

Random(4000000,2)								
# of cores	1	2	3	4	5	6	7	8
serial	1.73	—	—	—	—	—	—	—
serial_call	1.49 (1.16)	—	—	—	—	—	—	—
serial_call_cas	1.82 (0.951)	—	—	—	—	—	—	—
serial_call_membar	1.78 (0.972)	—	—	—	—	—	—	—
Cilk_cas	2.25 (0.769)	1.35 (1.28)	0.921 (1.88)	0.757 (2.29)	0.654 (2.65)	0.605 (2.86)	0.549 (3.15)	0.534 (3.24)
Cilk_membar	2.22 (0.779)	1.33 (1.30)	0.887 (1.95)	0.756 (2.29)	0.648 (2.67)	0.611 (2.83)	0.551 (3.14)	0.526 (3.29)
Cilk_R_cas	2.21 (0.783)	1.32 (1.31)	0.882 (1.96)	0.741 (2.33)	0.638 (2.71)	0.604 (2.86)	0.543 (3.19)	0.525 (3.30)
Cilk_R_membar	2.18 (0.794)	1.31 (1.32)	0.887 (1.95)	0.731 (2.37)	0.638 (2.71)	0.599 (2.89)	0.533 (3.25)	0.521 (3.32)
Tascell_cas	1.85 (0.935)	1.67 (1.04)	0.957 (1.81)	0.821 (2.11)	0.649 (2.67)	0.630 (2.75)	0.568 (3.05)	0.532 (3.25)
Tascell_membar	1.82 (0.951)	1.64 (1.05)	0.937 (1.85)	0.810 (2.14)	0.666 (2.60)	0.588 (2.94)	0.555 (3.12)	0.547 (3.16)
serial_call_800	1.68 (1.03)	—	—	—	—	—	—	—
serial_call_cas_800	2.04 (0.848)	—	—	—	—	—	—	—
serial_call_membar_800	2.01 (0.861)	—	—	—	—	—	—	—
Cilk_cas_800	2.71 (0.638)	1.63 (1.06)	0.906 (1.91)	0.762 (2.27)	0.685 (2.53)	0.644 (2.69)	0.590 (2.93)	0.540 (3.20)
Cilk_membar_800	2.69 (0.643)	1.61 (1.07)	1.02 (1.70)	0.815 (2.12)	0.687 (2.52)	0.615 (2.81)	0.597 (2.90)	0.548 (3.16)
Cilk_R_cas_800	2.59 (0.668)	1.54 (1.12)	0.920 (1.88)	0.753 (2.30)	0.661 (2.62)	0.622 (2.78)	0.554 (3.12)	0.554 (3.12)
Cilk_R_membar_800	2.56 (0.676)	1.52 (1.14)	0.898 (1.93)	0.738 (2.34)	0.639 (2.71)	0.627 (2.76)	0.548 (3.16)	0.520 (3.33)
Tascell_cas_800	2.10 (0.824)	1.31 (1.32)	0.788 (2.20)	0.695 (2.49)	0.636 (2.72)	0.590 (2.93)	0.545 (3.17)	0.526 (3.29)
Tascell_membar_800	2.07 (0.836)	1.29 (1.34)	0.938 (1.84)	0.699 (2.47)	0.630 (2.75)	0.594 (2.91)	0.544 (3.18)	0.495 (3.49)
Hypercube(21)								

# of cores	1	2	3	4	5	6	7	8
serial	1.40	—	—	—	—	—	—	—
serial_call	1.18 (1.19)	—	—	—	—	—	—	—
serial_call_cas	1.26 (1.11)	—	—	—	—	—	—	—
serial_call_membar	1.25 (1.12)	—	—	—	—	—	—	—
Cilk_cas	1.40 (1.00)	0.912 (1.54)	0.657 (2.13)	0.569 (2.46)	0.528 (2.65)	0.514 (2.72)	0.490 (2.86)	0.483 (2.90)
Cilk_membar	1.39 (1.01)	0.907 (1.54)	0.643 (2.18)	0.563 (2.49)	0.520 (2.69)	0.513 (2.73)	0.496 (2.82)	0.481 (2.91)
Cilk_R_cas	1.37 (1.02)	0.900 (1.56)	0.587 (2.39)	0.501 (2.79)	0.460 (3.04)	0.446 (3.14)	0.417 (3.36)	0.403 (3.47)
Cilk_R_membar	1.36 (1.03)	0.883 (1.59)	0.580 (2.41)	0.493 (2.84)	0.459 (3.05)	0.442 (3.17)	0.413 (3.39)	0.399 (3.51)
Tascell_cas	1.29 (1.09)	0.868 (1.61)	0.567 (2.47)	0.512 (2.73)	0.456 (3.07)	0.434 (3.23)	0.410 (3.41)	0.409 (3.42)
Tascell_membar	1.28 (1.09)	0.858 (1.63)	0.560 (2.50)	0.502 (2.79)	0.454 (3.08)	0.442 (3.17)	0.409 (3.42)	0.407 (3.44)
serial_call_800	1.17 (1.20)	—	—	—	—	—	—	—
serial_call_cas_800	1.26 (1.11)	—	—	—	—	—	—	—
serial_call_membar_800	1.24 (1.13)	—	—	—	—	—	—	—
Cilk_cas_800	1.38 (1.01)	0.920 (1.52)	0.671 (2.09)	0.561 (2.50)	0.530 (2.64)	0.518 (2.70)	0.495 (2.83)	0.484 (2.89)
Cilk_membar_800	1.37 (1.02)	0.907 (1.54)	0.658 (2.13)	0.557 (2.51)	0.529 (2.65)	0.517 (2.71)	0.494 (2.83)	0.492 (2.85)
Cilk_R_cas_800	1.37 (1.02)	0.908 (1.54)	0.598 (2.34)	0.507 (2.76)	0.460 (3.04)	0.454 (3.08)	0.424 (3.30)	0.411 (3.41)
Cilk_R_membar_800	1.36 (1.03)	0.896 (1.56)	0.586 (2.39)	0.501 (2.79)	0.457 (3.06)	0.449 (3.12)	0.418 (3.35)	0.408 (3.43)
Tascell_cas_800	1.29 (1.09)	0.861 (1.63)	0.578 (2.42)	0.502 (2.79)	0.458 (3.06)	0.441 (3.17)	0.417 (3.36)	0.409 (3.42)
Tascell_membar_800	1.28 (1.09)	0.859 (1.63)	0.571 (2.45)	0.500 (2.80)	0.454 (3.08)	0.442 (3.17)	0.418 (3.35)	0.406 (3.45)
2D-torus(2000)								

# of cores	1	2	3	4	5	6	7	8
serial	0.260	—	—	—	—	—	—	—
serial_call	0.277 (0.939)	—	—	—	—	—	—	—
serial_call_cas	0.353 (0.737)	—	—	—	—	—	—	—
serial_call_membar	0.330 (0.788)	—	—	—	—	—	—	—
Cilk_cas	0.576 (0.451)	0.353 (0.737)	0.339 (0.767)	0.337 (0.772)	0.273 (0.952)	0.258 (1.01)	0.244 (1.07)	0.239 (1.09)
Cilk_membar	0.558 (0.466)	0.340 (0.765)	0.328 (0.793)	0.334 (0.778)	0.274 (0.949)	0.258 (1.01)	0.241 (1.08)	0.232 (1.12)
Cilk_R_cas	0.479 (0.543)	0.283 (0.919)	0.245 (1.06)	0.210 (1.24)	0.185 (1.41)	0.171 (1.52)	0.156 (1.67)	0.160 (1.62)
Cilk_R_membar	0.455 (0.571)	0.266 (0.977)	0.235 (1.11)	0.207 (1.26)	0.182 (1.43)	0.164 (1.59)	0.158 (1.65)	0.156 (1.67)
Tascell_cas	0.380 (0.684)	0.265 (0.981)	0.200 (1.30)	0.189 (1.38)	0.169 (1.54)	0.154 (1.69)	0.149 (1.74)	0.143 (1.82)
Tascell_membar	0.359 (0.724)	0.245 (1.06)	0.191 (1.36)	0.180 (1.44)	0.161 (1.61)	0.149 (1.74)	0.140 (1.86)	0.138 (1.88)
serial_call_800	0.289 (0.900)	—	—	—	—	—	—	—
serial_call_cas_800	0.361 (0.720)	—	—	—	—	—	—	—
serial_call_membar_800	0.338 (0.769)	—	—	—	—	—	—	—
Cilk_cas_800	0.569 (0.457)	0.388 (0.670)	0.524 (0.496)	0.739 (0.352)	0.527 (0.493)	0.633 (0.411)	0.543 (0.479)	0.548 (0.474)
Cilk_membar_800	0.551 (0.472)	0.389 (0.668)	0.550 (0.473)	0.619 (0.420)	0.533 (0.488)	0.523 (0.497)	0.515 (0.505)	0.530 (0.491)
Cilk_R_cas_800	0.501 (0.519)	0.324 (0.802)	0.429 (0.606)	0.454 (0.573)	0.404 (0.644)	0.423 (0.615)	0.396 (0.657)	0.387 (0.672)
Cilk_R_membar_800	0.479 (0.543)	0.317 (0.820)	0.411 (0.633)	0.473 (0.550)	0.456 (0.570)	0.421 (0.618)	0.428 (0.607)	0.426 (0.610)
Tascell_cas_800	0.394 (0.660)	0.232 (1.12)	0.178 (1.46)	0.155 (1.68)	0.136 (1.91)	0.126 (2.06)	0.113 (2.30)	0.111 (2.34)
Tascell_membar_800	0.370 (0.703)	0.220 (1.18)	0.161 (1.61)	0.148 (1.76)	0.133 (1.95)	0.119 (2.18)	0.110 (2.36)	0.107 (2.43)
Bintree(24)								

# of cores	1	2	3	4	5	6	7	8
serial	0.558	—	—	—	—	—	—	—
serial_call	0.626 (0.891)	—	—	—	—	—	—	—
serial_call_cas	0.840 (0.664)	—	—	—	—	—	—	—
serial_call_membar	0.732 (0.762)	—	—	—	—	—	—	—
Cilk_cas	1.11 (0.503)	0.572 (0.976)	0.381 (1.46)	0.290 (1.92)	0.234 (2.38)	0.199 (2.80)	0.172 (3.24)	0.153 (3.65)
Cilk_membar	0.999 (0.559)	0.516 (1.08)	0.344 (1.62)	0.262 (2.13)	0.214 (2.61)	0.182 (3.07)	0.158 (3.53)	0.141 (3.96)
Cilk_R_cas	1.17 (0.477)	0.579 (0.964)	0.385 (1.45)	0.294 (1.90)	0.238 (2.34)	0.203 (2.75)	0.176 (3.17)	0.156 (3.58)
Cilk_R_membar	1.08 (0.517)	0.560 (0.996)	0.370 (1.51)	0.280 (1.99)	0.227 (2.46)	0.193 (2.89)	0.167 (3.34)	0.149 (3.74)
Tasccell_cas	0.953 (0.586)	0.495 (1.13)	0.370 (1.51)	0.313 (1.78)	0.251 (2.22)	0.225 (2.48)	0.195 (2.86)	0.178 (3.13)
Tasccell_membar	0.839 (0.665)	0.438 (1.27)	0.327 (1.71)	0.301 (1.85)	0.205 (2.72)	0.210 (2.66)	0.173 (3.23)	0.155 (3.60)
serial_call_800	0.627 (0.890)	—	—	—	—	—	—	—
serial_call_cas_800	0.840 (0.664)	—	—	—	—	—	—	—
serial_call_membar_800	0.732 (0.762)	—	—	—	—	—	—	—
Cilk_cas_800	1.12 (0.498)	0.572 (0.976)	0.381 (1.46)	0.289 (1.93)	0.235 (2.37)	0.199 (2.80)	0.172 (3.24)	0.153 (3.65)
Cilk_membar_800	0.999 (0.559)	0.516 (1.08)	0.344 (1.62)	0.262 (2.13)	0.214 (2.61)	0.181 (3.08)	0.158 (3.53)	0.141 (3.96)
Cilk_R_cas_800	1.16 (0.481)	0.580 (0.962)	0.386 (1.45)	0.295 (1.89)	0.239 (2.33)	0.203 (2.75)	0.177 (3.15)	0.156 (3.58)
Cilk_R_membar_800	1.07 (0.521)	0.548 (1.02)	0.371 (1.50)	0.280 (1.99)	0.227 (2.46)	0.193 (2.89)	0.167 (3.34)	0.148 (3.77)
Tasccell_cas_800	0.955 (0.584)	0.494 (1.13)	0.369 (1.51)	0.339 (1.65)	0.254 (2.20)	0.222 (2.51)	0.182 (3.07)	0.182 (3.07)
Tasccell_membar_800	0.838 (0.666)	0.438 (1.27)	0.327 (1.71)	0.275 (2.03)	0.213 (2.62)	0.185 (3.02)	0.165 (3.38)	0.155 (3.60)