MPI Code

	5 elements	10 elements	20 elements	40 elements	80 elements
1 core	TS = 0.000321	TS = 0.000292	TS = 0.001505	TS = 0.000539	TS = 0.000440
	S = 1	S = 1	S = 1	S = 1	S = 1
	E = 1	E = 1	E = 1	E = 1	E = 1
2 cores	TP = 0.014670	TP = 0.032918	TP = 1.473654	TP = 0.009859	TP = 0.022800
	S = 0.021881	S = 0.00887	S = 0.0010212	S = 0.05467	S = 0.01929
	E = 0.01094	E = 0.00443	E = 0.000510	E = 0.02733	E = 0.00964
4 cores	TP = 0.048121	TP = 0.033702	TP = 0.072804	TP = 0.039669	TP = 0.454041
	S = 0.00667	S = 0.008664	S = 0.020671	S = 0.013587	S = 0.0009777
	E = 0.001667	E = 0.002166	E = 0.0051677	E = 0.003396	E = 0.0002444
8 cores	TP = 0.087477	TP = 0.145585	TP = 0.070239	TP = 0.107084	TP = 0.056641
	S = 0.003669	S = 0.0020057	S = 0.021426	S = 0.005033	S = 0.007768
	E = 0.0004586	E =0.00025	E = 0.0026783	E = 0.000629	E = 0.000971
16 cores	TP = 0.267129	TP = 0.286874	TP = 0.189672	TP = 0.244066	TP = 0.161703
	S = 0.0012016	S = 0.001017	S = 0.007934	S = 0.002208	S = 0.0027210
	E = 0.0000751	E = 0.0000635	E = 0.0004958	E = 0.000138	E = 0.00017006

OpenMP Code

p.size /cores	core = 1	core = 2	core = 4	core = 8	core = 16
p.size= 5	TS= 0.000004	TP= 0.000909	TP= 0.000246	TP= 0.000389	TP= 0.000954
	S= 1.000	S= 0.00440044	S= 0.016260	S= 0.0102827	S= 0.004192872
	E= 1.000	E= 0.00220022	E= 0.004065	E= 0.0012853375	E= 0.0002620545
p.size= 10	TS= 0.000006	TP= 0.000135	TP= 0.008202	TP= 0.000479	TP= 0.000991
	S= 1.000	S= 0.044444	S= 0.000731528	S= 0.0125260	S= 0.006054490
	E= 1.000	E= 0.022222	E= 0.000182882	E= 0.00156575	E= 0.000378405
p.size= 20	TS= 0.000004	TP= 0.000124	TP= 0.001307	TP= 0.000824	TP= 0.000796
	S= 1.000	S= 0.0322580	S= 0.00306044	S= 0.004854368	S= 0.005025125
	E= 1.000	E= 0.016129	E= 0.00076511	E= 0.000606796	E= 0.00031407
p.size= 40	TS= 0.000004	TP= 0.001319	TP= 0.001082	TP= 0.000442	TP= 0.001144
	S= 1.000	S= 0.0030326	S= 0.0036968	S= 0.0090497	S= 0.0034965
	E= 1.000	E= 0.0015163	E= 0.0009242	E= 0.0011312	E= 0.0002185
p.size= 80	TS= 0.000006	TP= 0.000102	TP= 0.000480	TP= 0.000441	TP= 0.001128
	S= 1.000	S= 0.0588235	S= 0.0125	S= 0.0136054	S= 0.0053191
	E= 1.000	E= 0.02941175	E= 0.003125	E= 0.0017006	E= 0.0003324