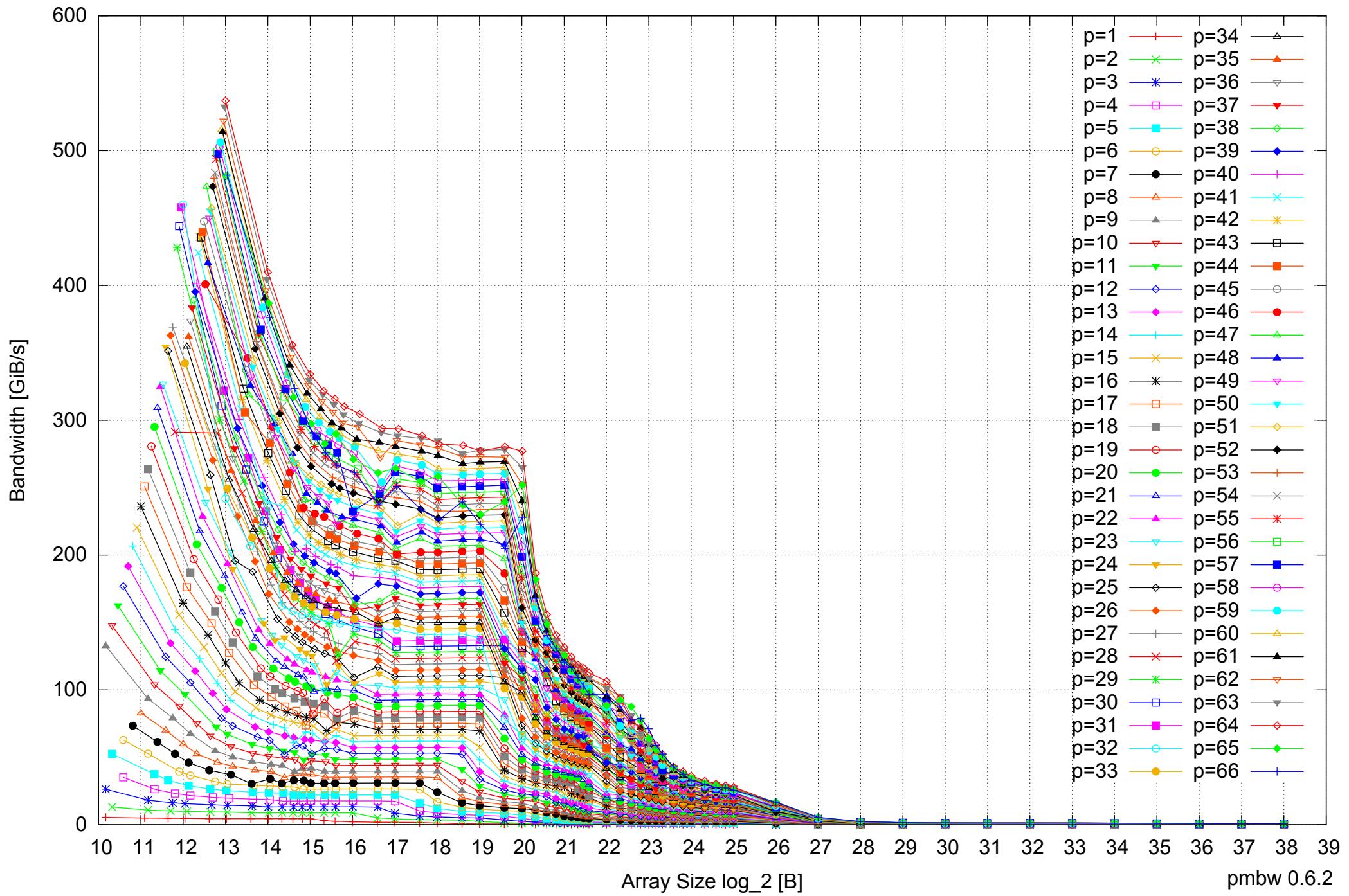
# Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth - PermRead64SimpleLoop



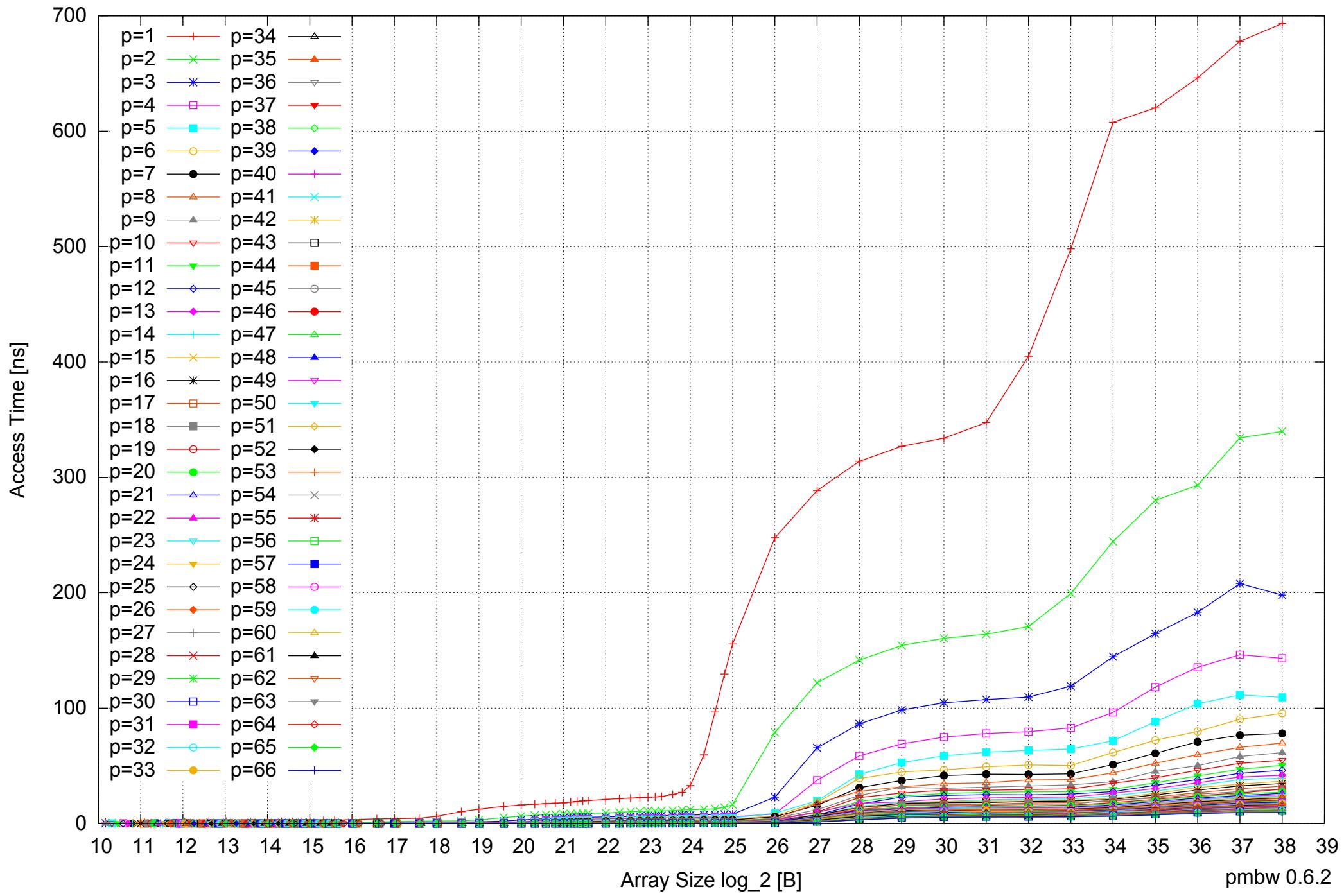
Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth (enlarged) - PermRead64SimpleLoop



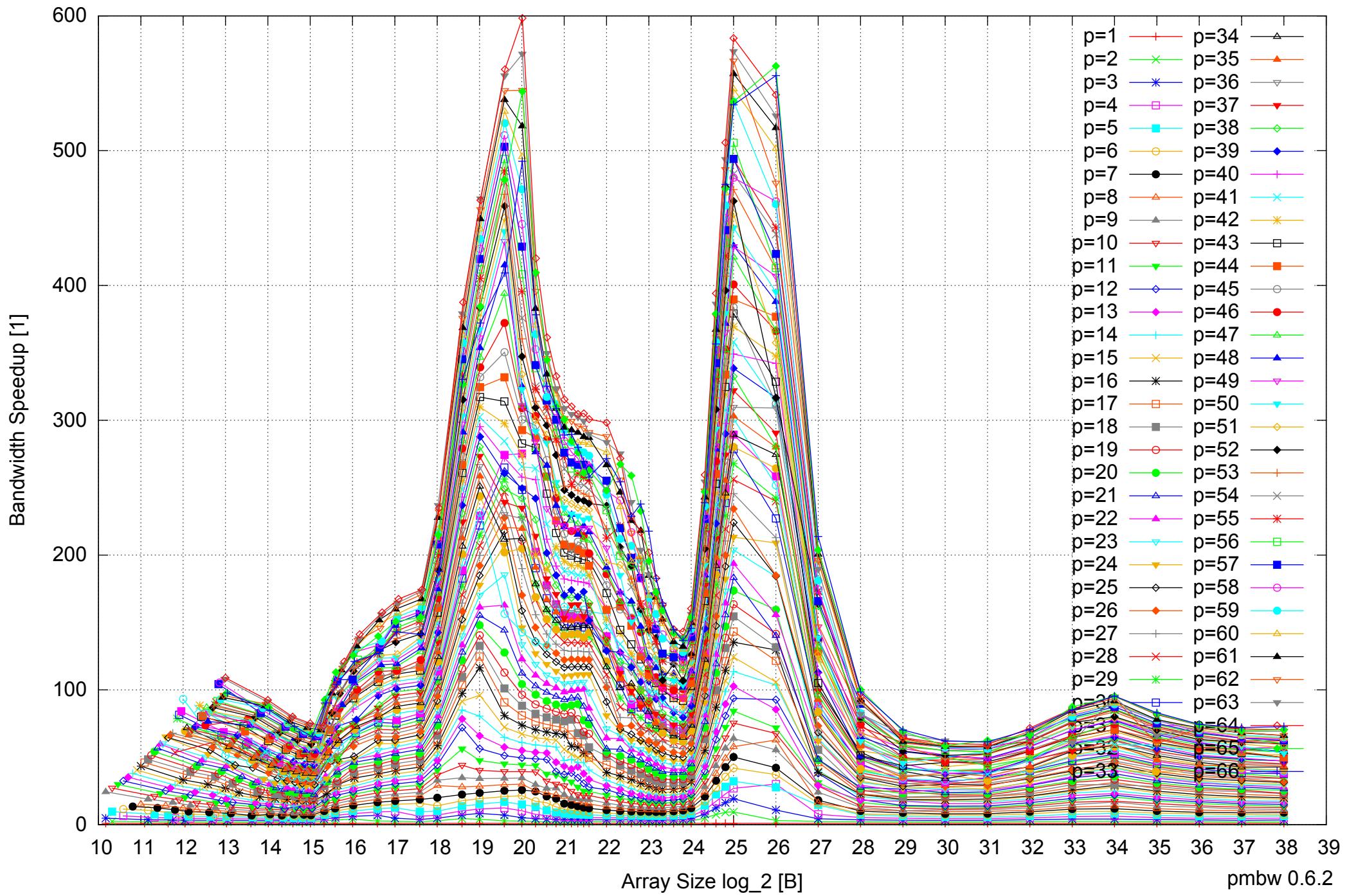
# Intel Xeon E5-4640 512GB - Parallel Memory Bandwidth - PermRead64UnrollLoop



# Intel Xeon E5-4640 512GB - Parallel Memory Access Time - PermRead64UnrollLoop



# Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth - PermRead64UnrollLoop



Intel Xeon E5-4640 512GB - Speedup of Parallel Memory Bandwidth (enlarged) - PermRead64UnrollLoop

