

Serial Program				Parallel Program with 4 threads (encrypt guided scheduling, prepare dynamic scheduling and filter dynamic scheduling)				Parallel Program with 16 threads (encrypt guided scheduling, prepare dynamic scheduling and filter dynamic scheduling)				Parallel Program with 48 threads (encrypt guided scheduling, prepare dynamic scheduling and filter dynamic scheduling)			
Filter Time	Encrypt Time	Prepare Time	TOTAL Time	Filter Time	Encrypt Time	Prepare Time	TOTAL Time	Filter Time	Encrypt Time	Prepare Time	TOTAL Time	Filter Time	Encrypt Time	Prepare Time	TOTAL Time
6.955,50	204,40	706,60	7.866,50	2.008,10	61,50	190,10	2.259,70	695,10	20,10	47,70	762,90	395,20	16,10	28,10	439,40
7.123,80	205,00	708,40	8.037,20	2.002,10	61,60	189,90	2.253,60	741,10	19,30	47,50	807,90	394,10	16,20	24,40	434,70
7.077,20	207,50	707,60	7.992,30	2.014,10	61,20	190,20	2.265,50	682,80	20,50	48,00	751,30	398,50	17,70	26,80	443,00
6.955,10	205,10	709,80	7.870,00	1.996,10	60,90	191,10	2.248,10	730,30	20,30	47,30	797,90	410,00	16,90	27,50	454,40
7.058,80	204,60	723,30	7.986,70	1.994,90	61,60	191,30	2.247,80	697,50	20,60	47,70	765,80	389,30	22,20	28,30	439,80
6.955,30	205,00	707,50	7.867,80	2.011,30	62,20	189,90	2.263,40	694,80	20,00	47,70	762,50	388,40	16,30	21,60	426,30
7.260,90	204,00	705,70	8.170,60	1.998,80	62,10	191,00	2.251,90	662,90	20,50	48,00	731,40	390,30	16,40	27,50	434,20
7.261,80	204,10	706,40	8.172,30	2.009,10	62,40	190,10	2.261,60	641,40	20,90	47,70	710,00	391,10	17,00	27,80	435,90
7.262,10	204,10	706,50	8.172,70	2.010,30	62,40	190,40	2.263,10	707,40	20,70	47,80	775,90	392,50	18,20	27,10	437,80
6.954,70	205,00	707,50	7.867,20	1.997,20	61,60	191,10	2.249,90	634,90	20,80	48,10	703,80	394,70	17,70	26,00	438,40
7.264,50	204,80	712,90	8.182,20	1.997,80	61,80	191,20	2.250,80	679,30	20,60	48,00	747,90	386,40	18,90	24,70	430,00
Serial Time:		8.016,86													
4 Threads Parallel Time:		2.255,95													
16 Threads Parallel Time:		756,12													
48 Threads Parallel Time:		437,63													
Efficiencies and speed-ups				Times (ms)											
Prepare		Prepare													
Prepare Efficiency 4 Threads		0,93		Serial		709,29									
Prepare Speed-up 4 Threads		3,72		4 Threads		190,57									
Prepare Efficiency 16 Threads		0,93		16 Threads		47,77									
Prepare Speed-up 16 Threads		14,85		48 Threads		26,35									
Prepare Efficiency 48 Threads		0,56													
Prepare Speed-up 48 Threads		26,92													
Efficiencies and speed-ups				Times (ms)											
Filter		Filter													
Prepare Efficiency 4 Threads		0,89		Serial		7.102,70									
Prepare Speed-up 4 Threads		3,54		4 Threads		2.003,62									
Prepare Efficiency 16 Threads		0,65		16 Threads		687,95									
Prepare Speed-up 16 Threads		10,32		48 Threads		393,68									
Prepare Efficiency 48 Threads		0,38													
Prepare Speed-up 48 Threads		18,04													
Efficiencies and speed-ups				Times (ms)											
Filter		Filter													
Prepare Efficiency 4 Threads		0,83		Serial		204,87									
Prepare Speed-up 4 Threads		3,32		4 Threads		61,75									
Prepare Efficiency 16 Threads		0,63		16 Threads		20,39									
Prepare Speed-up 16 Threads		10,05		48 Threads		17,60									
Prepare Efficiency 48 Threads		0,24													
Prepare Speed-up 48 Threads		11,64													

Serial Program					Parallel Program with 4 threads (encrypt guided scheduling, prepare dynamic scheduling and filter dynamic scheduling)					Parallel Program with 16 threads (encrypt guided scheduling, prepare dynamic scheduling and filter dynamic scheduling)					Parallel Program with 48 threads (encrypt guided scheduling, prepare dynamic scheduling and filter dynamic scheduling)			
Filter Time	Encrypt Time	Prepare Time	TOTAL Time		Filter Time	Encrypt Time	Prepare Time	TOTAL Time		Filter Time	Encrypt Time	Prepare Time	TOTAL Time		Filter Time	Encrypt Time	Prepare Time	TOTAL Time
15.452,80	379,10	1.291,80	17.123,70		4.339,90	114,20	345,10	4.799,20		2.542,10	113,00	161,00	2.816,10		672,50	27,50	37,00	737,00
15.449,10	379,30	1.324,60	17.153,00		4.404,70	113,40	346,30	4.864,40		2.729,90	159,90	132,70	3.022,50		770,50	30,00	44,10	844,60
15.827,30	379,70	1.290,60	17.497,60		4.420,10	115,50	347,50	4.883,10		2.246,30	97,10	179,00	2.522,40		723,50	19,70	35,80	779,00
15.687,30	378,80	1.292,90	17.359,00		4.418,50	114,80	347,00	4.880,30		2.512,00	102,80	142,80	2.757,60		710,00	30,10	36,70	776,80
15.454,30	379,40	1.289,90	17.123,60		4.430,40	114,60	347,10	4.892,10		2.128,00	92,90	136,40	2.357,30		689,90	29,10	37,40	756,40
15.827,00	378,90	1.291,40	17.497,30		4.404,70	113,20	346,10	4.864,00		2.779,10	94,60	188,00	3.061,70		677,80	30,60	38,70	747,10
15.729,30	383,70	1.306,00	17.419,00		4.430,70	114,60	347,60	4.892,90		2.589,40	98,00	139,00	2.826,40		712,20	20,20	36,00	768,40
15.829,90	379,40	1.290,80	17.500,10		4.392,90	113,50	349,20	4.855,60		2.604,20	63,60	125,60	2.793,40		670,40	19,40	36,00	725,80
15.688,60	378,80	1.293,40	17.360,80		5.313,90	244,10	393,90	5.951,90		2.223,20	62,40	149,10	2.434,70		660,90	29,40	37,00	727,30
15.832,90	379,10	1.292,20	17.504,20		4.338,10	115,90	347,50	4.801,50		2.661,20	85,40	130,60	2.877,20		712,70	29,40	36,60	778,70
15.450,60	379,30	1.319,80	17.149,70		4.590,10	115,20	345,50	5.050,80		2.361,40	55,90	176,30	2.593,60		698,20	29,40	37,40	765,00
Serial Time:		17.335,27																
4 Threads Parallel Time:		4.975,98																
16 Threads Parallel Time:		2.732,99																
48 Threads Parallel Time:		764,19																
Efficiencies and speed-ups				Times (ms)														
Prepare		Prepare																
Prepare Efficiency 4 Threads		0,92	Serial			1296,36												
Prepare Speed-up 4 Threads		3,69	4 Threads			351,73												
Prepare Efficiency 16 Threads		0,55	16 Threads			148,42												
Prepare Speed-up 16 Threads		8,73	48 Threads			37,53												
Prepare Efficiency 48 Threads		0,72																
Prepare Speed-up 48 Threads		34,54																
Efficiencies and speed-ups				Times (ms)														
Filter		Filter																
Prepare Efficiency 4 Threads		0,87	Serial			15677,85												
Prepare Speed-up 4 Threads		3,49	4 Threads			4489,39												
Prepare Efficiency 16 Threads		0,39	16 Threads			2501,54												
Prepare Speed-up 16 Threads		6,27	48 Threads			700,04												
Prepare Efficiency 48 Threads		0,47																
Prepare Speed-up 48 Threads		22,40																
Efficiencies and speed-ups				Times (ms)														
Filter		Filter																
Prepare Efficiency 4 Threads		0,75	Serial			379,62												
Prepare Speed-up 4 Threads		2,98	4 Threads			127,38												
Prepare Efficiency 16 Threads		0,24	16 Threads			96,97												
Prepare Speed-up 16 Threads		3,91	48 Threads			26,54												
Prepare Efficiency 48 Threads		0,30																
Prepare Speed-up 48 Threads		14,30																

Serial Program					Parallel Program with 4 threads (encrypt guided scheduling, prepare dynamic scheduling and filter dynamic scheduling)					Parallel Program with 16 threads (encrypt guided scheduling, prepare dynamic scheduling and filter dynamic scheduling)					Parallel Program with 48 threads (encrypt guided scheduling, prepare dynamic scheduling and filter dynamic scheduling)			
Filter Time	Encrypt Time	Prepare Time	TOTAL Time		Filter Time	Encrypt Time	Prepare Time	TOTAL Time		Filter Time	Encrypt Time	Prepare Time	TOTAL Time		Filter Time	Encrypt Time	Prepare Time	TOTAL Time
47.588,50	1.086,30	3.526,80	52.201,60		14.483,20	567,70	1.000,60	16.051,50		5.264,90	94,00	228,00	5.586,90		1.627,20	47,70	84,60	1.759,50
48.443,00	1.115,30	3.467,00	53.025,30		14.751,20	428,60	985,10	16.164,90		5.362,40	303,00	247,30	5.912,70		1.735,50	60,40	100,20	1.896,10
45.688,10	1.078,60	3.459,80	50.226,50		15.766,10	456,70	907,90	17.130,70		5.710,10	148,00	294,50	6.152,60		1.637,80	46,50	85,00	1.769,30
48.130,40	977,00	4.109,00	53.216,40		15.579,10	528,20	989,00	17.096,30		5.350,00	236,00	391,80	5.977,80		1.560,80	47,30	84,50	1.692,60
49.566,70	989,10	3.469,10	54.024,90		15.430,40	507,50	956,90	16.894,80		6.407,00	193,10	269,10	6.869,20		1.627,20	47,10	84,40	1.758,70
47.899,10	1.145,10	3.544,00	52.588,20		16.663,30	511,90	1.010,00	18.185,20		5.952,60	180,20	472,80	6.605,60		1.748,70	46,50	84,90	1.880,10
48.129,90	1.089,00	3.514,20	52.733,10		14.566,10	486,90	1.050,60	16.103,60		5.679,90	250,00	431,50	6.361,40		1.627,20	61,10	86,00	1.774,30
46.143,20	954,20	3.451,10	50.548,50		15.329,40	600,20	998,70	16.928,30		6.215,50	359,70	410,90	6.986,10		1.640,00	61,30	86,50	1.787,80
50.321,10	1.190,10	3.529,20	55.040,40		14.307,90	401,50	901,20	15.610,60		6.000,70	202,00	378,10	6.580,80		1.655,90	47,00	85,00	1.787,90
48.052,20	1.043,80	3.526,70	52.622,70		15.297,80	375,90	955,80	16.629,50		6.138,00	178,20	392,00	6.708,20		1.627,60	45,60	84,50	1.757,70
44.981,10	1.021,40	3.236,20	49.238,70		15.615,40	462,30	1.041,30	17.119,00		5.860,20	115,60	260,10	6.235,90		1.589,90	46,90	84,80	1.721,60
Serial Time:		52.315,12																
4 Threads Parallel Time:		16.719,49																
16 Threads Parallel Time:		6.361,56																
48 Threads Parallel Time:		1.780,51																
Efficiencies and speed-ups				Times (ms)														
Prepare		Prepare																
Prepare Efficiency 4 Threads		0,91	Serial		3559,69													
Prepare Speed-up 4 Threads		3,65	4 Threads		975,58													
Prepare Efficiency 16 Threads		0,63	16 Threads		351,6													
Prepare Speed-up 16 Threads		10,12	48 Threads		86,56													
Prepare Efficiency 48 Threads		0,86																
Prepare Speed-up 48 Threads		41,12																
Efficiencies and speed-ups				Times (ms)														
Filter		Filter																
Prepare Efficiency 4 Threads		0,79	Serial		47996,22													
Prepare Speed-up 4 Threads		3,15	4 Threads		15217,45													
Prepare Efficiency 16 Threads		0,52	16 Threads		5808,11													
Prepare Speed-up 16 Threads		8,26	48 Threads		1648,79													
Prepare Efficiency 48 Threads		0,61																
Prepare Speed-up 48 Threads		29,11																
Efficiencies and speed-ups				Times (ms)														
Filter		Filter																
Prepare Efficiency 4 Threads		0,55	Serial		1066,85													
Prepare Speed-up 4 Threads		2,19	4 Threads		486,51													
Prepare Efficiency 16 Threads		0,31	16 Threads		214,42													
Prepare Speed-up 16 Threads		4,98	48 Threads		51,05													
Prepare Efficiency 48 Threads		0,44																
Prepare Speed-up 48 Threads		20,90																