

MFLOPs on Linux1

Num Threads	PAPI Exec Time	Instructions	MFLOPs
1	2s 120ms	2000000002	943.396227358491
2	1s 580ms	2000000002	1265.82278607595
4	1s 270ms	2000000002	1574.8031511811
8	1s 340ms	2000000002	1492.53731492537
16	1s 300ms	2000000002	1538.46154
32	2s 560ms	2000000002	781.25000078125

The graph illustrates the relationship between the number of threads and the achieved MFLOPs. Performance increases from 1 to 4 threads, reaches a peak, and then declines as more threads are added, indicating a transition from serial to parallel execution and eventually hitting memory or communication bottlenecks.

Num Threads	MFLOPs
1	943.396
2	1265.823
4	1574.803
8	1492.537
16	1538.462
32	781.250