

OMEinsumContractionOrders (v1.0.0) Benchmark Results

Note: the Treewidth optimizer is greedy, only a subset of backends (MF, MMD, AMF) are tested (check [Issue 2](#)).

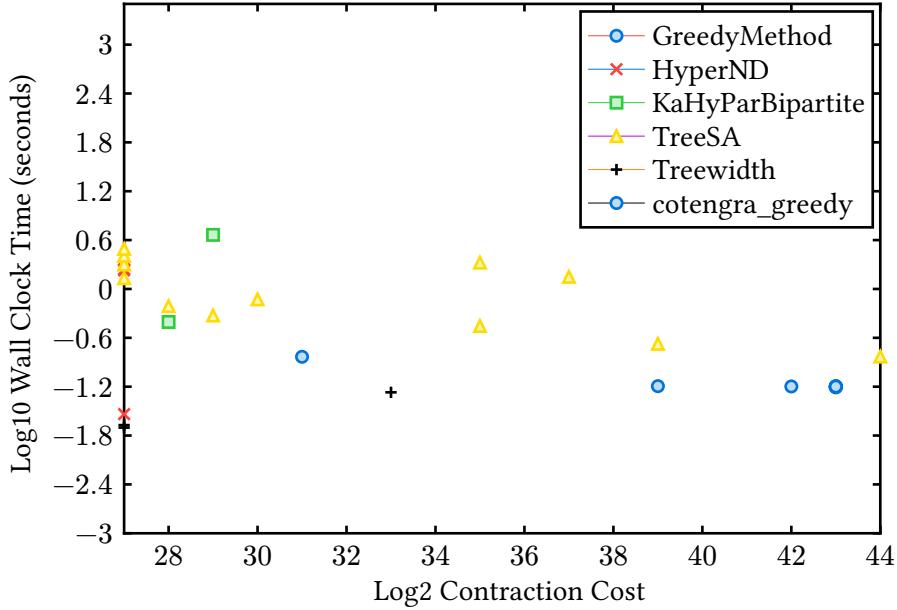


Figure 1: Scatter plot for `einsumorg/qc_qft_27` showing contraction cost ($1^*sc + 0^*tc + 0^*rwc$) vs computing time for different optimizers.

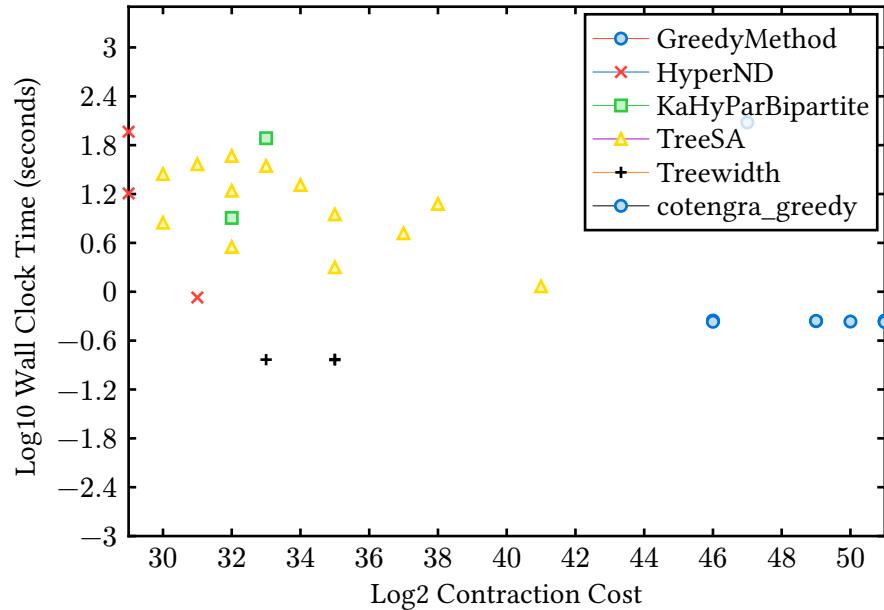


Figure 2: Scatter plot for `independentset/ksg` showing contraction cost ($1^*sc + 0^*tc + 0^*rwc$) vs computing time for different optimizers.

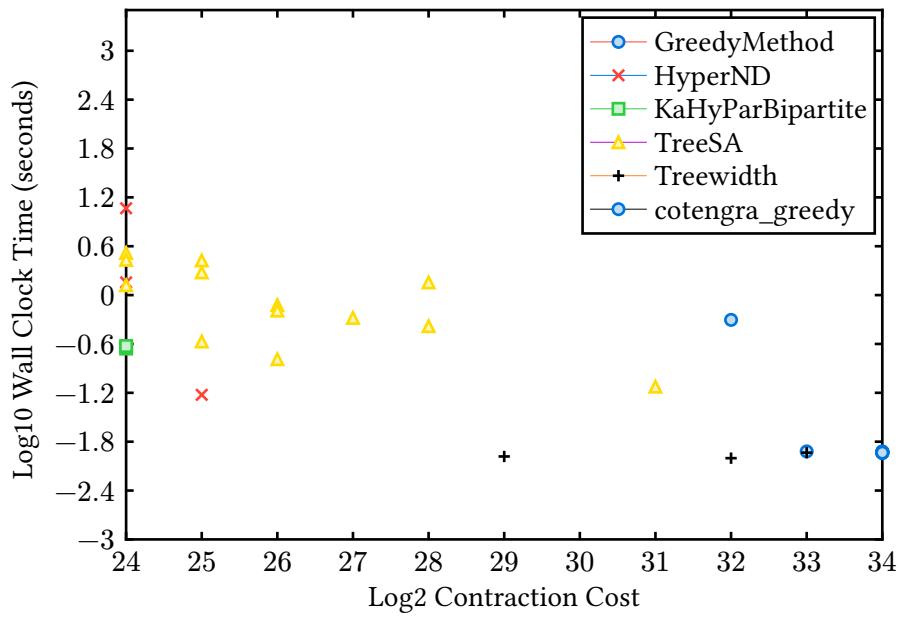


Figure 3: Scatter plot for **independentset/rg3** showing contraction cost ($1^*sc + 0^*tc + 0^*rwc$) vs computing time for different optimizers.

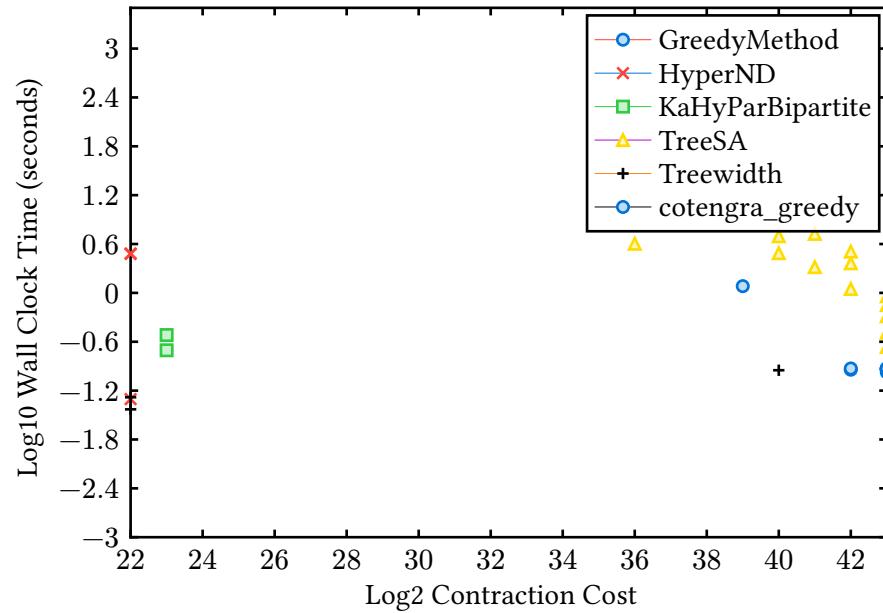


Figure 4: Scatter plot for **inference/DBN_13** showing contraction cost ($1^*sc + 0^*tc + 0^*rwc$) vs computing time for different optimizers.

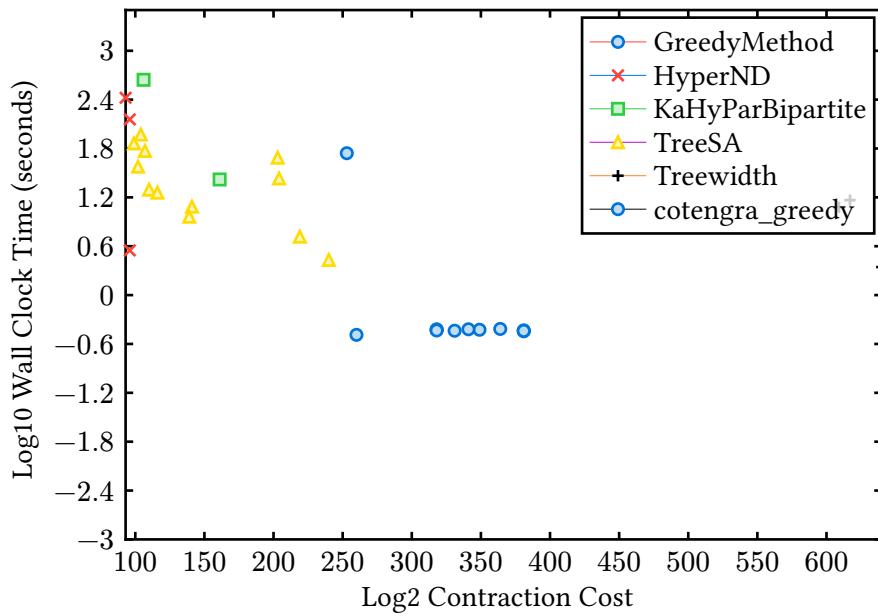


Figure 5: Scatter plot for **nqueens/nqueens_n=28** showing contraction cost ($1^*sc + 0^*tc + 0^*rwc$) vs computing time for different optimizers.

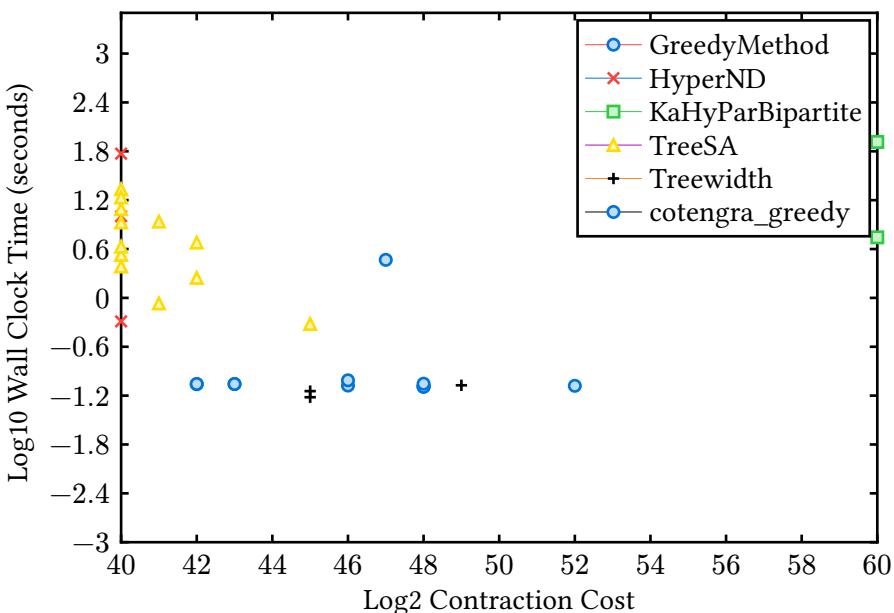


Figure 6: Scatter plot for **qec/surfacecode_d=21** showing contraction cost ($1^*sc + 0^*tc + 0^*rwc$) vs computing time for different optimizers.

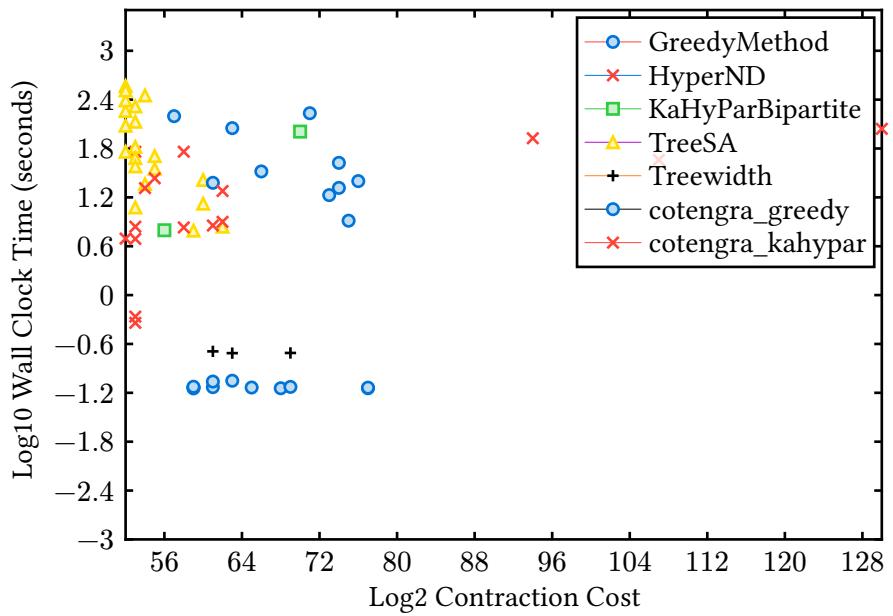


Figure 7: Scatter plot for **quantumcircuit/sycamore_53_20_0** showing contraction cost ($1^*sc + 0^*tc + 0^*rwc$) vs computing time for different optimizers.