

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	2.56 (0.676)	1.79 (0.966)	2.09 (0.828)	2.30 (0.752)	2.10 (0.824)	1.96 (0.883)	1.90 (0.911)	1.74 (0.994)
Cilk_membar	2.55 (0.678)	1.82 (0.951)	2.04 (0.848)	2.30 (0.752)	2.19 (0.790)	1.98 (0.874)	1.92 (0.901)	1.84 (0.940)
Cilk_R_cas	2.21 (0.783)	1.32 (1.31)	0.890 (1.94)	0.738 (2.34)	0.637 (2.72)	0.599 (2.89)	0.541 (3.20)	0.520 (3.33)
Cilk_R_membar	2.19 (0.790)	1.31 (1.32)	0.873 (1.98)	0.735 (2.35)	0.635 (2.72)	0.602 (2.87)	0.545 (3.17)	0.519 (3.33)
Tasccell_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)
Tasccell_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)
Hypercube(20)								
# of cores	1	2	3	4	5	6	7	8
serial	0.170	—	—	—	—	—	—	—
serial_call	0.277 (0.614)	—	—	—	—	—	—	—
serial_call_cas	0.354 (0.480)	—	—	—	—	—	—	—
serial_call_membar	0.326 (0.521)	—	—	—	—	—	—	—
Cilk_cas	0.798 (0.213)	0.635 (0.268)	0.800 (0.212)	0.892 (0.191)	0.710 (0.239)	0.627 (0.271)	0.674 (0.252)	0.608 (0.280)
Cilk_membar	0.779 (0.218)	0.630 (0.270)	0.746 (0.228)	0.815 (0.209)	0.750 (0.227)	0.663 (0.256)	0.648 (0.262)	0.612 (0.278)
Cilk_R_cas	0.479 (0.355)	0.279 (0.609)	0.238 (0.714)	0.208 (0.817)	0.185 (0.919)	0.175 (0.971)	0.164 (1.04)	0.161 (1.06)
Cilk_R_membar	0.455 (0.374)	0.263 (0.646)	0.227 (0.749)	0.205 (0.829)	0.177 (0.960)	0.159 (1.07)	0.160 (1.06)	0.167 (1.02)
Tasccell_cas	0.380 (0.447)	0.267 (0.637)	0.201 (0.846)	0.191 (0.890)	0.171 (0.994)	0.160 (1.06)	0.151 (1.13)	0.146 (1.16)
Tasccell_membar	0.358 (0.475)	0.244 (0.697)	0.186 (0.914)	0.180 (0.944)	0.162 (1.05)	0.148 (1.15)	0.142 (1.20)	0.140 (1.21)
2D-torus(2000)								

# of cores	1	2	3	4	5	6	7	8
serial	0.580	—	—	—	—	—	—	—
serial_call	0.493 (1.18)	—	—	—	—	—	—	—
serial_call_cas	0.533 (1.09)	—	—	—	—	—	—	—
serial_call_membar	0.525 (1.10)	—	—	—	—	—	—	—
Cilk_cas	0.686 (0.845)	0.431 (1.35)	0.332 (1.75)	0.287 (2.02)	0.258 (2.25)	0.247 (2.35)	0.233 (2.49)	0.249 (2.33)
Cilk_membar	0.684 (0.848)	0.429 (1.35)	0.327 (1.77)	0.279 (2.08)	0.254 (2.28)	0.247 (2.35)	0.234 (2.48)	0.227 (2.56)
Cilk_R_cas	0.594 (0.976)	0.387 (1.50)	0.260 (2.23)	0.223 (2.60)	0.205 (2.83)	0.194 (2.99)	0.181 (3.20)	0.175 (3.31)
Cilk_R_membar	0.583 (0.995)	0.378 (1.53)	0.253 (2.29)	0.218 (2.66)	0.198 (2.93)	0.191 (3.04)	0.180 (3.22)	0.172 (3.37)
Tasccell_cas	0.552 (1.05)	0.367 (1.58)	0.248 (2.34)	0.222 (2.61)	0.199 (2.91)	0.192 (3.02)	0.181 (3.20)	0.174 (3.33)
Tasccell_membar	0.545 (1.06)	0.364 (1.59)	0.242 (2.40)	0.218 (2.66)	0.196 (2.96)	0.190 (3.05)	0.175 (3.31)	0.173 (3.35)
Bintree(20)								
# 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	1.96 (0.285)	0.996 (0.560)	0.677 (0.824)	0.518 (1.08)	0.411 (1.36)	0.349 (1.60)	0.307 (1.82)	0.264 (2.11)
Cilk_membar	1.81 (0.308)	0.955 (0.584)	0.662 (0.843)	0.498 (1.12)	0.409 (1.36)	0.347 (1.61)	0.289 (1.93)	0.261 (2.14)
Cilk_R_cas	1.16 (0.481)	0.581 (0.960)	0.388 (1.44)	0.295 (1.89)	0.237 (2.35)	0.202 (2.76)	0.175 (3.19)	0.155 (3.60)
Cilk_R_membar	1.04 (0.537)	0.542 (1.03)	0.356 (1.57)	0.271 (2.06)	0.221 (2.52)	0.187 (2.98)	0.163 (3.42)	0.147 (3.80)
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)
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	1.53 (0.915)	0.979 (1.43)	0.730 (1.92)	0.632 (2.22)	0.579 (2.42)	0.532 (2.63)	0.532 (2.63)	0.517 (2.71)
Cilk_membar	1.53 (0.915)	0.974 (1.44)	0.710 (1.97)	0.621 (2.25)	0.579 (2.42)	0.533 (2.63)	0.533 (2.63)	0.515 (2.72)
Cilk_R_cas	1.38 (1.01)	0.905 (1.55)	0.591 (2.37)	0.513 (2.73)	0.459 (3.05)	0.450 (3.11)	0.418 (3.35)	0.407 (3.44)
Cilk_R_membar	1.36 (1.03)	0.892 (1.57)	0.582 (2.41)	0.498 (2.81)	0.456 (3.07)	0.446 (3.14)	0.412 (3.40)	0.399 (3.51)
Tasccell_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)
Tasccell_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)