|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **电路** |  | **变量数** | **子句数** | **AND2门数** | **求解时间**  **(单位：毫秒)** |  | | **求解时间（单位：毫秒）** | | | | | |  | | | | |
| **混淆前** | | **混淆后** | | **时间开销** | | **混淆时间** | **映射时间** | | **异步加速比** | |
|  | | | | | | |  | |  |  |  | |  |  | |  | |  | |  |  |  |  |  |  |
| **s3330** |  | 10275 | 31973 | 1739 | 48.003 |  | | 48.003 | | 72.004 | |  | | 20.001 | 4 | |  | |
| **s3271** |  | 11897 | 43969 | 2678 | 56.003 |  | | 56.003 | | 52.003 | |  | | 36.002 | 0 | |  | |
| **s5378** |  | 12341 | 41930 | 1422 | 40.002 |  | | 40.002 | | 56.003 | |  | | 28.001 | 8 | |  | |
| **s3384** |  | 12583 | 42146 | 1883 | 212.013 |  | | 212.013 | | 544.034 | |  | | 28.001 | 0 | |  | |
| **s1196** |  | 13970 | 50011 | 4197 | 48.003 |  | | 48.003 | | 80.005 | |  | | 40.002 | 8 | |  | |
| **s4863** |  | 17483 | 64153 | 2598 | 136.008 |  | | 136.008 | | 160.01 | |  | | 44.002 | 12 | |  | |
| **s9234** |  | 18044 | 67500 | 3976 | 136.008 |  | | 136.008 | | 256.016 | |  | | 52.003 | 8 | |  | |
| **s6669** |  | 23703 | 81746 | 2912 | 472.029 |  | | 472.029 | | 888.055 | |  | | 40.002 | 4 | |  | |
| **s13207** |  | 34423 | 117739 | 5206 | 220.013 |  | | 220.013 | | 288.018 | |  | | 72.004 | 8 | |  | |
| **s15850** |  | 37692 | 133613 | 7150 | 288.018 |  | | 288.018 | | 240.015 | |  | | 88.005 | 16.001 | |  | |
| **s38417** |  | 102556 | 388438 | 11859 | 3216.2 |  | | 3216.2 | | 4060.25 | |  | | 220.013 | 28.001 | |  | |
| **s38584** |  | 122341 | 446430 | 22697 | 1696.11 |  | | 1696.11 | | 916.057 | |  | | 252.015 | 28.001 | |  | |
| **s35932** |  | 1164134 | 4271763 | 281160 | 727777 |  | | 727777 | | 115339 | |  | | 2328.145 | 280.017 | |  | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **circuit** |  | **vn** | **cn** | **Marked Gates** | **Solve Time(s)** | | | **Obfuscation Time(s)** | **Map Time(s)** | **Asymmetric Speedup** |
| **Before obfuscation** | **After obfuscation** | **Solve Overhead** |
|  |  |  |  |  |  |  |  |  |  |  |
| s1196a |  | 13970 | 50011 | 4397 | 0.056003 s | 0.068004 s | 21.43% | 0.076004 s | 0.004000 s | ***70.00%*** |
| s1196b |  | 13970 | 50011 | 4397 | 0.048003 s | 0.060003 s | 25.00% | 0.064004 s | 0.012000 s | ***63.16%*** |
| s1196 |  | 13970 | 50011 | 4397 | 0.048003 s | 0.080005 s | 66.67% | 0.072004 s | 0.000000 s | ***66.67%*** |
| s13207 |  | 34423 | 117739 | 6221 | 0.280017 s | 0.316019 s | 12.86% | 0.284017 s | 0.016001 s | ***93.33%*** |
| s3384 |  | 60503 | 210546 | *139860* | 5.04031 s | 12.4368 s | *146.75%* | *96.450027s* | 0.132008 s | ***5.22%*** |
| s15850 |  | 181772 | 668093 | 41471 | 16.361 s | 46.0069 s | *181.20%* | 1.392087 s | 0.048003 s | 1136.11% |
| s3271 |  | 57976 | 219807 | 14597 | 5.97237 s | 6.4044 s | 7.23% | 1.396087 s | 0.020001 s | 421.75% |
| s3330 |  | 49635 | 159813 | 9679 | 7.9405 s | 7.28045 s | **-8.31%** | 0.264016 s | 0.016001 s | 2835.72% |
| s38417 |  | 492876 | 1939718 | 9563 | 652.685 s | 3538.12 s | 442.09% | 0.412025 s | 0.012000 s | 153926.07% |
| s38584 |  | 593381 | 2227470 | 66491 | 496.847 s | 1092.3 s | 119.85% | 9.756609 s | 0.120007 s | 5030.54% |
| s4863 |  | 85963 | 320633 | *128896* | 352.746 s | 352.606 s | **-0.04%** | *133.788361s* | 0.140008 s | 263.38% |
| s5378 |  | 59462 | 209372 | 14096 | 11.9407 s | 8.73655 s | **-26.83%** | 0.428026 s | 0.020001 s | 2665.17% |
| s6669 |  | 115303 | 408306 | 10868 | 1.31608 s | 1.6081 s | 22.19% | 0.296018 s | 0.024001 s | 411.25% |
| s9234 |  | 87484 | 337020 | 15392 | 244.627 s | 292.058 s | 19.39% | 0.728045 s | 0.032002 s | 32185.77% |
| s35932 |  | 584534 | 2135163 | 23418 | 282.17 s | 714.573 s | *153.24%* | 0.676042 s | 0.024001 s | 40307.52% |