

Scalability

Matrix = 128x128	Multikernel (Time in ms)	Single Kernel (Time in ms)
Blocks 1	5	4.7
Blocks 2	3	2.5
Blocks 4	2	1.5
Blocks 8	1	0.8
Blocks 16	1	0.7
Blocks 32	0.9	0.5
Blocks 64	0.8	0.6
Blocks 128	0.8	0.8

Matrix Size	Multikernel (Time in ms)	Single kernel (Time in ms)
64x64	0.24	0.06
256x256	0.26	0.1
1024x1024	0.32	0.2
4096x4096	0.44	0.4
16384x16384	0.57	0.9

Matrix Size = 128x128	Recursive (Time in ms)	Recursive Hybrid (Time in ms)
Threads 1	5	4
Threads 2	2	1.5
Threads 4	0.8	0.5
Threads 8	0.5	0.2
Threads 16	0.2	0.1
Threads 32	0.3	0.1
Threads 64	0.2	0.1

Matrix Size	Recursive (Time in ms)	Recursive Hybrid (Time in ms)
64X64	0.1	0.06
256x256	0.08	0.05
1024x1024	0.07	0.03
4096x4096	0.06	0.02
16384x16384	0.06	0.01