

Benchmark Results

| | | Crystal 1.0 | | Node.js | | LuaJIT 2.0 | | OBX IDE | | OBXLJ | | OBXMC Mono3 | | OBXMC Mono5 | |
|----------------------|----------|-------------|---------|---------|---------|------------|---------|-----------|---------|------------|---------|-------------|---------|-------------|---------|
| | | --release | | 12.16 | | Lua 5.1 | | 0.7.21 | | 2021-07-11 | | 2021-08-28 | | 2021-08-28 | |
| all times in μ s | | n | average | factor | average | factor | average | factor | average | factor | average | factor | average | factor | average |
| Benchmark: | | n | average | factor | average | factor | average | factor | average | factor | average | factor | average | factor | average |
| DeltaBlue | 12000/1 | 18 | 0.1 | 63 | 0.2 | 348 | 1.0 | 116 | 0.3 | 113 | 0.3 | 32 | 0.1 | 41 | 0.1 |
| Richards | 100/1 | 1'877 | 0.0 | 5'773 | 0.1 | 39'705 | 1.0 | 19'897 | 0.5 | 22'785 | 0.6 | 6'866 | 0.2 | 7'321 | 0.2 |
| Json | 100/1 | 3'196 | 0.4 | 4'803 | 0.6 | 7'859 | 1.0 | 165'632 | 21.1 | 162'598 | 20.7 | 7'679 | 1.0 | 8'948 | 1.1 |
| Havlak | 10/1 | 984'323 | 0.1 | 481'671 | 0.1 | 8'185'360 | 1.0 | 4'440'679 | 0.5 | 4'441'696 | 0.5 | 1'087'598 | 0.1 | 1'151'781 | 0.1 |
| CD | 250/2 | 1'755 | 0.1 | 2'019 | 0.1 | 14'751 | 1.0 | 10'610 | 0.7 | 12'122 | 0.8 | 1'899 | 0.1 | 1'949 | 0.1 |
| Bounce | 1500/1 | 61 | 0.2 | 119 | 0.5 | 249 | 1.0 | 145 | 0.6 | 189 | 0.8 | 116 | 0.5 | 126 | 0.5 |
| List | 1500/1 | 67 | 0.1 | 208 | 0.3 | 676 | 1.0 | 651 | 1.0 | 666 | 1.0 | 206 | 0.3 | 222 | 0.3 |
| Mandelbrot | 500/1 | 1 | 0.5 | 12 | 6.0 | 2 | 1.0 | 2 | 1.0 | 2 | 1.0 | 3 | 1.5 | 11 | 5.5 |
| NBody | 250000/1 | | | 3 | 0.4 | 8 | 1.0 | 5 | 0.6 | 5 | 0.6 | 4 | 0.5 | 9 | 1.1 |
| Permute | 1000/1 | 202 | 0.6 | 168 | 0.5 | 328 | 1.0 | 526 | 1.6 | 566 | 1.7 | 216 | 0.7 | 272 | 0.8 |
| Queens | 1000/1 | 160 | 0.5 | 231 | 0.8 | 297 | 1.0 | 305 | 1.0 | 297 | 1.0 | 200 | 0.7 | 228 | 0.8 |
| Sieve | 3000/1 | 56 | 0.5 | 103 | 0.9 | 119 | 1.0 | 86 | 0.7 | 93 | 0.8 | 86 | 0.7 | 99 | 0.8 |
| Storage | 1000/1 | 778 | 0.4 | 310 | 0.1 | 2'202 | 1.0 | 2'219 | 1.0 | 2'214 | 1.0 | 404 | 0.2 | 384 | 0.2 |
| Towers | 600/1 | 275 | 0.9 | 307 | 1.0 | 299 | 1.0 | 524 | 1.8 | 507 | 1.7 | 519 | 1.7 | 482 | 1.6 |
| sum of averages: | | 992'769 | 0.12 | 495'790 | 0.06 | 8'252'203 | 1.0 | 4'641'397 | 0.6 | 4'643'853 | 0.6 | 1'105'828 | 0.1 | 1'171'873 | 0.1 |
| geomean of factors: | | | 0.24 | | 0.39 | | 1.0 | | 1.00 | | 1.04 | | 0.40 | | 0.51 |
| 1/geomean: | | | 4.15 | | 2.54 | | 1.00 | | 1.00 | | 0.96 | | 2.49 | | 1.98 |

1.26

Benchmarks used from <https://github.com/smarr/are-we-fast-yet> commit 770c664 3.4.2020

Mono 3.12.1

Mono 5.20.1.34

Measurements done between 2021-07-07 - 2021-08-28

Testmachine: HP EliteBook 2530p, Intel Core Duo L9400 1.86GHz, 4GB RAM, Linux i386

All binaries compiled with GCC 4.8.2

LuaJIT params, deviations from default values:

maxtrace 100000
maxrecord 40000
maxside 100
maxsnap 1000
sizemcode 64
maxmcode 5120