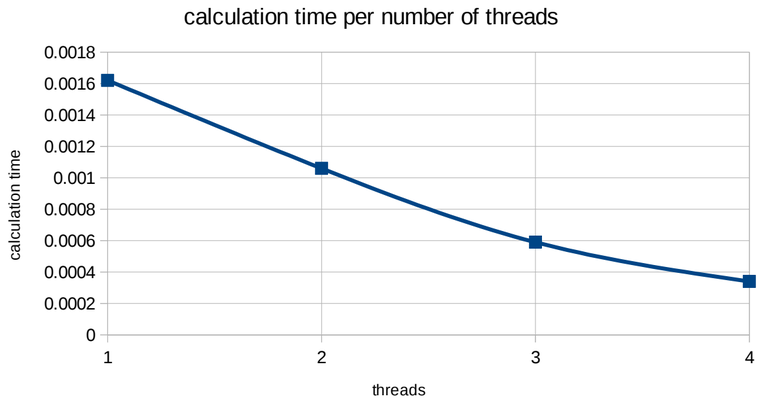
64*64	1 thread
	t1
	0.001427
	0.001462
	0.001864
	0.002149
	0.002703
	0.002437
	0.001789
	0.001421
	0.001631
	0.001434
Average	0.001832
	sec

2 threads			
t1	t2		
0.000938	0.00071		
0.001144	0.001314		
0.000876	0.000799		
0.001178	0.001264		
0.000926	0.000727		
0.001285	0.001239		
0.001457	0.000716		
0.00154	0.001276		
0.000714	0.000703		
0.001128	0.001347		
0.001119	0.00101	0.001064	
sec	sec	sec	

4 threads				
t1	0.000361	0.000353	0.000362	0.000446
t2	0.00057	0.00036	0.00066	0.000451
t3	0.000683	0.000578	0.000659	0.000736
t4	0.000765	0.000693	0.000651	0.000741
t1	0.000364	0.000361	0.000659	0.000353
t2	0.000732	0.000557	0.000652	0.000358
t3	0.000741	0.000639	0.00069	0.000583
t4	0.000633	0.000933	0.000797	0.000697
t1 t3	0.00037	0.000703	0.000353	0.000696
t2 t4	0.000588	0.000704	0.000585	0.000687
0.000581	0.000588	0.000607	0.000575	0.000588
sec	sec	sec	sec	sec

8 threads					
t1	0.00044	0.000297	0.000305	0.000303	0.000308
t2	0.00045	0.000324	0.000311	0.000338	0.000354
t3	0.000442	0.00034	0.00036	0.00034	0.000355
t4	0.000448	0.00037	0.000351	0.000341	0.000357
t5	0.000445	0.000399	0.000362	0.000345	0.000356
t6	0.000442	0.000485	0.000203	0.000428	0.00045
t7	0.000432	0.000219	0.00027	0.000227	0.000476
t8	0.000426	0.000277	0.000311	0.000247	0.000257
t1 t3 t5 t7	0.000293	0.000344	0.00034	0.000293	0.000292
t2 t4 t6 t8	0.000338	0.000333	0.000328	0.000193	0.000346
0.000416	0.000339	0.000314	0.000306	0.000355	
sec	sec	sec	sec	sec	

1	0.001621
2	0.001064
4	0.000588
8	0.000343



0.000288	0.000352	0.000288
0.000308	0.000351	0.000324
0.000327	0.000358	0.00034
0.000339	0.000355	0.00035
0.000345	0.000349	0.000316
0.000409	0.000255	0.000202
0.000253	0.000686	0.000289
0.000266	0.000379	0.000354
0.000349	0.000343	0.000176
0.000343	0.000234	0.000656

0.000323 sec	0.000366 sec	0.00033 sec	0.000343 sec

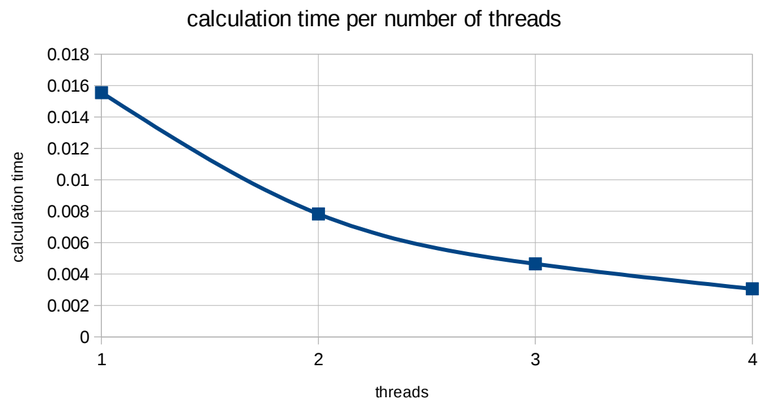
128*128	1 thread
	t1
	0.013191
	0.021208
	0.011405
	0.019122
	0.01457
	0.015779
	0.012565
	0.011727
	0.015202
	0.02254
Average	0.015731 sec

2 threads		
t1	t2	
0.00683	0.006044	
0.00783	0.00682	
0.006071	0.005835	
0.006962	0.008264	
0.009751	0.005765	
0.009998	0.007763	
0.007076	0.005769	
0.009702	0.006679	
0.005725	0.011649	
0.010297	0.011689	
0.008024 sec	0.007628 sec	0.007826 sec

4 threads				
t1	0.003836	0.003296	0.00305	0.002881
t2	0.004297	0.004096	0.003504	0.002881
t3	0.004332	0.005593	0.003554	0.005779
t4	0.006276	0.004621	0.004698	0.006415
t1	0.004427	0.003337	0.003879	0.002849
t2	0.005301	0.004676	0.004277	0.004895
t3	0.005845	0.00495	0.004526	0.005684
t4	0.00687	0.006307	0.005743	0.005878
t1 t3	0.002919	0.005056	0.004172	0.005936
t2 t4	0.003561	0.005064	0.004616	0.005947
	0.004766 sec	0.0047 sec	0.004202 sec	0.004915 sec	0.004646 sec

8 threads					
t1	0.002548	0.002572	0.002426	0.002399	0.002399
t2	0.002889	0.002855	0.002637	0.002644	0.002743
t3	0.002958	0.002922	0.002757	0.002837	0.002814
t4	0.002975	0.003607	0.003424	0.003038	0.003029
t5	0.003035	0.002345	0.002407	0.003244	0.003029
t6	0.002407	0.002664	0.00379	0.003756	0.003181
t7	0.002442	0.002519	0.005364	0.001808	0.002494
t8	0.002485	0.004863	0.003969	0.002304	0.006461
t1 t3 t5 t7	0.002482	0.002902	0.002945	0.003337	0.002568
t2 t4 t6 t8	0.002883	0.002914	0.003153	0.002269	0.002731
	0.00271 sec	0.003016 sec	0.003287 sec	0.002764 sec	0.003145 sec

1	0.015553
2	0.007826
4	0.004646
8	0.003058



0.002771	0.002607	0.002418
0.002813	0.003023	0.002843
0.002843	0.003042	0.002873
0.002947	0.003219	0.002914
0.003078	0.003223	0.003011
0.003231	0.002635	0.00319
0.004161	0.005148	0.002047
0.00183	0.006209	0.002268
0.00336	0.002515	0.003755
0.004006	0.003343	0.004053

0.003104 sec	0.003496 sec	0.002937 sec	0.003058 sec

256*256

1 thread

t1
0.106141
0.146367
0.105208
0.109006
0.09719
0.099012
0.096494
0.098885
0.097143
0.118268

Average 0.107371 sec

2 threads

t1	t2
0.058849	0.050094
0.063418	0.051226
0.04998	0.066555
0.075507	0.094759
0.05027	0.051195
0.060174	0.052306
0.059917	0.048821
0.064411	0.057084
0.054253	0.062193
0.06233	0.063286

0.059911 sec 0.059752 sec 0.059831 sec

4 threads

t1	0.034288	0.024038	0.023838	0.030252
t2	0.03602	0.03064	0.024765	0.030622
t3	0.041537	0.047438	0.029959	0.047811
t4	0.044556	0.047416	0.030754	0.048837
t1	0.045271	0.032368	0.027458	0.029697
t2	0.046042	0.040894	0.032393	0.044514
t3	0.048203	0.048129	0.03644	0.047754
t4	0.048443	0.048438	0.044861	0.047866
t1 t3	0.027979	0.029218	0.025517	0.02957
t2 t4	0.030357	0.034638	0.029508	0.032961

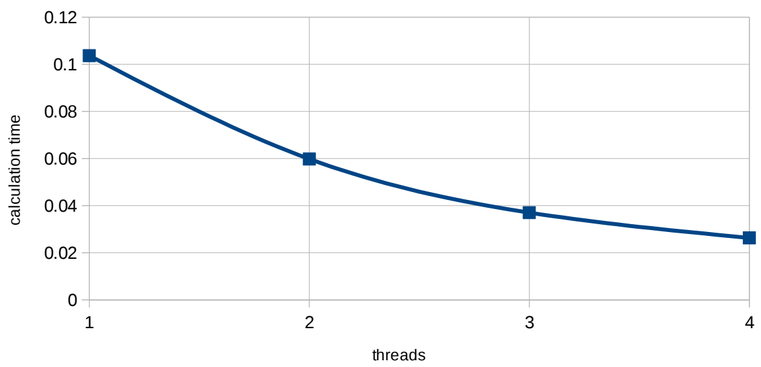
0.04027 sec 0.038322 sec 0.030549 sec 0.038988 sec 0.037032 sec

8 threads

t1	0.022514	0.022144	0.022732	0.02318	0.022867
t2	0.02421	0.023313	0.02344	0.023571	0.022265
t3	0.025058	0.026156	0.023725	0.023622	0.023694
t4	0.023414	0.023351	0.030489	0.024525	0.023929
t5	0.037074	0.027777	0.020063	0.023233	0.023956
t6	0.038574	0.028044	0.020969	0.029795	0.025345
t7	0.03971	0.020568	0.034612	0.027686	0.032978
t8	0.024776	0.03267	0.041284	0.023144	0.028998
t1 t3 t5 t7	0.023405	0.023784	0.024239	0.033151	0.022759
t2 t4 t6 t8	0.023665	0.023826	0.02367	0.026051	0.022931

0.02824 sec 0.025163 sec 0.026522 sec 0.025796 sec 0.024972 sec

1	0.103632
2	0.059831
4	0.037032
8	0.026311



0.0236	0.023221	0.023567
0.024513	0.023258	0.023805
0.024497	0.023648	0.023819
0.024693	0.024893	0.024179
0.023885	0.019911	0.024209
0.029995	0.033728	0.024997
0.030349	0.034411	0.030299
0.02732	0.037719	0.025711
0.02462	0.030966	0.036055
0.024952	0.022253	0.028831

0.025842 sec	0.027401 sec	0.026547 sec	0.026311 sec

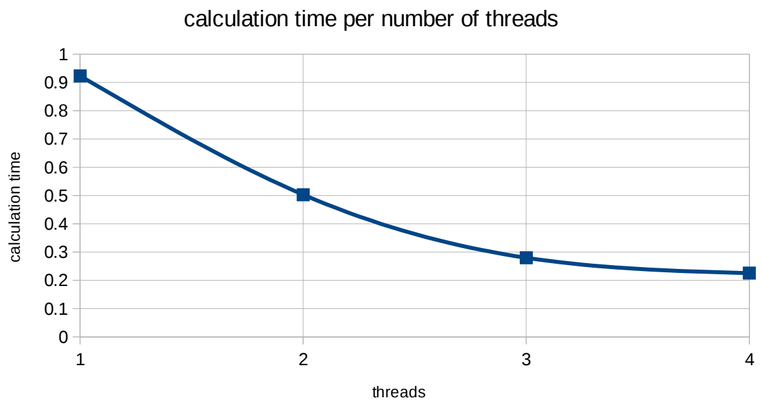
512*512	1 thread
	t1
	0.95565
	0.902719
	0.970797
	0.90518
	0.95253
	0.949307
	0.91574
	0.920858
	0.934736
	0.912079
Average	0.93196
	sec

2 threads		
t1	t2	
0.484227	0.477989	
0.521605	0.524186	
0.467648	0.539079	
0.489265	0.560587	
0.477504	0.527474	
0.481386	0.545887	
0.522176	0.473754	
0.559575	0.550449	
0.457065	0.466272	
0.467466	0.466444	
0.492792	0.513212	0.503002
sec	sec	sec

4 threads				
t1	0.234873	0.226567	0.238936	0.231158
t2	0.240284	0.239959	0.239834	0.235546
t3	0.246144	0.243352	0.438123	0.236587
t4	0.253749	0.246464	0.438105	0.241058
t1	0.243675	0.242579	0.232327	0.236699
t2	0.26667	0.314211	0.235609	0.237756
t3	0.424167	0.40195	0.449979	0.241439
t4	0.43678	0.402248	0.45091	0.24876
t1 t3	0.226206	0.23429	0.236966	0.243576
t2 t4	0.227267	0.241938	0.237382	0.243726
0.279982	0.279356	0.319817	0.239631	0.279696
sec	sec	sec	sec	sec

8 threads					
t1	0.208346	0.207035	0.208223	0.206248	0.208718
t2	0.209944	0.209581	0.209135	0.206319	0.210059
t3	0.211631	0.221087	0.21829	0.213867	0.214497
t4	0.212441	0.222887	0.218658	0.215183	0.219919
t5	0.21474	0.231668	0.22099	0.217587	0.212987
t6	0.216189	0.232397	0.231847	0.214426	0.227808
t7	0.243188	0.233166	0.239558	0.226185	0.231183
t8	0.23336	0.221838	0.2398	0.230743	0.237344
t1 t3 t5 t7	0.20921	0.222346	0.233365	0.228529	0.211308
t2 t4 t6 t8	0.210155	0.209017	0.234281	0.242777	0.214189
0.21692	0.221102	0.225415	0.220186	0.218801	
sec	sec	sec	sec	sec	

1	0.923075
2	0.503002
4	0.279696
8	0.225359



0.211014	0.209572	0.208607
0.212444	0.21271	0.210089
0.214302	0.213342	0.212255
0.218135	0.214743	0.213919
0.229989	0.232503	0.215414
0.235761	0.234689	0.218997
0.252696	0.254776	0.252966
0.254004	0.260591	0.256656
0.234543	0.244278	0.274673
0.235913	0.253989	0.310902

0.22988 sec	0.233119 sec	0.237448 sec	0.225359 sec

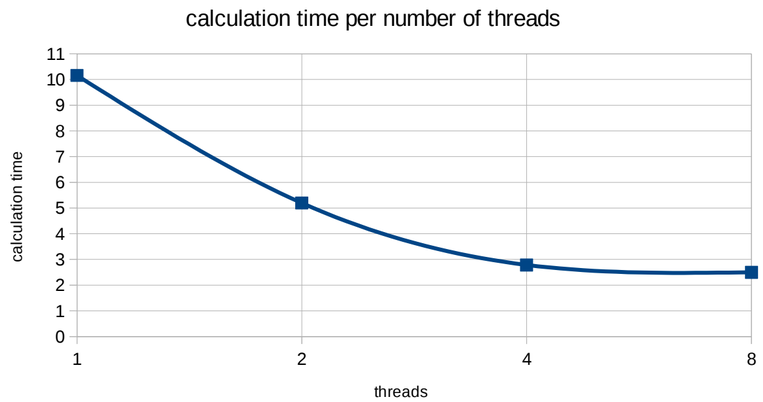
1024*1024	1 thread
	t1
	9.716745
	10.27439
	10.33908
	10.05346
	9.714137
	10.10673
	10.21496
	10.61037
	9.948562
	9.934361
Average	10.09128 sec

2 threads		
t1	t2	
5.186979	5.206402	
5.480366	5.161061	
5.169923	5.169921	
5.32137	5.515074	
5.292825	5.151318	
4.815168	4.833331	
5.108323	5.129626	
5.261072	5.271053	
5.164527	5.175567	
5.255989	5.255982	
5.205654 sec	5.186934 sec	5.196294 sec

4 threads				
t1	2.771441	2.718864	2.74857	2.81203
t2	2.771437	2.72891	2.747988	2.841605
t3	2.793961	2.748334	2.785561	2.84164
t4	2.816471	2.759333	2.803502	2.884605
t1	2.699484	2.859088	2.715118	2.749218
t2	2.699484	2.890325	2.734695	2.792188
t3	2.720945	2.890322	2.734691	2.864423
t4	2.731212	2.890324	2.744773	2.939139
t1 t3	2.761801	2.772956	2.749615	2.759692
t2 t4	2.772953	2.811729	2.759687	2.80819
	2.753919 sec	2.807019 sec	2.75242 sec	2.829273 sec	2.785658 sec

8 threads					
t1	2.330553	2.307065	2.411132	2.413474	2.485348
t2	2.391406	2.352456	2.553154	2.413466	2.598279
t3	2.428809	2.419363	2.634966	2.413432	2.645867
t4	2.436152	2.484693	2.650889	2.441784	2.657906
t5	2.464243	2.516645	2.636578	2.477646	2.695952
t6	2.486902	2.534009	2.67395	2.47763	2.708652
t7	2.497675	2.542608	2.689048	2.611698	2.846834
t8	2.509423	2.557027	2.772033	2.642692	2.874546
t1 t3 t5 t7	2.247551	2.296989	2.415257	2.48588	2.354852
t2 t4 t6 t8	2.286648	2.40353	2.42432	2.49641	2.376177
	2.407936 sec	2.441439 sec	2.586133 sec	2.487411 sec	2.624441 sec

1	10.15991
2	5.196294
4	2.785658
8	2.499831



2.400708	2.435786	2.249431
2.419702	2.444615	2.28616
2.494866	2.481643	2.329089
2.496568	2.553715	2.339263
2.505073	2.563809	2.379001
2.541003	2.582694	2.411776
2.581587	2.617592	2.418986
2.565717	2.691676	2.434962
2.438579	2.479961	2.68471
2.466236	2.509563	2.708398

2.491004 sec	2.536105 sec	2.424178 sec	2.499831 sec

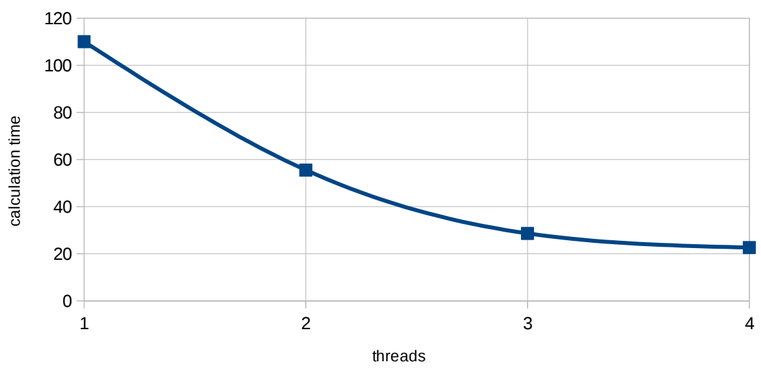
2048*2048	1 thread
	t1
	107.2978
	113.4473
	108.6325
	113.1194
	109.4119
	107.6493
	109.7952
	112.3934
	109.4029
	108.4198
Average	109.9569
	sec

2 threads				
t1	t2			
54.72023	54.83442			
54.72027	54.94116			
54.77794	55.58801			
54.83107	55.58802			
55.73562	55.92643			
55.84804	55.92644			
55.94411	55.6629			
55.99742	55.7173			
56.45661	55.29184			
56.4566	55.47212			
55.54879	55.49486	55.52183		
sec	sec	sec		

4 threads					
t1	27.95568	28.15844	27.91024	28.10084	
t2	28.00971	28.21299	29.82997	28.10085	
t3	28.06523	28.2678	29.82998	28.21169	
t4	28.06522	28.26781	31.75849	28.266	
t1	27.97692	28.12264	27.93545	28.14319	
t2	27.97692	28.12268	27.93544	28.14318	
t3	28.033	33.51924	29.9367	28.19747	
t4	28.033	33.57503	29.99516	28.37114	
t1 t3	28.0712	28.07122	28.04004	28.04006	
t2 t4	28.0712	28.13027	28.04005	28.0401	
28.02581	29.24481	29.12115	28.16145	28.63831	
sec	sec	sec	sec	sec	

8 threads					
t1	22.14626	21.70473	21.61962	21.71001	21.84271
t2	22.21078	21.79263	21.61966	21.71006	21.84271
t3	22.21785	21.86036	21.70454	21.93726	21.92682
t4	22.21784	21.99355	21.86518	21.98483	21.92926
t5	22.30969	22.00943	22.14391	22.03685	21.92684
t6	22.44675	22.15527	22.14393	22.03925	22.04068
t7	22.46177	22.46821	22.3072	22.09029	22.09913
t8	22.53939	22.81272	23.13123	22.18521	22.14401
t1 t3 t5 t7	21.90661	22.1756	22.95437	23.36747	21.99936
t2 t4 t6 t8	22.12568	22.25434	23.13413	24.287	22.13298
22.25826	22.12268	22.26238	22.33482	21.98845	
sec	sec	sec	sec	sec	

1	109.9936
2	55.52183
4	28.63831
8	22.64199

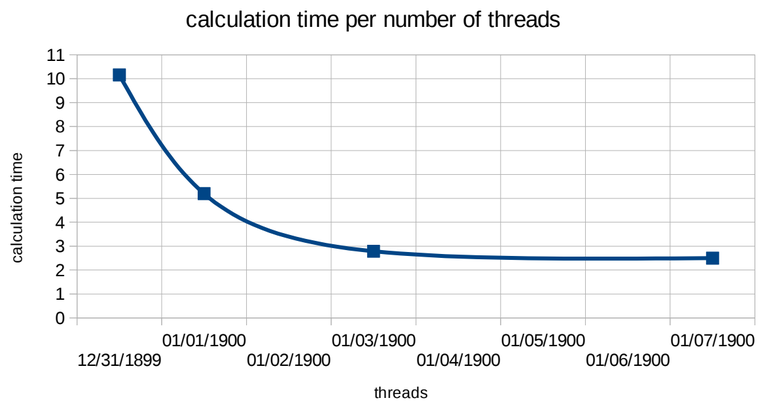


21.81418	22.31381	22.34683
21.96958	22.49752	22.68087
22.14105	23.12513	23.61154
22.14082	24.1246	23.87429
22.21776	24.32679	23.89738
22.32768	24.51166	24.28582
22.40974	24.52215	25.36215
22.5652	24.64793	25.58549
23.27012	23.71311	23.87977
23.51306	23.82387	24.19371

22.43692 sec	23.76066 sec	23.97178 sec	22.64199 sec

4096*4096	1 thread	2 threads		4 threads					8 threads					
	t1	t1	t2											
	9.716745	5.186979	5.206402	t1	2.771441	2.718864	2.74857	2.81203	t1	2.330553	2.307065	2.411132	2.413474	2.485348
	10.27439	5.480366	5.161061	t2	2.771437	2.72891	2.747988	2.841605	t2	2.391406	2.352456	2.553154	2.413466	2.598279
	10.33908	5.169923	5.169921	t3	2.793961	2.748334	2.785561	2.84164	t3	2.428809	2.419363	2.634966	2.413432	2.645867
	10.05346	5.32137	5.515074	t4	2.816471	2.759333	2.803502	2.884605	t4	2.436152	2.484693	2.650889	2.441784	2.657906
	9.714137	5.292825	5.151318	t1	2.699484	2.859088	2.715118	2.749218	t5	2.464243	2.516645	2.636578	2.477646	2.695952
	10.10673	4.815168	4.833331	t2	2.699484	2.890325	2.734695	2.792188	t6	2.486902	2.534009	2.67395	2.47763	2.708652
	10.21496	5.108323	5.129626	t3	2.720945	2.890322	2.734691	2.864423	t7	2.497675	2.542608	2.689048	2.611698	2.846834
	10.61037	5.261072	5.271053	t4	2.731212	2.890324	2.744773	2.939139	t8	2.509423	2.557027	2.772033	2.642692	2.874546
	9.948562	5.164527	5.175567	t1 t3	2.761801	2.772956	2.749615	2.759692	t1 t3 t5 t7	2.247551	2.296989	2.415257	2.48588	2.354852
	9.934361	5.255989	5.255982	t2 t4	2.772953	2.811729	2.759687	2.80819	t2 t4 t6 t8	2.286648	2.40353	2.42432	2.49641	2.376177
Average	10.09128	5.205654	5.186934	5.196294	2.753919	2.807019	2.75242	2.829273	2.785658	2.407936	2.441439	2.586133	2.487411	2.624441
	sec	sec	sec	sec	sec	sec	sec	sec	sec	sec	sec	sec	sec	sec

1	10.15991
2	5.196294
4	2.785658
8	2.499831

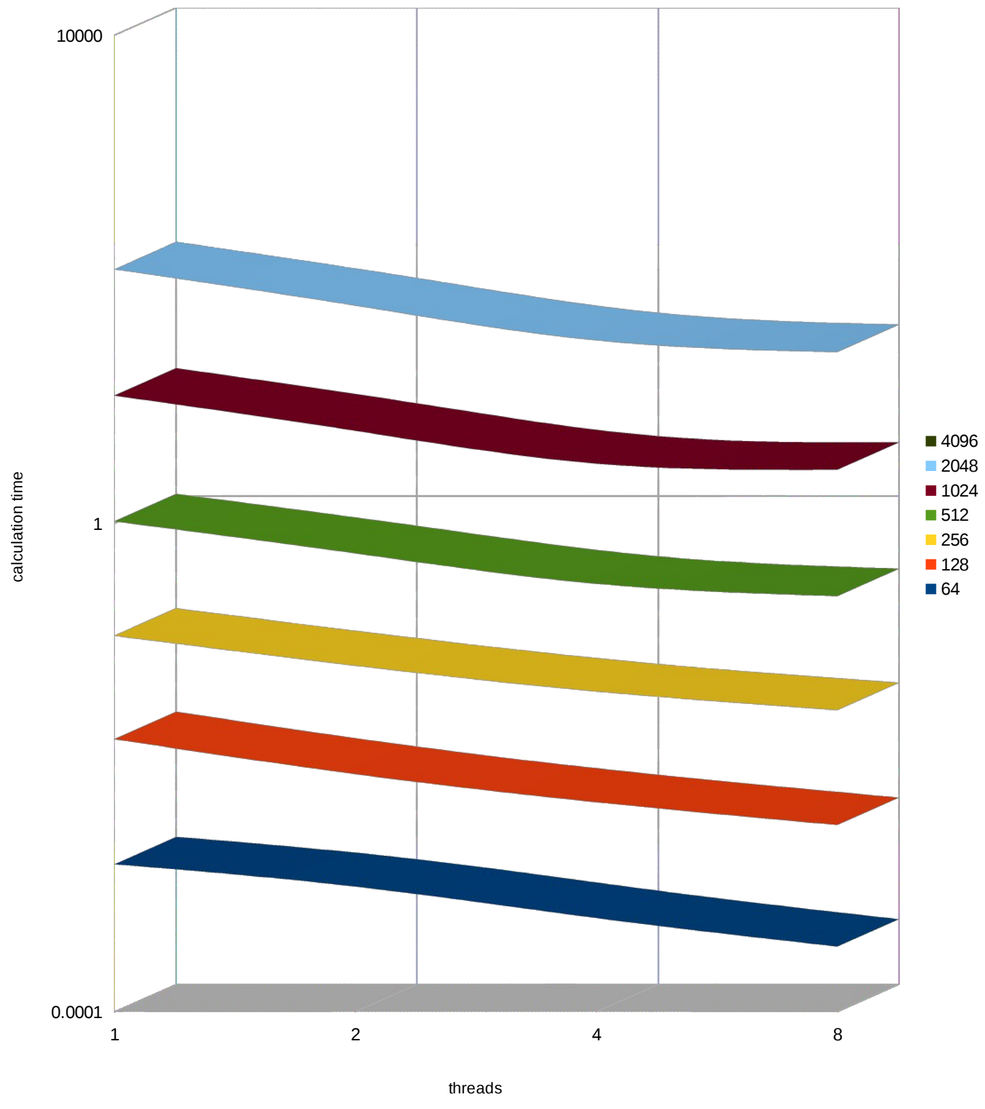


2.400708	2.435786	2.249431
2.419702	2.444615	2.28616
2.494866	2.481643	2.329089
2.496568	2.553715	2.339263
2.505073	2.563809	2.379001
2.541003	2.582694	2.411776
2.581587	2.617592	2.418986
2.565717	2.691676	2.434962
2.438579	2.479961	2.68471
2.466236	2.509563	2.708398

2.491004 sec	2.536105 sec	2.424178 sec	2.499831 sec

	64	128	256	512	1024	2048	4096
1	0.001621	0.015553	0.103632	0.923075	10.15991	109.9936	
2	0.001064	0.007826	0.059831	0.503002	5.196294	55.52183	
4	0.000588	0.004646	0.037032	0.279696	2.785658	28.63831	
8	0.000343	0.003058	0.026311	0.225359	2.499831	22.64199	

مقایسه کلی



در این حالت زمان صرف شده برای محاسبات هر نخ جداگانه محاسبه شده و با هم میانگین گیری شده است. بنابراین زمان overhead نخ ها درنظر گرفته نشده است.
زمان های محاسبه شده در این روش بسیار نزدیک به مقادیر روش محاسبه دیگر (در فایل اکسل اول) هستند که این موضوع نشان می دهد overhead نخ ها تاثیر بسزایی در نتایج محاسبات ماتریسی ندارند.
تمامی روابط لگاریتمی و خطی در حالت اول در این حالت نیز برقرار می باشد.