| worksize = | 1,000,000 | worksize = | 10,000,000 | média (usec) | work | size |
|-------------|-------------|-------------|-------------|--------------|-------------|-------------|
| repet | itions | repeti | itions | repetitions | 1,000,000 | 10,000,000 |
| 1,000 | 2,000 | 1,000 | 2,000 | 1,000 | 5528919.233 | 55170509.53 |
| 5515191 | 11056933 | 55126443 | 110156810 | 2,000 | 11061063.67 | 110341206.4 |
| 5528449 | 11074700 | 55091445 | 110514610 | | | |
| 5510543 | 11043598 | 55097616 | 110165359 | média (seg) | work | (size |
| 5528303 | 11043776 | 55196634 | 110412114 | repetitions | 1,000,000 | 10,000,000 |
| 5542360 | 11045311 | 55177518 | 110182412 | 1,000 | 5.528919233 | 55.17050953 |
| 5526548 | 11054749 | 55190465 | 110426490 | 2,000 | 11.06106367 | 110.3412064 |
| 5531437 | 11073067 | 55205234 | 110316252 | | | |
| 5521508 | 11078058 | 55069281 | 110514783 | | | |
| 5519537 | 11041105 | 55129578 | 110147388 | | | |
| 5534248 | 11080646 | 55177872 | 110484988 | | | |
| 5527744 | 11058823 | 55086379 | 110406828 | | | |
| 5527901 | 11088046 | 55245687 | 110245716 | | | |
| 5515981 | 11047523 | 55228067 | 110404928 | | | |
| 5522407 | 11079788 | 55196501 | 110201487 | | | |
| 5524191 | 11061580 | 55095271 | 110349312 | | | |
| 5520660 | 11085030 | 55310902 | 110289986 | | | |
| 5523444 | 11050140 | 55200686 | 110423101 | | | |
| 5535530 | 11051883 | 55208856 | 110164426 | | | |
| 5535427 | 11069649 | 55125744 | 110609730 | | | |
| 5536561 | 11076658 | 55216825 | 110510108 | | | |
| 5522743 | 11043550 | 55222029 | 110440722 | | | |
| 5526892 | 11029301 | 55079526 | 110164063 | | | |
| 5534297 | 11056257 | 55093549 | 110573717 | | | |
| 5541493 | 11039011 | 55209246 | 110384566 | | | |
| 5522081 | 11044858 | 55280828 | 110220419 | | | |
| 5543008 | 11061493 | 55191633 | 110355684 | | | |
| 5539460 | 11070406 | 55285671 | 110463312 | | | |
| 5535291 | 11071044 | 55113932 | 110153251 | | | |
| 5537312 | 11077445 | 55095411 | 110156268 | | | |
| 5537030 | 11077482 | 55166457 | 110397361 | | | |
| mé | dia | mé | dia | | | |
| 5528919.233 | 11061063.67 | 55170509.53 | 110341206.4 | | | |

| | 4 000 | | 2,000 repetitions | | |
|-----------|-------------------|-----------|-------------------|-----------|-----------|
| | 1,000 repetitions | | | | |
| 2 threads | 4 threads | 8 threads | 2 threads | 4 threads | 8 threads |
| 2803615 | 2122220 | 2074283 | 5608318 | 4188152 | 4107104 |
| 2844391 | 2089907 | 2052210 | 5685745 | 4185268 | 4126144 |
| 2831783 | 2089320 | 2069163 | 5700816 | 4173023 | 4155810 |
| 2837445 | 2084385 | 2073338 | 5640718 | 4154466 | 4137899 |
| 2818219 | 2074673 | 2078070 | 5644338 | 4161877 | 4105161 |
| 2818220 | 2088016 | 2072473 | 5642131 | 4189482 | 4117922 |
| 2837423 | 2081520 | 2073817 | 5628894 | 4185333 | 4127934 |
| 2850253 | 2074615 | 2087130 | 5614360 | 4184540 | 4120539 |
| 2824537 | 2091559 | 2084091 | 5625415 | 4188981 | 4137697 |
| 2853498 | 2083849 | 2043014 | 5659433 | 4192122 | 4101477 |
| 2827718 | 2090172 | 2069606 | 5622617 | 4188197 | 4128593 |
| 2825970 | 2094749 | 2075402 | 5655684 | 4168393 | 4146322 |
| 2853871 | 2097353 | 2076156 | 5630058 | 4187910 | 4119470 |
| 2859130 | 2089750 | 2070163 | 5671446 | 4203146 | 4125804 |
| 2854191 | 2078953 | 2060051 | 5643958 | 4172384 | 4136975 |
| 2838323 | 2073935 | 2077792 | 5625098 | 4177009 | 4120277 |
| 2850599 | 2098550 | 2075988 | 5676633 | 4179927 | 4132340 |
| 2847641 | 2094721 | 2073385 | 5622237 | 4190921 | 4126574 |
| 2811193 | 2089777 | 2061362 | 5614418 | 4192911 | 4140042 |
| 2811448 | 2091696 | 2040167 | 5620224 | 4186890 | 4145077 |
| 2834522 | 2094988 | 2068827 | 5629777 | 4177478 | 4114153 |
| 2809090 | 2092459 | 2067036 | 5633873 | 4191543 | 4121465 |
| 2853168 | 2090412 | 2087441 | 5630944 | 4178607 | 4114957 |
| 2861799 | 2091981 | 2078135 | 5621903 | 4182876 | 4108410 |
| 2854129 | 2087784 | 2055114 | 5612113 | 4180394 | 4112195 |
| 2818200 | 2082564 | 2052555 | 5707081 | 4186682 | 4149398 |
| 2827820 | 2079235 | 2047283 | 5612797 | 4175159 | 4116333 |
| 2847570 | 2081905 | 2074932 | 5660135 | 4195565 | 4111282 |
| 2821379 | 2126939 | 2058887 | 5690070 | 4182463 | 4101914 |
| 2825268 | 2089548 | 2061564 | 5623714 | 4172831 | 4150510 |
| | | mé | dia | | |

| 1,000 repetitions 2,000 repetitions 2,00 |
|--|
| threads 4 threads 8 threads 2 threads 4 threads 8 threads |
| |
| 278488 20860761 20902523 56542351 41844651 41600016 |
| |
| 272876 20839856 20848648 56533632 41721469 41697183 |
| 255635 20886107 20883540 56511207 41703803 41853705 |
| 276617 20869603 20853285 56564041 41839710 41791981 |
| 369154 20874237 20894482 56571211 41697104 41773835 |
| 269264 20851213 20872264 56529449 41771103 41715712 |
| 238725 20904420 20880543 56531254 41792100 41724551 |
| 280247 20874960 20921526 56535339 41844764 41744075 |
| 273829 20902795 20885202 56540446 41813797 41655295 |
| 337612 20873922 20849111 56602167 41708204 41721484 |
| 275413 20859377 20884678 56332563 41728162 41721087 |
| 386193 20921105 20861962 56563220 41693299 41761268 |
| 3281416 20861268 20889570 56520802 41771267 41771273 |
| 308726 20859820 20837449 56597810 41817840 41682639 |
| 3286054 20918444 20858815 56554252 41713769 41671291 |
| 274435 20938323 20900239 56511049 41726679 41695854 |
| 285021 20894749 20838677 56524665 41791565 41707018 |
| 271695 20918087 20903537 56604901 41699235 41721545 |
| 262124 20851735 20876291 56522639 41760257 41798343 |
| 271886 20875584 20883868 56499562 41745216 41758489 |
| 305547 20923937 20817415 56518452 41748790 41719184 |
| 350009 20830944 20920444 56570552 41952166 41679867 |
| 277928 20898123 20876066 56554859 41797630 41683250 |
| 289173 20902539 20849676 56525289 41728389 41772282 |
| 267302 20822413 20906570 56521388 41727268 41781491 |
| 274947 20930838 20879385 56525231 41714759 41724318 |
| 249440 20850256 20874898 56381842 42043134 41712897 |
| 255815 20847046 20889008 56584189 41792331 41748044 |
| 284857 20892315 20876118 56575634 41826683 41730464 |
| 272236 20849336 20895565 56575566 41783853 41744201 |
| média |
| 286088.8 20879470.43 20877045.17 56534185.4 41776633.23 41728754.73 |

| | | 2 threads | |
|--|--------------|-------------|------------|
| | média (usec) | work | size |
| | repetitions | 1,000,000 | 10,000,000 |
| | 1,000 | 2835080.433 | 28286088.8 |
| | 2,000 | 5641831.6 | 56534185.4 |
| | | | |

| 4 threads | | | | | |
|--------------|-------------------------|-------------|--|--|--|
| média (usec) | worksize | | | | |
| repetitions | 1,000,000 | 10,000,000 | | | |
| 1,000 | 2089917.833 | 20879470.43 | | | |
| 2,000 | 4182484.333 41776633.23 | | | | |

| | 2,000 | 4182484.333 | 41776633.23 | | | |
|---|--------------|-------------|-------------|--|--|--|
| | | | | | | |
| | 8 threads | | | | | |
| | média (usec) | worksize | | | | |
| I | repetitions | 1,000,000 | 10,000,000 | | | |
| Ī | 1,000 | 2067981.167 | 20877045.17 | | | |
| | 2,000 | 4125325.933 | 41728754.73 | | | |

| 2 threads | | | | | |
|----------------------|-------------|------------|--|--|--|
| média (seg) worksize | | | | | |
| repetitions | 1,000,000 | 10,000,000 | | | |
| 1,000 | 2.835080433 | 28.2860888 | | | |
| 2,000 | 5.6418316 | 56.5341854 | | | |
| | | | | | |

| | 4 threads | | | | |
|----------------------|-------------|-------------|--|--|--|
| média (seg) worksize | | | | | |
| repetitions | 1,000,000 | 10,000,000 | | | |
| 1,000 | 2.089917833 | 20.87947043 | | | |
| 2,000 | 4.182484333 | 41.77663323 | | | |
| | | | | | |

| | 8 threads | |
|-------------|-------------|-------------|
| média (seg) | work | size |
| repetitions | 1,000,000 | 10,000,000 |
| 1,000 | 2.067981167 | 20.87704517 |
| 2,000 | 4.125325933 | 41.72875473 |
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| | | worksize : | = 1,000,000 | | |
|-------------|-------------------|------------|-------------|-------------------|-----------|
| | 1,000 repetitions | 3 | | 2,000 repetitions | |
| 2 threads | 4 threads | 8 threads | 2 threads | 4 threads | 8 threads |
| 3081493 | 2108872 | 2617838 | 6143704 | 4248947 | 5191707 |
| 3070661 | 2105437 | 2576590 | 6154929 | 4195644 | 5210929 |
| 3074963 | 2140446 | 2581227 | 6151865 | 4225239 | 5201003 |
| 3073341 | 2089298 | 2613453 | 6158644 | 4206674 | 5230301 |
| 3078789 | 2113053 | 2610442 | 6154313 | 4219028 | 5214910 |
| 3072447 | 2126077 | 2590201 | 6150924 | 4212854 | 5229646 |
| 3081102 | 2115862 | 2608401 | 6157638 | 4206659 | 5210590 |
| 3074638 | 2102505 | 2563904 | 6149323 | 4210927 | 5216046 |
| 3076056 | 2107317 | 2579136 | 6150141 | 4201070 | 5231801 |
| 3075944 | 2131007 | 2603132 | 6151611 | 4191270 | 5182600 |
| 3075792 | 2121571 | 2579237 | 6150788 | 4209003 | 5147122 |
| 3077817 | 2109515 | 2623393 | 6154797 | 4195273 | 5228595 |
| 3074608 | 2111982 | 2597692 | 6148556 | 4233640 | 5196478 |
| 3076664 | 2129539 | 2608272 | 6150835 | 4201067 | 5234254 |
| 3080356 | 2123569 | 2593232 | 6155904 | 4254530 | 5192150 |
| 3076578 | 2111475 | 2611330 | 6151783 | 4208689 | 5217066 |
| 3076107 | 2103256 | 2577262 | 6152343 | 4223779 | 5161095 |
| 3072580 | 2111253 | 2555430 | 6150079 | 4213536 | 5251579 |
| 3077147 | 2131351 | 2578284 | 6146746 | 4241009 | 5179667 |
| 3075955 | 2109709 | 2581031 | 6153645 | 4234627 | 5242127 |
| 3072881 | 2101100 | 2608922 | 6153921 | 4238715 | 5174377 |
| 3073833 | 2109014 | 2558991 | 6155718 | 4224100 | 5169532 |
| 3081008 | 2100947 | 2579309 | 6150271 | 4208957 | 5194825 |
| 3077289 | 2121472 | 2594848 | 6150660 | 4222296 | 5218714 |
| 3073593 | 2113679 | 2609297 | 6158858 | 4210252 | 5190594 |
| 3075369 | 2114646 | 2592640 | 6147473 | 4218770 | 5211551 |
| 3073344 | 2105235 | 2596843 | 6161965 | 4222129 | 5198075 |
| 3079287 | 2117193 | 2589741 | 6145355 | 4190904 | 5198502 |
| 3075330 | 2110102 | 2585991 | 6150266 | 4260468 | 5157978 |
| 3079545 | 2105398 | 2621912 | 6149423 | 4241109 | 5231398 |
| | | mé | dia | | |
| 3076150.567 | 2113396 | 2592932.7 | 6152082.6 | 4219038.833 | 5203840. |

| | | WOI KOIZE - | 10,000,000 | | |
|-----------|-------------------|-------------|------------|-------------------|-----------|
| | 1,000 repetitions | | | 2,000 repetitions | |
| 2 threads | 4 threads | 8 threads | 2 threads | 4 threads | 8 threads |
| 30868526 | 21018587 | 22002309 | 61690435 | 42210883 | 43995310 |
| 30861589 | 21091052 | 22060214 | 61736956 | 42264454 | 44027106 |
| 30864364 | 21054833 | 22063006 | 61680623 | 42209111 | 44012632 |
| 30879270 | 21056056 | 22031939 | 61671252 | 42079745 | 44145236 |
| 30868641 | 21099867 | 22009144 | 61678077 | 42126976 | 43999178 |
| 30863742 | 21004929 | 21964347 | 61705157 | 41984787 | 43991602 |
| 30858161 | 21056285 | 22037483 | 61641190 | 42130139 | 43995806 |
| 30852159 | 21071906 | 22016266 | 61667899 | 42186957 | 44035749 |
| 30868617 | 21029588 | 21939788 | 61685481 | 42212468 | 44055635 |
| 30846200 | 21084481 | 21996196 | 61408661 | 42130599 | 43987755 |
| 30856461 | 30716428 | 22005392 | 61375165 | 41949074 | 44034863 |
| 30991815 | 21091377 | 22046097 | 61716609 | 42104532 | 44047626 |
| 30848872 | 21082041 | 22028861 | 61703577 | 42023495 | 44093705 |
| 30838129 | 20999557 | 21991358 | 61729214 | 42193818 | 44036962 |
| 30856984 | 21040345 | 22056986 | 61696416 | 42156276 | 44043366 |
| 30859416 | 21115273 | 22005095 | 61699251 | 41875253 | 43976827 |
| 30845580 | 21085056 | 21974531 | 61712603 | 42061264 | 44057550 |
| 30844331 | 21018948 | 22004628 | 61679353 | 42143114 | 43938394 |
| 30843829 | 21094743 | 22018673 | 61724093 | 42114990 | 44013296 |
| 30848927 | 21111553 | 22036994 | 61726913 | 42122492 | 44032905 |
| 30855045 | 21103514 | 22051740 | 61677262 | 42189773 | 44088020 |
| 30848149 | 21006904 | 22017516 | 61724600 | 42129442 | 44034497 |
| 30838820 | 21065058 | 21998972 | 61701996 | 42088046 | 43994630 |
| 30859519 | 20958278 | 22014970 | 61709070 | 42145989 | 43945168 |
| 30842195 | 20938463 | 22061821 | 61658488 | 42049992 | 44039950 |
| 30861707 | 21060403 | 22002364 | 61754185 | 42183679 | 43991625 |
| 30871627 | 21079145 | 22002833 | 61660971 | 42087090 | 44092776 |
| 30849378 | 21099438 | 22029095 | 61678508 | 42101399 | 44109602 |
| 30876144 | 21089046 | 21991604 | 61737793 | 42091915 | 44127250 |
| 30838465 | 21079799 | 21956368 | 61644695 | 42034119 | 43977762 |
| | | mé | dia | | |

| | 2 threads | |
|--------------|-------------|-------------|
| média (usec) | worksize | |
| repetitions | 1,000,000 | 10,000,000 |
| 1,000 | 3076150.567 | 30860222.07 |
| 2,000 | 6152082.6 | 61675883.1 |
| | | |

| 4 threads | | | | | | |
|--------------|-------------|-------------|--|--|--|--|
| média (usec) | worksize | | | | | |
| repetitions | 1,000,000 | 10,000,000 | | | | |
| 1,000 | 2113396 | 21380098.43 | | | | |
| 2,000 | 4219038.833 | 42112729.03 | | | | |

| | 4 threads | | | |
|-------------|-------------|-------------|--|--|
| média (seg) | worksize | | | |
| repetitions | 1,000,000 | 10,000,000 | | |
| 1,000 | 2.113396 | 21.38009843 | | |
| 2,000 | 4.219038833 | 42.11272903 | | |
| | | | | |

2 threads worksize 1,000,000 10,000,000

3.076150567 30.86022207 6.1520826 61.6758831

média (seg) repetitions 1,000

2,000

| | o threads | | | | |
|--------------|-----------|-------------|--|--|--|
| média (usec) | worksize | | | | |
| repetitions | 1,000,000 | 10,000,000 | | | |
| 1,000 | 2592932.7 | 22013886.33 | | | |
| 2,000 | 5203840.4 | 44030759.43 | | | |
| | | | | | |
| | | | | | |

| 8 threads | | | | |
|-------------|-----------|-------------|--|--|
| média (seg) | work | size | | |
| repetitions | 1,000,000 | 10,000,000 | | |
| 1,000 | 2.5929327 | 22.01388633 | | |
| 2,000 | 5.2038404 | 44.03075943 | | |
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| 2886401 2125145 2138198 5742250 4214698 422 2885052 2114641 2094896 5751909 4206536 420 2885166 2119703 2138870 7556984 4200733 420 2885270 2120037 2110205 5754478 4199067 421 2887150 2119499 2115745 5749417 4252596 419 2885272 2125787 2137799 5748415 4202489 414 28852840 2112707 2110776 5746660 4209282 416 28864716 2124700 2113761 5747044 4210169 416 2887943 21146919 2110585 5788378 4192198 418 2885411 2144650 2118277 5750324 4204697 419 2885191 2112878 219416 5747698 4185826 418 2886072 2113050 2118418 5747098 4123867 419 288161 212578 | : 1,000,000 | | | | | | | | | | |
|---|-------------|-------|-------|------|---|-------|-------|--------|---------|-------|--------|
| 2886401 2125145 2138198 5742250 4214698 422 2885052 2114641 2084896 5751909 4206536 420 2885166 2119703 2138870 7556984 4200733 420 2885270 2120037 2110205 5754478 4199067 421 2887150 2119499 2115745 5749417 4252596 419 2885272 2125767 2137799 5748415 4202489 414 28852840 2112707 2110776 5746660 4209282 416 2886141 2116686 2107930 5753113 4223414 418 28864716 2124700 2113761 5747044 4210169 416 2887993 2117699 2114239 5747192 4189799 417 2883411 2144650 2118277 5750324 4204697 419 2885191 2112878 2119416 5747698 4185926 418 2881311 2142231 | | | | | | 2,000 | repe | tition | ıs | | |
| 2885052 2114641 2094896 5751909 4209536 420 2889166 2119703 2138870 5756984 4200783 420 2885270 2120037 2110205 5754478 4199096 421 2887150 2119499 2115745 5749417 4252596 419 2885270 2125787 2137799 5744815 4202499 414 28852840 2112707 2110776 574660 4202922 416 2888154 2116668 2107930 5753113 4223814 418 2884716 2124700 2113761 5747044 4210169 416 28879933 2114619 2116585 5738378 4192198 418 2885191 2142860 2118277 5750324 4204697 419 2885191 2112878 2119416 5747016 4210758 418 2886191 21124231 2098014 5742090 4213867 415 2886192 2115343 | се | oroce | ocess | ssos | S | 4 p | roces | ssos | | 8 pro | cessos |
| 2889166 2119703 2138870 5756984 4200783 420 2885270 2120037 2110205 5754478 4199067 421 2887150 2119499 2115745 5749417 4252596 419 2885572 2125787 2137799 5744815 4202489 414 28856572 2125787 2137779 5746660 4202282 416 2888544 2112707 2110776 5746660 4202282 416 2888154 2116688 2107930 5753113 4223814 418 288475 2114619 2110585 5738378 4192198 418 2885453 2114619 2110585 5738378 4192198 418 28879933 2117609 2114239 5747944 4204697 419 2885191 2142878 2119416 5747904 4204697 419 2885191 2142878 2119416 5747908 4185978 412 288672 2113050 | 122 | 5742 | 42250 | 50 | | 4 | 2146 | 98 | \perp | 422 | 9381 |
| 2885270 2120037 2110205 5754478 4199067 421 2887150 2119499 2115745 5749417 4252596 419 2885572 2125767 2137799 5744815 4202489 414 2882640 2112707 2110776 5746860 4209282 416 2888154 2116668 2107930 5753113 4223814 418 2884716 2124700 2113761 5747044 4210169 416 28842453 2114619 2116255 5738378 4192198 418 28879933 2117609 2114279 5747024 4204697 419 2886572 211927 5750324 4204697 419 2886572 2119350 2118418 5747068 4185926 418 2886672 2119350 2118418 5747068 4210758 412 2880341 2124231 208014 5742696 4213867 415 2880341 2118243 2115145 | 519 | 5751 | 51909 | 09 | | 4 | 2095 | 36 | \perp | 420 | 1389 |
| 2887150 2119499 2115745 5749417 4252596 419 2885572 2125787 2137799 5744815 4202489 414 2886240 2112707 2110776 6746860 4202628 416 2888154 2116668 2107930 5753113 4223814 418 2884716 2124700 2113761 5747044 4210169 416 2886453 2114619 2110585 5738378 4192198 418 2879933 2117609 2114239 5747192 4189789 417 2885191 2112878 21194165 5747992 4204697 419 2886572 2113050 2118418 5747016 4210758 412 2884087 2115243 2098014 5746982 4214920 418 2880071 2115243 21194145 5746982 4214920 418 2880173 2113624 2119944 5746526 4206847 419 2881565 2134644 | 569 | 5756 | 56984 | 84 | | 4 | 2007 | 83 | | 420 | 9310 |
| 2885572 2125787 2137799 5744815 4202489 414 2882840 2112707 2110776 5746860 4202822 416 2888154 2116688 2107930 5753113 4223814 418 2884716 2124700 2113761 5747044 4210169 416 288453 2114619 2110585 5738378 4192198 418 2879933 2117609 2114239 5747192 4189789 417 2885191 2112278 2119416 5747698 4185926 418 2886572 213050 2118418 5747016 4210758 412 28861311 2142231 2098014 5742090 4213867 415 2881031 2115243 2115145 5746926 4218664 417 2881073 2115848 208666 5739813 4206664 417 2881665 2134644 2125718 5747284 4205650 412 28879778 2116218 | 544 | 5754 | 54478 | 78 | | 4 | 1990 | 67 | ┸ | 421 | 1413 |
| 2882840 2112707 2110776 5746860 4209282 416 2888154 216668 2107990 5753113 4222814 416 2884716 2124700 2113761 5747044 4210169 41619 2882453 2114619 2110585 5738378 4192198 418 2879933 2117609 2114239 5747192 4189789 417 2885411 2144650 211927 5750224 4204697 4199285 2885191 2112878 2119416 5747698 4185926 4185926 2886572 2113050 2118418 5747016 42104697 419 2881311 2124231 2098014 5742000 4213867 415 2880341 2115243 2115145 5746982 4214920 41849 2880107 2115894 2118944 5746582 4206847 419 2881585 2137464 2125718 5748526 4206847 419 2881555 2134644 | 194 | 5749 | 49417 | 17 | | 4 | 2525 | 96 | | 419 | 4074 |
| 2888154 2116668 2107930 5753113 4223814 418 2884716 2124700 2113761 5747044 42210169 416 2882453 2114619 2110585 5738378 4120169 418 28879933 2117609 2114239 5747192 4189789 417 2885411 2144650 2118277 5750324 4204697 419 2885191 2112878 2119416 5747698 4185926 418 2886572 2113000 2118418 5747016 4210758 412 2881311 2142231 2098014 5747090 4213667 418 2890341 2115943 2115943 2115942 418902 418 2891073 2113624 2119944 5746952 4206847 419 2881073 2113624 2119944 5746526 4240078 417 2881655 2134644 2125718 5747284 4206650 412 2885367 2117180 | 148 | 5744 | 44815 | 15 | | 4 | 2024 | 89 | | 414 | 7673 |
| 2884716 2124700 2113761 5747044 4210169 416 2882453 2114619 2110585 5738378 4192198 418 2879933 2117699 2114239 5747192 4189789 417 2883411 2148278 2118277 5750324 4204697 419 2885191 2112878 2119416 5747068 4168526 418 2886572 2113050 2118418 5747016 4210788 418 2881311 2124231 2098014 5742090 4213867 415 2884087 2115243 2115145 5748082 4214920 418 2881073 2115844 2119944 5746526 420664 419 2881665 2134644 2125718 5747284 4205650 412 28879778 2116218 2086399 5752111 4186406 414 2883102 2107354 2122667 5741264 4216645 417 2883102 2116288 | 166 | 5746 | 46660 | 60 | | 4 | 2092 | 82 | | 416 | 1527 |
| 2882453 2114619 2110585 5738378 4192198 418 2879933 2117609 2114239 5747192 4189789 417 2883411 2144680 2118277 5750324 4204697 499 2885191 2112278 2119416 5747698 4185926 418 2886572 2113050 2118418 5747016 4210758 412 2881311 2124231 2098014 574209 4213867 415 2884087 2115243 2115145 5746982 4214920 418 28890341 2119848 2088666 5739813 4206864 417 2881073 2113624 2119944 5748566 420074 418 2883558 2117412 2125891 5748566 4240078 417 2881665 2134644 2125718 5747284 4205660 41228 28879778 2116218 2086389 5752111 4188406 414 2883102 2107394 | 531 | 5753 | 53113 | 13 | | 4 | 2238 | 14 | | 418 | 5250 |
| 2879933 2117609 2114239 5747192 4189789 417 2883411 2144650 2118277 5750324 4204697 419 2883411 2144650 2118277 5750324 4204697 419 2885191 2112878 2119416 5747698 4185926 418 2886572 2113050 2118418 5747016 4210758 412 2881311 2124231 2098014 5742090 4213867 415 2881311 2124231 2098014 5742090 4213867 415 2881031 2115243 2115145 5746982 4214920 418 2890341 2118948 2088666 5739813 4208864 417 2881073 2115624 2119944 5746526 4206647 419 2881073 2113624 2119944 5748526 4206647 419 2881665 2134644 2125718 5747284 4205650 412 2885367 2117180 2125679 5748705 4214399 411 2885102 2107354 2122667 5741264 421894 414 2883102 2107354 2129889 5752111 4188406 414 2883102 2107354 212988 5762714 4218845 417 2883116 2118268 2119987 5747380 4192077 419 28862021 2114639 2128880 5760714 4207881 418 2886393 2121124 2096980 5736212 4226409 420 2881850 2115760 2107019 5741210 4224383 419 2876186 2106051 2116688 5747295 4217203 423 | 170 | 5747 | 47044 | 44 | | 4 | 2101 | 69 | Ι | 416 | 4151 |
| 2883411 2144650 2118277 5750324 4204697 419 2885191 2112878 2119416 5747668 4185926 418 2886572 2113050 2118418 5747016 4210758 412 2881311 2124231 2088014 5742090 4213867 415 2884087 2115243 2115145 5746982 4214920 418 28890341 2118948 2088666 5739813 4208864 417 2881073 2113824 2119944 5746526 4240078 417 2881665 2134644 2125718 5747284 4206650 412 2885967 2117190 2125679 5748705 4214399 411 2883102 2107394 2122067 5741284 4218645 417 2883102 2116218 2119688 2119987 3747380 4192077 4192077 4192077 4192077 4192077 4192077 4192077 4192077 4192077 4192077 < | 383 | 5738 | 38378 | 78 | | 4 | 1921 | 98 | | 418 | 8275 |
| 2885191 2112878 2119416 5747698 4185926 418 2886572 2113050 2118418 5747016 4210758 412 2881311 2124231 2038014 5742090 4213887 415 2884087 2115243 2115145 5746982 4214920 418 28890341 2119898 2088666 5739813 4206864 417 2881073 2113624 2119944 5746526 4206874 419 2881073 2113624 2119944 5748566 4240078 417 2881665 2134644 2125718 5747284 4206600 412288 2885367 2117190 2125679 5748706 4214399 411 28879778 2116218 2086389 5752111 4188406 414 2883102 2107934 2122067 5741264 4218645 417 2883202 2114639 212880 5760714 4207881 418 28862021 2114639 | 171 | 5747 | 47192 | 92 | | 4 | 1897 | 89 | | 417 | 8712 |
| 2886572 2113050 2118418 5747016 4210758 412 2881311 2124231 2098014 5742090 4213867 415 2884087 2115243 2115145 5746982 4214920 418 2880341 2118948 2088686 5739813 4206864 417 2881073 2113624 2119944 5746526 420664 419 2883558 2117412 2125891 5748566 4240078 417 2881665 213644 2125718 5747284 420660 412 2885977 2117180 2125679 5748705 4214399 411 2883102 2107354 2122067 5741264 4218466 414 2883116 2118268 2119987 5747380 4192077 419 2886303 2121142 206960 5736212 4226409 420 288150 2115760 2107019 5741210 4224383 419 288150 2157690 <td< td=""><td>503</td><td>5750</td><td>50324</td><td>24</td><td></td><td>4</td><td>2046</td><td>97</td><td>Т</td><td>419</td><td>0609</td></td<> | 503 | 5750 | 50324 | 24 | | 4 | 2046 | 97 | Т | 419 | 0609 |
| 2881311 2124231 2098014 5742090 4213867 415 2884087 2115243 2115145 57468982 4214920 441820 2890341 2118948 2088666 5739813 4206864 41791894 2881073 2119824 2119944 5748526 4206847 4199 2883558 2117412 2125891 5748566 4240078 417 2881665 2134644 2125718 5747284 4206660 41224718 2885397 2117180 2125679 5748705 4214399 411179 2883102 2107354 2122067 5741264 4218645 417 2883102 2107354 2122067 5741264 4218645 417 2883031 2114639 2118686 3760714 4207881 4180077 4199077 4199077 419077 4191077 4191077 4191077 4191077 4191077 4191077 4191077 4191077 4191077 4191077 4191077 4191077 | 176 | 5747 | 47698 | 98 | | 4 | 1859 | 26 | Т | 418 | 2787 |
| 2884087 2115243 2115145 5746982 4214920 418 28900341 2118948 2088666 5739813 4206864 417 2881073 2119842 2119944 5748526 4208647 41994 2883558 2117412 2125891 5748566 4240078 417 2881665 2134644 2125718 5747284 4205660 4122589 2885367 2117180 2125679 5748705 4214394 411 28879778 2116218 2086389 5752111 4188406 414 2883102 2107354 2122067 5741264 4216645 417 2881316 2118268 211987 5747380 4192077 419 2882021 2114639 2128880 5760714 4207881 418 2886393 2121124 2096960 5736212 4226409 420 288156 215760 2107019 574129 574250 4212333 419 2881650 | 170 | 5747 | 47016 | 16 | | 4 | 2107 | 58 | | 412 | 9588 |
| 2890341 2118948 2088666 5739813 4206864 417 2881073 2113624 2119944 5748526 4200647 419 2883558 2117412 2125891 5748566 420078 417 2881665 2134644 2125718 5747284 4205650 412 2885367 2117180 2125679 5748705 4214399 411 28879778 2116218 2086389 5752111 4188406 414 2883102 2107354 2122067 5741264 4218645 417 2881316 2118268 2119987 5747380 4192077 419 2886393 2121124 2096960 5736212 4226409 420 2881850 2115760 2107019 5741210 4224383 419 2876186 2108051 2115698 5747296 4217233 423 | 120 | 5742 | 42090 | 90 | | 4 | 2138 | 67 | Т | 415 | 4853 |
| 2881073 2113624 2119944 5746526 4208647 419 2883558 2117412 2125891 5748566 420078 417 2881665 2134644 2125718 5747284 4205650 412 2885367 2117190 2125679 5748705 4214399 411 2887978 2116218 2066389 5752111 4188406 414 2883102 2107354 2122067 5741264 4218645 417 2881316 2118268 2119987 5747380 4192077 419 2882021 2114639 2128880 5760714 4207881 418 2886385 2121724 2096960 5736212 4226409 420 2881850 2115760 2107019 5741210 4224383 420 2876186 2108051 2115698 5747295 4217293 423 | 169 | 5746 | 46982 | 82 | | 4 | 2149 | 20 | | 418 | 7999 |
| 2883558 2117412 2125891 5748566 4240078 417 2881665 2134644 2125718 5747284 4205650 4122588 2885367 2117180 2125679 5748705 4214399 411 2879778 2116218 2086389 5752111 4188406 414 2883102 2107354 2122067 5741264 4218645 417 2881316 2118288 2119887 5747380 4192077 419 2882021 214639 2128880 5760714 4207881 418 2886393 2121124 2069660 5736212 4226409 420 2881650 2115760 2107019 5741295 421424 4206866 2881650 2115760 2107019 5741295 4217293 423 28876186 2108051 2115698 5747295 4217293 423 | 398 | 5739 | 39813 | 13 | | 4 | 2068 | 64 | Т | 417 | 7382 |
| 2881665 2134644 2125718 5747284 4205650 412 2885367 2117180 2125679 5748705 4214399 411 28879778 2116218 2086389 5752111 4188406 414 2883102 2107354 2122067 5741264 4218645 417 2883102 2107354 2122067 5741264 4218645 417 2881316 2118268 2119987 57547380 4192077 4192077 2882021 2114639 2128880 5760714 4207881 418 2886393 212124 2096960 5758212 4226409 42028 2881850 2115760 2107019 5741210 4224383 419 2876186 2108051 2115698 5747295 4217233 423 | 165 | 5746 | 46526 | 26 | | 4 | 2086 | 47 | Т | 419 | 1866 |
| 2885367 2117180 2125679 5748705 4214399 411 2879778 2116218 2086389 5752111 4188406 414428 2883102 2107354 2122067 5741264 4218645 417 2881316 2118268 2119987 5747380 4192077 419 2882021 2114639 2128880 5760714 4207881 418 2886993 2121124 2086960 5736212 4224499 420 2881850 2115760 2107019 5741201 4224333 419 2876186 2108051 2115698 5747295 4217293 423 | 185 | 5748 | 48566 | 66 | | 4 | 2400 | 78 | Т | 417 | 6339 |
| 2879778 2116218 2086389 5752111 4188406 414 2883102 2107354 2122067 5741264 4218645 417 2881316 2118268 2119897 5747380 4192077 419 2882021 2114639 2128880 5760714 4207881 418 2886393 2121124 2096960 5736212 4226409 420 2881850 2115760 2107019 5741210 4224333 419 2876186 2108061 2115698 5747295 4217293 423 | 172 | 5747 | 47284 | 84 | | 4 | 2056 | 50 | Т | 412 | 8761 |
| 2883102 2107384 2122067 5741264 4218645 417 2881316 2118268 2119987 5747380 4192077 419 2880201 2114639 2128880 5760714 4207881 4182 2886393 2121124 2096860 5736212 4226409 420 2881850 2115760 2107019 5741210 4224333 419 2876186 2108051 2115698 5747295 4217293 423 | 187 | 5748 | 48705 | 05 | | 4 | 2143 | 99 | Г | 411 | 7494 |
| 2881316 2118268 2119987 5747380 4192077 419 2882021 2114639 2128880 5760714 4207881 418 2886393 2121124 2096960 5736212 4226409 420 2881850 2115790 2107019 5741210 4224383 419 2876186 2108051 2115698 5747295 4217293 423 | 521 | 5752 | 52111 | 11 | | 4 | 1884 | 06 | \perp | 414 | 7457 |
| 2882021 2114639 2128880 5760714 4207881 418 2886393 2121124 2096960 5736212 4226409 420 2881850 2115760 2107019 5741210 422433 4193 2876186 2108051 2115698 5747295 4217293 423 | 112 | 5741 | 41264 | 64 | | 4 | 2186 | 45 | Г | 417 | 3086 |
| 2886393 2121124 2096960 5736212 4226409 420 2881850 2115760 2107019 5741210 4224383 419 2876186 2108051 2115698 5747295 4217293 423 | 173 | 5747 | 47380 | 80 | | 4 | 1920 | 77 | | 419 | 0494 |
| 2881850 2115760 2107019 5741210 4224383 419 2876186 2108051 2115698 5747295 4217293 423 | 307 | 5760 | 60714 | 14 | | 4 | 2078 | 81 | Г | 418 | 0223 |
| 2876186 2108051 2115698 5747295 4217293 423 | 362 | 5736 | 36212 | 12 | | 4 | 2264 | 09 | Ι | 420 | 8892 |
| | 112 | 5741 | 41210 | 10 | | 4 | 2243 | 83 | | 419 | 1240 |
| 2878432 2122927 2125251 5731097 4197754 419 | 172 | 5747 | 47295 | 95 | | 4 | 2172 | 93 | Ι | 423 | 5676 |
| | 310 | 5731 | 31097 | 97 | | 4 | 1977 | 54 | | 419 | 5877 |
| 2881753 2122084 2144813 5741100 4207411 416 | 111 | 5741 | 41100 | 00 | | 4 | 2074 | 11 | Г | 416 | 7389 |
| média | | | | | | | | | | | |
| 2883670.467 2118980 2116507.867 5746520.9 4209682.867 41799 | 65 | 7465 | 6520. | 0.9 | _ | 420 | 09682 | 2.867 | \perp | 41799 | 72.23 |

| | 1,000 repetitions | | | 2,000 repetitions | |
|-------------------------|-------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | 4 processos | | | 4 processos | 0 processos |
| 2 processos 28732464 | 21220283 | 8 processos 21369109 | 2 processos 57221018 | 4 processos 42149462 | 8 processos 42438596 |
| 28755620 | 21220263 | 21309109 | 57221016 | 42149462 | 42436596 |
| 28748624 | 21223126 | 21391976 | 57299090 | 42000007 | 42201445 |
| 28767427 | 21288278 | 21422003 | 57318951 | 42089649 | 42257950 |
| 28714354 | 21200270 | 21392450 | | 42089649 | 42257950 |
| | | | 57211294 | | |
| 28773768 | 21147688 | 21379406 | 57216294 | 42006111 | 42268795 |
| 28718812 | 21282889 | 21400608 | 57282005 | 42099450 | 42311094 |
| 28719418 | 21169989 | 21382450 | 57307294 | 42075761 | 42234889 |
| 28726207 | 21229425 | 21388146 | 57305688 | 42188308 | 42273391 |
| 28915320 | 21137438 | 21390660 | 57347080 | 42069390 | 42221461 |
| 28840361 | 21214085 | 21415384 | 57253610 | 42095727 | 42412287 |
| 28731608 | 21131253 | 21423161 | 57220416 | 41991572 | 42394367 |
| 28792819 | 21135672 | 21381094 | 57321131 | 42170399 | 42284187 |
| 28724002 | 21215016 | 21378089 | 57306415 | 42046828 | 42181996 |
| 28863727 | 21180239 | 21398889 | 57261661 | 41969053 | 42298615 |
| 28745153 | 21142067 | 21366987 | 57250382 | 42255895 | 42235070 |
| 28875100 | 21137683 | 21518764 | 57256466 | 41965891 | 42337835 |
| 28768776 | 21123104 | 21413810 | 57789647 | 42036913 | 42408837 |
| 28838191 | 21191680 | 21394646 | 57246936 | 42149901 | 42261769 |
| 28778477 | 21129309 | 21446408 | 57333429 | 42042091 | 42200262 |
| 28744824 | 21101750 | 21410172 | 57260808 | 41977525 | 42236215 |
| 28774690 | 21194767 | 21418181 | 57365386 | 42307838 | 42277013 |
| 28745322 | 21213016 | 21439395 | 57507766 | 42027035 | 42245447 |
| 28738755 | 21205911 | 21394460 | 57185543 | 42000570 | 42335585 |
| 28770394 | 21154794 | 21353073 | 57548079 | 42008176 | 42395647 |
| 28870692 | 21106939 | 21366160 | 57266815 | 42212329 | 42385642 |
| 28799450 | 21173635 | 21416846 | 57224436 | 42200806 | 42261322 |
| 28851864 | 21158104 | 21406937 | 57230592 | 42206318 | 42231166 |
| 28756927 | 21139947 | 21435838 | 57239686 | 41944736 | 42174533 |
| 28834373 | 21149348 | 21398587 | 57253582 | 42157309 | 42297548 |
| | | mé | dia | | |
| 28780583.97 | 21175233.33 | 21404368.67 | 57303784.03 | 42093243.57 | 42285954.47 |

| | | 2 processos | | |
|---|-------------|-------------|-------------|--|
| m | édia (usec) | work | ksize | |
| n | epetitions | 1,000,000 | 10,000,000 | |
| | 1,000 | 2883670.467 | 28780583.97 | |
| | 2,000 | 5746520.9 | 57303784.03 | |
| | | | | |

| 4 processos | | | | | |
|--------------|-----------------------|-------------|--|--|--|
| média (usec) | worksize | | | | |
| repetitions | 1,000,000 | 10,000,000 | | | |
| 1,000 | 2118980 | 21175233.33 | | | |
| 2,000 | 4209682.867 42093243. | | | | |

| | 8 processos | | |
|--------------|-------------|-------------|--|
| média (usec) | worksize | | |
| repetitions | 1,000,000 | 10,000,000 | |
| 1,000 | 2116507.867 | 21404368.67 | |
| 2,000 | 4179972.233 | 42285954.47 | |
| | | | |
| | | | |

| 2 processos | | | | | | |
|-------------|-------------|-------------|--|--|--|--|
| média (seg) | worksize | | | | | |
| repetitions | 1,000,000 | 10,000,000 | | | | |
| 1,000 | 2.883670467 | 28.78058397 | | | | |
| 2,000 | 5.7465209 | 57.30378403 | | | | |
| | | | | | | |

| 4 processos | | | | | |
|-------------|-------------|-------------|--|--|--|
| média (seg) | worksize | | | | |
| repetitions | 1,000,000 | 10,000,000 | | | |
| 1,000 | 2.11898 | 21.17523333 | | | |
| 2,000 | 4.209682867 | 42.09324357 | | | |
| | | | | | |

| 2,000 | 5.7465209 | 57.30378403 | |
|-------------|-------------|-------------|--|
| | | | |
| | | | |
| média (seg) | work | size | |
| repetitions | 1,000,000 | 10,000,000 | |
| 1,000 | 2.11898 | 21.17523333 | |
| 2,000 | 4.209682867 | 42.09324357 | |
| | | | |
| | 8 processos | | |
| média (seg) | work | size | |
| repetitions | 1,000,000 | 10,000,000 | |
| 1,000 | 2.116507867 | 21.40436867 | |
| 2,000 | 4.179972233 | 42.28595447 | |
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| | | worksize = | ,, | | |
|------------|-------------------|-------------|---------|------------------|-------------|
| | 1,000 repetitions | | | 2,000 repetition | |
| 2 tasks | 4 tasks | 8 tasks | 2 tasks | 4 tasks | 8 tasks |
| 2093340 | 2037040 | 1823680 | 4051370 | 4089640 | 3543160 |
| 2205060 | 2034190 | 1830530 | 4226320 | 4077250 | 3636300 |
| 2074290 | 2050870 | 1911320 | 4101800 | 4101390 | 3722840 |
| 2081080 | 2028790 | 1822080 | 4391510 | 4094620 | 3574060 |
| 2103820 | 2052870 | 1795450 | 4178270 | 4117350 | 3657890 |
| 2060810 | 2068580 | 1839220 | 4206220 | 4127330 | 3522020 |
| 2057230 | 2038260 | 1814060 | 4229460 | 4092520 | 3630040 |
| 2181540 | 2057320 | 1825240 | 4114890 | 4103590 | 3755140 |
| 2098790 | 2037690 | 1888180 | 4331120 | 4110440 | 3589640 |
| 2255520 | 2043780 | 1805990 | 4484540 | 4103110 | 3665470 |
| 2017100 | 2040110 | 1801420 | 4407190 | 4094670 | 3689510 |
| 2041550 | 2086870 | 1802360 | 4163580 | 4082320 | 3642680 |
| 2101570 | 2057320 | 1833180 | 4213280 | 4078120 | 3732080 |
| 2153930 | 2069490 | 1790660 | 4191660 | 4083230 | 3644710 |
| 2152360 | 2067150 | 1846980 | 4110990 | 4073960 | 3660200 |
| 2143610 | 2054830 | 1851650 | 4404360 | 4099020 | 3435760 |
| 2257980 | 2033060 | 1760980 | 4213430 | 4079440 | 3589560 |
| 2110380 | 2049960 | 1841570 | 4311970 | 4090180 | 3530030 |
| 2106920 | 2071900 | 1824610 | 4213770 | 4099550 | 3627220 |
| 2109190 | 2046410 | 1857560 | 4083790 | 4077330 | 3567340 |
| 2248190 | 2057580 | 1787660 | 4201860 | 4126260 | 3667230 |
| 2119000 | 2091060 | 1828080 | 4135050 | 4085290 | 3624790 |
| 2112130 | 2041680 | 1822700 | 4139810 | 4221280 | 3632610 |
| 2173520 | 2056610 | 1811250 | 4220480 | 4091330 | 3613610 |
| 2191730 | 2112300 | 1818590 | 4425540 | 4137580 | 3677870 |
| 2195070 | 2053400 | 1830540 | 4241940 | 4120190 | 3662270 |
| 2055480 | 2099650 | 1798020 | 4302420 | 4082160 | 3659790 |
| 2137000 | 2061290 | 1828050 | 4129970 | 4087760 | 3648190 |
| 2020890 | 2083670 | 1775810 | 4079870 | 4167370 | 3597500 |
| 2158800 | 2056580 | 1829730 | 4172080 | 4095600 | 3565180 |
| | | mé | dia | | |
| 127262.667 | 2058010.333 | 1823238.333 | 4222618 | 4102996 | 3625489.667 |
| | | | | | |
| | worksize = | = 1,000,000 | | | |
| | | | | | |

2,000

promotion

forall

3471437 3557633 7179460.333 7524367.333

1,000

forall promotion

| worksize = 10,000,000 | | | | | |
|-----------------------|----------|-------------|-------------------|-------------|-------------|
| 1,000 repetitions | | | 2,000 repetitions | | |
| 2 tasks | 4 tasks | 8 tasks | 2 tasks | 4 tasks | 8 tasks |
| 20786100 | 20509700 | 20922400 | 41904000 | 40838400 | 41392600 |
| 20604100 | 20531200 | 20811500 | 41039700 | 40799700 | 42190600 |
| 20295800 | 20133100 | 20708700 | 40755200 | 40858000 | 41708900 |
| 20551600 | 20376700 | 20862100 | 41646100 | 40121800 | 41331000 |
| 20808400 | 20388800 | 20873900 | 42514100 | 40758600 | 41464100 |
| 20335700 | 20365700 | 20909000 | 41272000 | 40311400 | 41435900 |
| 20424300 | 20362900 | 20808600 | 41632600 | 40798700 | 41737200 |
| 20388000 | 20348900 | 20909100 | 43128300 | 40964900 | 41824700 |
| 20685700 | 21024400 | 20836700 | 41714800 | 40638500 | 41412200 |
| 20831900 | 20420500 | 20856800 | 42444900 | 40838800 | 41505100 |
| 20853600 | 20423500 | 20835000 | 41793300 | 40946000 | 41616500 |
| 20851400 | 20528400 | 20868700 | 42230700 | 41796700 | 41350900 |
| 21756100 | 20404200 | 20831000 | 42791400 | 40786900 | 41608700 |
| 22112000 | 20193100 | 20856100 | 40681200 | 40885800 | 41496500 |
| 20982100 | 20155500 | 20787600 | 42163700 | 40809400 | 41507900 |
| 21071600 | 20443400 | 20718200 | 42045500 | 40290600 | 41547900 |
| 20930200 | 20989200 | 20868200 | 41823900 | 40884700 | 41245600 |
| 20255200 | 20351500 | 20968900 | 42650700 | 40189200 | 41752200 |
| 21095900 | 20378300 | 20875100 | 43536900 | 40803000 | 41598800 |
| 21061600 | 20492800 | 20948800 | 43352000 | 40505300 | 41799400 |
| 21394900 | 20399400 | 20656400 | 41627100 | 40952500 | 41704200 |
| 21289000 | 20400500 | 20949700 | 41601900 | 40972600 | 41487700 |
| 20855300 | 20338600 | 20890200 | 42449600 | 41281300 | 41385000 |
| 21364500 | 20471600 | 20791000 | 40777700 | 41047100 | 41457800 |
| 20846600 | 20360200 | 20866400 | 42709600 | 40630300 | 41424600 |
| 21783000 | 20537200 | 20978800 | 43545600 | 40979100 | 41584500 |
| 21955200 | 20402400 | 21054000 | 43549600 | 40094600 | 41456300 |
| 20875100 | 20340400 | 20905400 | 40950100 | 40690300 | 41200100 |
| 21453800 | 20453300 | 21088100 | 43120400 | 40424000 | 41616100 |
| 22008100 | 20400700 | 20789300 | 42600100 | 42002300 | 41554600 |
| | | mé | dia | | |
| 21016893.33 | 20430870 | 20867523.33 | 42135090 | 40796683.33 | 41546586.67 |
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| 20335700 | 20365700 | 20909000 | 41272000 | 40311400 | 41435900 |
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| 20424300 | 20362900 | 20808600 | 41632600 | 40798700 | 41737200 |
| 20388000 | 20348900 | 20909100 | 43128300 | 40964900 | 41824700 |
| 20685700 | 21024400 | 20836700 | 41714800 | 40638500 | 41412200 |
| 20831900 | 20420500 | 20856800 | 42444900 | 40838800 | 41505100 |
| 20853600 | 20423500 | 20835000 | 41793300 | 40946000 | 41616500 |
| 20851400 | 20528400 | 20868700 | 42230700 | 41796700 | 41350900 |
| 21756100 | 20404200 | 20831000 | 42791400 | 40786900 | 41608700 |
| 22112000 | 20193100 | 20856100 | 40681200 | 40885800 | 41496500 |
| 20982100 | 20155500 | 20787600 | 42163700 | 40809400 | 41507900 |
| 21071600 | 20443400 | 20718200 | 42045500 | 40290600 | 41547900 |
| 20930200 | 20989200 | 20868200 | 41823900 | 40884700 | 41245600 |
| 20255200 | 20351500 | 20968900 | 42650700 | 40189200 | 41752200 |
| 21095900 | 20378300 | 20875100 | 43536900 | 40803000 | 41598800 |
| 21061600 | 20492800 | 20948800 | 43352000 | 40505300 | 41799400 |
| 21394900 | 20399400 | 20656400 | 41627100 | 40952500 | 41704200 |
| 21289000 | 20400500 | 20949700 | 41601900 | 40972600 | 41487700 |
| 20855300 | 20338600 | 20890200 | 42449600 | 41281300 | 41385000 |
| 21364500 | 20471600 | 20791000 | 40777700 | 41047100 | 41457800 |
| 20846600 | 20360200 | 20866400 | 42709600 | 40630300 | 41424600 |
| 21783000 | 20537200 | 20978800 | 43545600 | 40979100 | 41584500 |
| 21955200 | 20402400 | 21054000 | 43549600 | 40094600 | 41456300 |
| 20875100 | 20340400 | 20905400 | 40950100 | 40690300 | 41200100 |
| 21453800 | 20453300 | 21088100 | 43120400 | 40424000 | 41616100 |
| 22008100 | 20400700 | 20789300 | 42600100 | 42002300 | 41554600 |
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| 21016893.33 | 20430870 | 20867523.33 | 42135090 | 40796683.33 | 41546586.67 |
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| | repet | | | | |
| 1,0 | 1,000 2,000 | | | | |
| forall | promotion | forall | promotion | | |
| 23709700 | 24608200 | 50489400 | 48341600 | 1 | |
| 24463900 | 24767200 | 48871800 | 50534000 | | |
| 24078600 | 24590100 | 50889300 | 49039400 | | |

| worksize = 10,000,000 | | | | | |
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| repetitions | | | | | |
| 1,0 | 000 | 2,0 | 000 | | |
| forall | promotion | forall | promotion | | |
| 23709700 | 24608200 | 50489400 | 48341600 | | |
| 24463900 | 24767200 | 48871800 | 50534000 | | |
| 24078600 | 24590100 | 50889300 | 49039400 | | |
| 25265200 | 25429600 | 49248300 | 49157800 | | |
| 23821500 | 24679100 | 50675300 | 49837500 | | |
| 24613900 | 23936500 | 49311300 | 49247900 | | |
| 24733500 | 24601500 | 49864500 | 47515700 | | |
| 24423700 | 24955500 | 49542000 | 50715900 | | |
| 24602400 | 24574800 | 50243000 | 49260800 | | |
| 23473700 | 24913200 | 48896900 | 48961800 | | |
| 24556300 | 24357900 | 49016500 | 49013500 | | |
| 24445900 | 24661000 | 49999600 | 49060800 | | |
| 24730700 | 23327200 | 49207700 | 49334200 | | |
| 23770300 | 24526400 | 50355200 | 49119000 | | |
| 25165500 | 24561800 | 49183600 | 48751700 | | |
| 23533600 | 25352700 | 49247600 | 49401500 | | |
| 24195000 | 24306600 | 49244700 | 48607900 | | |
| 25145500 | 24433200 | 49141600 | 48744300 | | |
| 23710800 | 24463000 | 50269100 | 48918000 | | |
| 24455000 | 24596600 | 48006200 | 49275500 | | |
| 24801200 | 24777500 | 47981100 | 50924000 | | |
| 24717600 | 23971000 | 50322300 | 49205100 | | |
| 24904500 | 23556200 | 49128200 | 48410200 | | |
| 23665000 | 23663800 | 49343600 | 49293800 | | |
| 23921900 | 24534000 | 48932900 | 49010100 | | |
| 24625200 | 24375900 | 47366400 | 48212600 | | |
| 24956800 | 24361600 | 47274700 | 48858300 | | |
| 24501700 | 24303300 | 48918200 | 49751100 | | |
| 24243400 | 25084600 | 47612200 | 49173700 | | |
| 24701600 | 23842900 | 48359300 | 49277900 | | |
| | dia | | dia | | |
| 24397786.67 | 24470430 | 49231416.67 | 49165186.67 | | |
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| 2 tasks | | | | |
|--------------|-------------|-------------|--|--|
| média (usec) | worksize | | | |
| repetitions | 1,000,000 | 10,000,000 | | |
| 1,000 | 2127262.667 | 21016893.33 | | |
| 2,000 | 4222618 | 42135090 | | |
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| 4 tasks | | | | | |
|--------------|-------------|-------------|--|--|--|
| média (usec) | worksize | | | | |
| repetitions | 1,000,000 | 10,000,000 | | | |
| 1,000 | 2058010.333 | 20430870 | | | |
| 2,000 | 4102996 | 40796683.33 | | | |

| 8 tasks | | | | | |
|--------------|-------------|-------------|--|--|--|
| média (usec) | worksize | | | | |
| repetitions | 1,000,000 | 10,000,000 | | | |
| 1,000 | 1823238.333 | 20867523.33 | | | |
| 2,000 | 3625489.667 | 41546586.67 | | | |

| forall | | | | | |
|--------------|-------------|-------------|--|--|--|
| média (usec) | worksize | | | | |
| repetitions | 1,000,000 | 10,000,000 | | | |
| 1,000 | 3471437 | 24397786.67 | | | |
| 2,000 | 7179460.333 | 49231416.67 | | | |

| promotion | | | | |
|-------------|----------------------|--|--|--|
| worksize | | | | |
| 1,000,000 | 10,000,000 | | | |
| 3557633 | 24470430 | | | |
| 7524367.333 | 49165186.67 | | | |
| | 1,000,000 3557633 | | | |

| | 2 tasks | | |
|---|----------------------|-------------|-------------|
| | média (seg) worksize | | size |
|) | repetitions | 1,000,000 | 10,000,000 |
| 3 | 1,000 | 2.127262667 | 21.01689333 |
| | 2,000 | 4.222618 | 42.13509 |
| | | | |

| 4 tasks | | | | |
|----------------------|-------------|-------------|--|--|
| média (seg) worksize | | | | |
| repetitions | 1,000,000 | 10,000,000 | | |
| 1,000 | 2.058010333 | 20.43087 | | |
| 2,000 | 4.102996 | 40.79668333 | | |
| | | | | |

| | 8 tasks | 8 tasks | | |
|-------------|-------------|-------------|--|--|
| média (seg) | work | size | | |
| repetitions | 1,000,000 | 10,000,000 | | |
| 1,000 | 1.823238333 | 20.86752333 | | |
| 2,000 | 3.625489667 | 41.54658667 | | |
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| | forall | | | | | | |
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| média (seg) | worksize | | | | | | |
| repetitions | 1,000,000 | 10,000,000 | | | | | |
| 1,000 | 3.471437 | 24.39778667 | | | | | |
| 2,000 | 7.179460333 | 49.23141667 | | | | | |
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| | promotion | | | | | | | |
|-------------|-------------|---------------------------------------|--|--|--|--|--|--|
| média (seg) | worksize | | | | | | | |
| repetitions | 1,000,000 | 10,000,000 24.47043 49.16518667 | | | | | | |
| 1,000 | 3.557633 | | | | | | | |
| 2,000 | 7.524367333 | | | | | | | |
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| 7524367.333 | 49165186.67 | 2,000 | 7.524367333 | 49.16518667 |
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| * promotion = fur | nction promotion (| Chapel's implicit d | ata parallelism) |
|-------------------|--------------------|---------------------|------------------|

| | | | | | | | | | | | | C++ backend | | | | | | | |
|--|---|--|--|--|---|---|--|--|--|--|--|--------------|---|--|---|--------|---|---|---------|
| | | worksize = | = 1,000,000 | | | | | worksize = | 10,000,000 | | | | | 2 activities | | | | 2 activities | Ī |
| | 1,000 repetitions | | | 2,000 repetitions | | | 1,000 repetition | ; | | 2,000 repetitions | | | média (usec) | wor | ksize | mé | edia (seg) | wo | rks |
| 2 activities | 4 activities | 8 activities | 2 activities | 4 activities | 8 activities | 2 activities | 4 activities | 8 activities | 2 activities | 4 activities | 8 activities | | repetitions | 1,000,000 | 10,000,000 | rep | petitions | 1,000,000 | T |
| 2187016 | 2093032 | 2058117 | 4317506 | 4160708 | 4094987 | 21502985 | 20692866 | 20675774 | 43137952 | 41345334 | 41438049 | | 1,000 | 2185897.767 | 21700250.43 | | 1,000 | 2.185897767 | |
| 2157219 | 2094220 | 2010749 | 4780780 | 4164448 | 4068660 | 21511167 | 20707819 | 20738467 | 43248255 | 41396399 | 42222447 | | 2,000 | 4374481.633 | 43098717.5 | | 2,000 | 4.374481633 | 1 |
| 2246166 | 2086539 | 1974970 | 4322819 | 4163854 | 4125404 | 21521237 | 20693683 | 20653026 | 43022715 | 41617361 | 41758260 | | | | | | | | |
| 2163835 | 2084450 | 2063951 | 4318435 | 4160371 | 4116796 | 21540579 | 20718215 | 20821016 | 43031973 | 41329457 | 41409027 | | | 4 activities | | | | 4 activities | |
| 2156121 | 2078112 | 2052766 | 4320922 | 4161633 | 3999593 | 21630315 | 20674277 | 20765188 | 43005142 | 41363162 | 41328174 | | média (usec) | wor | ksize | mé | edia (seg) | wo | rks |
| 2175643 | 2083065 | 2006030 | 4327149 | 4153334 | 4097899 | 21506657 | 20716178 | 20896793 | 43023241 | 41361502 | 41393233 | | repetitions | 1,000,000 | 10,000,000 | rep | petitions | 1,000,000 | 1 |
| 2160104 | 2091036 | 1983938 | 4328322 | 4157959 | 4095773 | 21544537 | 20703337 | 20829898 | 43042143 | 41429962 | 41405367 | | 1,000 | 2084966.7 | 20689831.8 | | 1,000 | 2.0849667 | \perp |
| 2158683 | 2088728 | 2051400 | 4311751 | 4136900 | 4106802 | 21487383 | 20718491 | 20724490 | 43011515 | 41381765 | 41372948 | | 2,000 | 4162422.933 | 41398292.23 | | 2,000 | 4.162422933 | \perp |
| 2159689 | 2083095 | 2010252 | 4309239 | 4177714 | 4098111 | 21552257 | 20722300 | 20904252 | 43025569 | 41409891 | 41621379 | | | | | | | | _ |
| 2229792 | 2091572 | 2071033 | 4497477 | 4161019 | 4105861 | 21533797 | 20615380 | 20699158 | 43036741 | 41391480 | 41367820 | | | 8 activities | | | | 8 activities | |
| 2164509 | 2084224 | 2004711 | 4320480 | 4173222 | 4102704 | 21645383 | 20686233 | 20729360 | 43004019 | 41417902 | 41353372 | | média (usec) | | ksize | mé | edia (seg) | woi | rks |
| 2155800 | 2085738 | 2030577 | 4330297 | 4161595 | 4112878 | 21650389 | 20641222 | 20658145 | 43055948 | 41335622 | 42426117 | | repetitions | 1,000,000 | 10,000,000 | rep | | 1,000,000 | 1 |
| 2163699 | 2081980 | 2022991 | 4331619 | 4157935 | 4078247 | 21515365 | 20699984 | 20712649 | 43332246 | 41407125 | 41387749 | | 1,000 | 2035094.433 | 20754582.37 | | 1,000 | 2.035094433 | - |
| 2248943 | 2080692 | 2056122 | 4335728 | 4159270 | 3978629 | 21514364 | 20639971 | 20741776 | 43244015 | 41397197 | 41412477 | | 2,000 | 4081292.867 | 41504450.3 | | 2,000 | 4.081292867 | 1 |
| 2385417 | 2081856 | 2025436 | 4332254 | 4160316 | 4013216 | 21615205 | 20681415 | 20878807 | 42986004 | 41402067 | 41449090 | | | | | | | | |
| 2166669 | 2079836 | 2073217 | 4329001 | 4151175 | 4026766 | 21536910 | 20697098 | 20700805 | 43140227 | 41445943 | 41428690 | | | | | | | | |
| 2160245 | 2082139 | 2032414 | 4318975 | 4171038 | 4110549 | 22437872 | 20754992 | 20748957 | 42987164 | 41415459 | 41414530 | | | | | | | | |
| 2165425 | 2077316 | 1985864 | 4624192 | 4167401 | 4114629 | 22557697 | 20710402 | 20676555 | 43238619 | 41386675 | 41311549 | 1 | | | | | | | |
| 2159190 | 2080992 | 2017285 | 4317589 | 4148794 | 4134730 | 21498556 | 20698721 | 20714740 | 43302984 | 41347374 | 41392702 | + | | | | | | | |
| 2156914 | 2114385 | 2021587 | 4318731 | 4155230 | 4117162 | 21507960 | 20686768 | 20662126 | 43072237 | 41413193 | 41735716 | 1 | | | | | | | |
| 2158150 | 2086656 | 2010158 | 4477939 | 4160092 | 3972313 | 22113185 | 20716778 | 20692690 | 43068756 | 41320368 | 41349799 | 1 | | | | | | | |
| 2156664 | 2076630 | 2066589 | 4318035 | 4156778 | 4149810 | 22990518 | 20667603 | 20722398 | 43037892 | 41404271 | 41468629 | 1 | | | | | | | |
| 2162852 | 2088926 2083164 | 2016884 | 4330114 | 4168526 4184223 | 4005415 | 21535067 22267747 | 20707395 20668862 | 20684165 | 43043316 43049248 | 41431601 | 41393950 41468696 | 1 | | | | | | | |
| 2161967 2385240 | 2083164 | 2037934 2040972 | 4326166 4318091 | 4184223 4168535 | 4027551 4111103 | 22267747 21530064 | 20668862 | 21104179 20713142 | 43049248 43137276 | 41421272 41405523 | 41468696 41365677 | 1 | | | | | | | |
| 2385240 2162516 | 2082340 | 2040972 | 4318091 4339889 | 4168535 4177921 | 4111103 4126644 | 21530064 21537888 | 20685650 | 20713142 | 43137276 43062538 | 41405523 41384349 | 41365677 41368019 | 1 | | | | | | | |
| 2165979 | 2083766 | 2079630 | 4310193 | 4158714 | 4139626 | 21559531 | 20653529 | 20698588 | 43135096 | 41399619 | 41385291 | | | | | | | | |
| 2180699 | 2085847 | 2062864 | 4316860 | 4162432 | 3963385 | 21601562 | 20688635 | 20929029 | 43046411 | 41349873 | 41303231 | | | | | | | | |
| 2160033 | 2079939 | 2065939 | 4571785 | 4166577 | 4114439 | 21525641 | 20671064 | 20743216 | 43014978 | 41390841 | 41405425 | | | | | | | | |
| 2161744 | 2084584 | 2063333 | 4532111 | 4164974 | 4129104 | 21535695 | 20648857 | 20706821 | 43417305 | 41446180 | 41996255 | | | | | | | | |
| 2101744 | 2004304 | 2001754 mé | | 4104374 | 4123104 | 21333083 | 20040037 | 20700021 | | 41440100 | 41990233 | | | | | | | | |
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| 2185897 767 | 2084966.7 | 2035094 433 | | 4162422 933 | 4081292 867 | 21700250 43 | 20689831.8 | | | 41398292 23 | 41504450.3 | | | | | | | | |
| 2185897.767 | 2084966.7 | 2035094.433 | | 4162422.933 | 4081292.867 | 21700250.43 | 20689831.8 | 20754582.37 | | 41398292.23 | 41504450.3 | | | | | | | | |
| 2185897.767 | 7 2084966.7 | 2035094.433 | | 4162422.933 | 4081292.867 | 21700250.43 | 20689831.8 | | | 41398292.23 | 41504450.3 | Java backend | | | | | | | |
| 2185897.767 | 7 2084966.7 | | | 4162422.933 | 4081292.867 | 21700250.43 | 20689831.8 | 20754582.37 | | 41398292.23 | 41504450.3 | Java backend | | 2 activities | | | | 2 activities | |
| 2185897.767 | 7 2084966.7 1,000 repetitions | | 4374481.633 | 4162422.933 2,000 repetitions | 4081292.867 | 21700250.43 | 20689831.8 1,000 repetition: | 20754582.37 worksize = | 43098717.5 | 41398292.23 2,000 repetitions | 41504450.3 | Java backend | média (usec) | | ksize | mé | ėdia (seg) | 2 activities | rks |
| 2 activities | 1,000 repetitions 4 activities | worksize = | 4374481.633 = 1,000,000 2 activities | 2,000 repetitions 4 activities | 8 activities | 2 activities | 1,000 repetition: | 20754582.37 worksize = 6 8 activities | 43098717.5 10,000,000 2 activities | 2,000 repetitions | 8 activities | Java backend | repetitions | wor 1,000,000 | 10,000,000 | rep | petitions | 1,000,000 | Ť |
| 2 activities 2008091 | 1,000 repetitions 4 activities 2187618 | worksize = 8 activities 2057652 | 4374481.633 = 1,000,000 2 activities 3935747 | 2,000 repetitions 4 activities 4261695 | 8 activities 4234933 | 2 activities 18994661 | 1,000 repetition: 4 activities 20696143 | 20754582.37 worksize = 8 activities 20714563 | 43098717.5 10,000,000 2 activities 37883583 | 2,000 repetitions 4 activities 41306966 | 8 activities 41405810 | Java backend | repetitions 1,000 | 4,000,000 2018343.567 | 10,000,000 18995196.77 | rep | petitions 1,000 | 1,000,000 2.018343567 | Ī |
| 2 activities 2008091 2002461 | 1,000 repetitions 4 activities 2187618 2182709 | worksize = 8 activities 2057652 2193868 | 4374481.633 = 1,000,000 2 activities 3935747 3922946 | 2,000 repetitions 4 activities 4261695 4215500 | 8 activities 4234933 4218034 | 2 activities 18994661 19024715 | 1,000 repetition: 4 activities 20696143 20735106 | worksize = 8 8 activities 20714563 20719120 | 43098717.5 10,000,000 2 activities 37883583 37937207 | 2,000 repetitions 4 activities 41306966 41343674 | 8 activities 41405810 41349103 | Java backend | repetitions | wor 1,000,000 | 10,000,000 | rep | petitions | 1,000,000 | Ī |
| 2 activities 2008091 2002461 2006325 | 1,000 repetitions 4 activities 2187618 2182709 2189181 | worksize = 8 activities 2057652 2193868 2170824 | 2 activities 3935747 3922946 3920013 | 2,000 repetitions 4 activities 4261695 4215500 4258134 | 8 activities 4234933 4218034 4210808 | 2 activities 18994661 19024715 18977326 | 1,000 repetition: 4 activities 20696143 20735106 20726254 | worksize = 8 8 activities 20714563 20719120 20756717 | 10,000,000 2 activities 37883583 37937207 38056444 | 2,000 repetitions 4 activities 41306966 41343674 41279592 | 8 activities 41405810 41349103 41372087 | Java backend | repetitions 1,000 | 1,000,000 2018343.567 3957338.967 | 10,000,000 18995196.77 | rep | petitions 1,000 | 1,000,000 2.018343567 3.957338967 | Ī |
| 2 activities 2008091 2002461 2006325 1985970 | 1,000 repetitions 4 activities 2187618 2182709 2189181 2195035 | worksize = 8 activities 2057652 2193868 2170824 2172815 | 4374481.633 = 1,000,000 2 activities 3935747 3922946 3920013 3902974 | 2,000 repetitions 4 activities 4261695 4215500 4258134 4252258 | 8 activities 4234933 4218034 4210808 4191353 | 2 activities 18994661 19024715 18977326 19001282 | 1,000 repetition: 4 activities 20696143 20735106 20726254 20730714 | 20754582.37 worksize = 3 8 activities 20714563 20719120 20756717 20720973 | 43098717.5 10,000,000 2 activities 37883583 37937207 38056444 37900145 | 2,000 repetitions 4 activities 41306966 41343674 41279592 41325491 | 8 activities 41405810 41349103 41372087 41331651 | Java backend | 1,000 2,000 | 1,000,000 2018343.567 3957338.967 4 activities | 10,000,000 18995196.77 37915534.03 | rep | petitions 1,000 2,000 | 1,000,000 2.018343567 3.957338967 4 activities | |
| 2 activities 2008091 2002461 2006325 1985970 2018568 | 1,000 repetitions 4 activities 2187618 2182709 2189181 2195035 2195402 | worksize = 8 activities 2057652 2193868 2170824 2172815 2173602 | 4374481.633 • 1,000,000 2 activities 3935747 3922946 3920013 3902974 4386517 | 2,000 repetitions 4 activities 4261695 4215500 4258134 4252258 4240498 | 8 activities 4234933 4218034 4210808 4191353 3816825 | 2 activities 18994661 19024715 18977326 19001282 18992615 | 1,000 repetition 4 activities 20696143 20735106 20726254 20730714 20733712 | worksize = 8 activities 20714563 20719120 20756717 20720973 2075884 | 43098717.5 10,000,000 2 activities 37883583 37937207 38056444 37900145 37957121 | 2,000 repetitions 4 activities 41306966 41343674 41279592 41325491 41354731 | 8 activities 41405810 41349103 41372087 41331651 41354733 | Java backend | repetitions 1,000 2,000 média (usec) | 1,000,000 2018343.567 3957338.967 4 activities | 10,000,000 18995196.77 37915534.03 | rep | petitions 1,000 2,000 | 1,000,000 2.018343567 3.957338967 4 activities | |
| 2 activities 2008091 2002461 2006325 1985970 2018568 2002239 | 1,000 repetitions 4 activities 2187618 2182709 2189181 2195035 2195402 2190080 | worksize = 8 activities 2057652 2193868 2170824 2172815 2173602 2189549 | 4374481.633 = 1,000,000 2 activities 3935747 3922946 3920013 3902974 4386517 3923065 | 2,000 repetitions 4 activities 4261695 4215500 4258134 4252258 4240498 4238780 | 8 activities 4234933 4218034 4210808 4191353 3816825 4164865 | 2 activities 18994661 19024715 18977326 19001282 18992615 18936489 | 1,000 repetition 4 activities 20696143 20735106 20726254 20730714 20733712 20710289 | 20754582.37 worksize = 8 activities 20714563 20719120 20756717 20720973 20758884 20785977 | 43098717.5 10,000,000 2 activities 37883583 37937207 38056444 37900145 37957121 37874976 | 2,000 repetitions 4 activities 41306966 41343674 41279592 41325491 41354731 41370373 | 8 activities 41405810 41349103 41372087 41331651 41354733 41326270 | Java backend | repetitions 1,000 2,000 média (usec) repetitions | 1,000,000 2018343.567 3957338.967 4 activities wor 1,000,000 | 10,000,000 18995196.77 37915534.03 ksize 10,000,000 | mé rep | petitions 1,000 2,000 édia (seg) petitions | 1,000,000 2.018343567 3.957338967 4 activities woll 1,000,000 | rksi |
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| MÉDIA DO | S TEM | OS DE EXECU | ÃO | | | | SPE | EDUP | | | | | | |
|-----------|---|--------------|----------------------|------------------|-------------------------|------------------|------|-------------|--------------|------------------|------------------|------------------|------------------|--|
| | | | | WORKSIZE | | | | | | WORKSIZE | | | | |
| MÉTODO | DO | U.P. | 1,000,000 (1 milhão) | | 10,000,000 (10 milhões) | | N | MÉTODO | U.P. | 1,000,000 | (1 milhão) | 10,000,000 | (10 milhões) | |
| | | | 1,000 repetições | 2,000 repetições | 1,000 repetições | 2,000 repetições | | | | 1,000 repetições | 2,000 repetições | 1,000 repetições | 2,000 repetições | |
| Sequencia | al | - | 5.5289 | 11.0611 | 55.1705 | 110.3412 | | | | | | | | |
| | | 2 threads | 2.8351 | 5.6418 | 28.2861 | 56.5342 | | | 2 threads | 1.9502 | 1.9606 | 1.9504 | 1.9518 | |
| Pthreads | | 4 threads | 2.0899 | 4.1825 | 20.8795 | 41.7766 | Pthr | eads | 4 threads | 2.6455 | 2.6446 | 2.6423 | 2.6412 | |
| | | 8 threads | 2.068 | 4.1253 | 20.877 | 41.7288 | | | 8 threads | 2.6735 | 2.6813 | 2.6426 | 2.6442 | |
| | 2 threads P 4 threads 8 threads | | 3.0762 | 6.1521 | 30.8602 | 61.6759 | | | 2 threads | 1.7973 | 1.7979 | 1.7878 | 1.789 | |
| OpenMP | | | 2.1134 | 4.219 | 21.3801 | 42.1127 | Ope | nMP | 4 threads | 2.6161 | 2.6217 | 2.5805 | 2.6201 | |
| | | | 2.5929 | 5.2038 | 22.0139 | 44.0308 | | | 8 threads | 2.1323 | 2.1256 | 2.5062 | 2.506 | |
| | 2 processos 4 processos 8 processos | | 2.8837 | 5.7465 | 28.7806 | 57.3038 | | | 2 processos | 1.9173 | 1.9248 | 1.9169 | 1.9255 | |
| MPI | | | 2.119 | 4.2097 | 21.1752 | 42.0932 | MPI | | 4 processos | 2.6092 | 2.6275 | 2.6054 | 2.6214 | |
| | | | 2.1165 | 4.18 | 21.4044 | 42.286 | | | 8 processos | 2.6123 | 2.6462 | 2.5775 | 2.6094 | |
| | | 2 tasks | 2.1273 | 4.2226 | 21.0169 | 42.1351 | | | 2 tasks | 2.599 | 2.6195 | 2.6251 | 2.6187 | |
| | | 4 tasks | 2.058 | 4.103 | 20.4309 | 40.7967 | | | 4 tasks | 2.6865 | 2.6959 | 2.7003 | 2.7047 | |
| Chapel | apel 8 tasks forall | | 1.8232 | 3.6255 | 20.8675 | 41.5466 | Cha | pel 8 tasks | | 3.0325 | 3.0509 | 2.6438 | 2.6558 | |
| | | | 3.4714 | 7.1795 | 24.3978 | 49.2314 | | | forall | 1.5927 | 1.5407 | 2.2613 | 2.2413 | |
| | | promotion | 3.5576 | 7.5244 | 24.4704 | 49.1652 | | | promotion | 1.5541 | 1.47 | 2.2546 | 2.2443 | |
| | | 2 activities | 2.1859 | 4.3745 | 21.7003 | 43.0987 | | | 2 activities | 2.5293 | 2.5285 | 2.5424 | 2.5602 | |
| | C++ | 4 activities | 2.085 | 4.1624 | 20.6898 | 41.3983 | | C++ | 4 activities | 2.6518 | 2.6574 | 2.6666 | 2.6654 | |
| X10 | | 8 activities | 2.0351 | 4.0813 | 20.7546 | 41.5045 | X10 | | 8 activities | 2.7168 | 2.7102 | 2.6582 | 2.6585 | |
| ^10 | | 2 activities | 2.0183 | 3.9573 | 18.9952 | 37.9155 | ^10 | | 2 activities | 2.7394 | 2.7951 | 2.9044 | 2.9102 | |
| J | Java | 4 activities | 2.1842 | 4.2562 | 20.7108 | 41.3476 | | Java | 4 activities | 2.5313 | 2.5988 | 2.6639 | 2.6686 | |
| 1 | | 8 activities | 2.1569 | 4.1884 | 20.7367 | 41.327 | | | 8 activities | 2.5634 | 2.6409 | 2.6605 | 2.67 | |