

CPU

Speed-up

GPU + CPU

Frontier

Omega CPU: 8.7s

1.4x

faster

MPAS-O CPU: 12s

47x full node
12x per GPU
5.3x per watt

1.4x full node
0.35x per GPU
0.16x per watt

Omega GPU + CPU: 0.18s

47x

faster

MPAS-O GPU + CPU: 8.5s

Aurora

Omega CPU: 4s

22x full node
3.7x per GPU
3.6x per watt

Omega GPU + CPU: 0.2s

Perlmutter

Omega CPU: 8.5s

1.4x

faster

MPAS-O CPU: 12s

6.1x full node
1.5x per GPU
1.2x per watt

2.7x full node
0.7x per GPU
0.5x per watt

Omega GPU + CPU: 1.4s

3.1x

faster

MPAS-O GPU + CPU: 4.4s