

The SSSF chess engine rating list, 2022-12

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In this last rating list of the year 2022, we can present five new entries. First one out is the latest version from team Stockfish, namely Stockfish 15. This version landed just a hairline from the number one spot this time and grabbed the third position, but only one single point behind the leader Lc0! After 480 played games it has earned a rating of 3574, which is 17 points ahead of Stockfish 14 and exactly on par with Stockfish 13 at the moment. As opening book for Stockfish 15, we have used Fauzi Dabat's "Aggressive 5.4 by Fauzi.abk".

Next one out is Dragon Komodo 3 by Mark Lefler and Larry Kaufman. We have tested both the "normal" version and the Monte Carlo Tree Search-version. The non-MCTS version of Dragon Komodo 3 earned a fifth place in this rating list, with a rating of 3571 after 285 games played. It has positioned itself five points ahead of the 2.51 version and just four points behind the number one spot at the moment!

In the testing of the Monte Carlo Tree Search (MCTS) Dragon Komodo, we have used the 3.1 version. It has received a rating of 3519 after 306 games played. It is 41 points stronger than the Dragon Komodo 2 MCTS and took the eleventh spot on this rating list. As opening book for both the ordinary and the MCTS-version, we have used Erdogan Günes opening book "out10-35.bin". The sharp-sighted has probably noticed that the nomenclature "x64" is omitted from the name this time. We can ensure that the testing has been done with the strongest settings, AVX2 and also 64-bit, and that the omission is made just because of the length limitations in the naming of the engines.

I can also add that since most engines that we have tested on both the Q6600 and 1800X hardware have been 64-bit programs, we will soon make an overhaul to upcoming rating lists and strip this rather unnecessary designation from the names – only adding 32 bit to the names of the few engines that haven't been 64-bit compatible.

Well, to get back on track. The next program that we can present in our latest rating list, is Alex Morozov's – Booot 7. This time he has used his own implementation of Neural Net technology (NN) in evaluation, using Python, Delphi and SIMD. This has proved to be useful to the already strong Booot-program and he has managed to get a rating of 3471 after the first 185 played games. This is 42 points ahead of the "ordinary evaluation"-version of Booot 6.5 and it now holds the first spot of the engines outside the three in the top: Lc0, Stockfish and Dragon Komodo. As opening book for Booot 7, we have used the "Perfect2021.abk" opening book by Sedat Canbaz.

Last one out in this rating list is Martin Danielsson with his Marvin-program. We have tested the 6.0.0-version this time, and it has received a rating of 3365 after 220 played games. It is 37 points stronger than the last Marvin version (5.2.0) which we have tested and we have used Marvin's own opening book for the testing.

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Since the last rating list, Wasp 4.5 1800X gained 14 points, Pedone 3.1 1800X gained 10 and Arasan 23.01 1800X gained 9 points. Biggest loss since the last list was Lc0 0.28.2 which dropped 16 points in the lead. Other notable losses were Roma II which lost 13 points and Chiron 5.01 1800X, which lost 8 points.

The next rating list will probably be released relatively soon and will feature the manually tested Revelation II A.E. Komodo 12.1, and hopefully also contain some more engines on both the 1800X and Q6600 hardware level. We will also begin testing of a more recent version of Lc0 soon, so hopefully it will have enough games to be presented as an early bird in the next rating list.

3 Stockfish 15 x64 1800X 3.6 GHz, 3574

| | | | | | |
|--------------|-----------|---------------|-----------|--------------|-------|
| Lc028 3060Ti | 20.5-19.5 | Dra3 1800X | 20.5-19.5 | SF12NU 1800X | 20-20 |
| Boo7 1800X | 25.5-14.5 | Arasa23 1800X | 25-15 | Mar60 1800X | 32-8 |
| Chi5 1800X | 33.5-6.5 | Mar52 1800X | 33.5-6.5 | | |

5 Dragon Komodo 3 x64 1800X 3.6 GHz, 3571

| | | | | | |
|--------------|-----------|---------------|-----------|--------------|-----------|
| Lc028 3060Ti | 19.5-20.5 | Stoc13 1800X | 19.5-20.5 | Stoc15 1800X | 19.5-20.5 |
| Stoc10 1800X | 24-16 | Boo7 1800X | 3.5-1.5 | Ped31 1800X | 27.5-12.5 |
| Wasp55 1800X | 29.5-10.5 | DShre13 1800X | 33.5-6.5 | | |

11 Dragon Komodo 3.1 MCTS 1800X 3.6 GHz, 3519

| | | | | | |
|--------------|-------|--------------|-----------|------------|-------|
| Lc028 3060Ti | 17-23 | SF12NU 1800X | 12.5-13.5 | Ko14 1800X | 22-18 |
| Ped31 1800X | 36-24 | Mar60 1800X | 42-18 | Chi5 1800X | 62-18 |

15 Booot 7 x64 1800X 3.6 GHz, 3471

| | | | | | |
|--------------|-----------|--------------|-----------|------------|---------|
| Lc028 3060Ti | 31.5-48.5 | Stoc15 1800X | 14.5-25.5 | Dra3 1800X | 1.5-3.5 |
| Wasp45 1800X | 41-19 | | | | |

26 Marvin 6.0.0 x64 1800X 3.6 GHz, 3365

| | | | | | |
|--------------|-----------|--------------|-----------|--------------|-------|
| Lc028 3060Ti | 6-34 | Stoc15 1800X | 8-32 | Dra31M 1800X | 18-42 |
| Boo65 1800X | 16.5-23.5 | Wasp55 1800X | 19.5-20.5 | | |

Table 1

The recently tested 'Selected 50' from SSDF rating list '2022-12', 161668 games played by 429 computers

| | | Rating | + | - | Games | Won | Oppo |
|----|--|--------|----|-----|-------|-----|------|
| 1 | Lc0 0.28.2 Cuda-611213 3060Ti | 3575 | 27 | -25 | 772 | 66% | 3447 |
| 2 | Stockfish 13 x64 1800X 3.6 GHz | 3574 | 35 | -32 | 480 | 69% | 3436 |
| 3 | Stockfish 15 x64 1800X 3.6 GHz | 3574 | 42 | -39 | 320 | 66% | 3458 |
| 4 | Lc0 0.26.3 Cuda(67362) 3060Ti | 3571 | 29 | -27 | 680 | 68% | 3444 |
| 5 | Dragon Komodo 3 x64 1800X 3.6 GHz | 3571 | 43 | -41 | 285 | 62% | 3487 |
| 6 | Dragon Komodo 2.51 x64 1800X 3.6 GHz | 3566 | 42 | -39 | 320 | 65% | 3457 |
| 7 | Stockfish 14 x64 1800X 3.6 GHz | 3557 | 39 | -37 | 360 | 66% | 3445 |
| 8 | Stockfish 12 NNUE x64 1800X 3.6 GHz | 3554 | 28 | -27 | 658 | 61% | 3464 |
| 9 | Dragon by Komodo x64 1800X 3.6 GHz | 3542 | 34 | -32 | 460 | 63% | 3448 |
| 10 | Stockfish 11 x64 1800X 3.6 GHz | 3535 | 36 | -34 | 450 | 70% | 3391 |
| 11 | Dragon Komodo 3.1 MCTS 1800X 3.6 GHz | 3519 | 42 | -39 | 306 | 63% | 3430 |
| 12 | Stockfish 10 x64 1800X 3.6 GHz | 3510 | 25 | -23 | 920 | 67% | 3375 |
| 13 | Dragon Komodo 2 MCTS x64 1800X 3.6 GHz | 3478 | 45 | -44 | 240 | 55% | 3443 |
| 14 | Stockfish 9 x64 1800X 3.6 GHz | 3474 | 25 | -24 | 922 | 68% | 3329 |
| 15 | Booot 7 x64 1800X 3.6 GHz | 3471 | 50 | -51 | 185 | 48% | 3486 |
| 16 | Komodo 13.1 x64 1800X 3.6 GHz | 3463 | 29 | -28 | 600 | 60% | 3152 |
| 17 | Komodo 14 x64 1800X 3.6 GHz | 3461 | 30 | -30 | 520 | 52% | 3445 |
| 18 | Komodo 13.02 x64 1800X 3.6 GHz | 3455 | 30 | -29 | 600 | 65% | 3344 |
| 19 | Arasan 23.01 x64 1800X 3.6 GHz | 3452 | 33 | -34 | 420 | 48% | 3464 |

Table 1
(Continued)

| | | Rating | + | - | Games | Won | Oppo |
|----|---|---------------|----------|----------|--------------|------------|-------------|
| 20 | Stockfish 9 x64 Q6600 2.4 GHz | 3437 | 32 | -31 | 480 | 56% | 3372 |
| 21 | Pedone 3.1 x64 1800X 3.6 GHz | 3433 | 38 | -39 | 320 | 45% | 3470 |
| 22 | Booot 6.5 x64 1800X 3.6 GHz | 3429 | 34 | -34 | 400 | 48% | 3440 |
| 23 | Dragon Komodo MCTS x64 1800X 3.6 GHz | 3401 | 38 | -38 | 320 | 52% | 3389 |
| 24 | Wasp 5.5 x64 1800X 3.6 GHz | 3391 | 41 | -43 | 280 | 41% | 3455 |
| 25 | Wasp 5 x64 1800X 3.6 GHz | 3379 | 41 | -44 | 280 | 38% | 3468 |
| 26 | Marvin 6.0.0 x64 1800X 3.6 GHz | 3365 | 47 | -53 | 220 | 31% | 3499 |
| 27 | Arasan 22.3 x64 1800X 3.6 GHz | 3363 | 39 | -42 | 320 | 35% | 3471 |
| 28 | Pedone 3.1 x64 Q6600 2.4 GHz | 3356 | 41 | -39 | 300 | 60% | 3288 |
| 29 | Deep Shredder 13 x64 1800X 3.6 GHz | 3351 | 24 | -23 | 920 | 62% | 3265 |
| 30 | Chiron 5.01 x64 1800X 3.6 GHz | 3347 | 33 | -35 | 440 | 34% | 3458 |
| 31 | Chiron 5.01 x64 Q6600 2.4 GHz | 3328 | 43 | -41 | 280 | 62% | 3243 |
| 32 | Marvin 5.2.0 x64 1800X 3.6 GHz | 3328 | 37 | -40 | 360 | 32% | 3459 |
| 33 | Wasp 4.5 x64 1800X 3.6 GHz | 3303 | 43 | -47 | 280 | 30% | 3453 |
| 34 | Vajole2 2.8 x64 1800X 3.6 GHz | 3287 | 27 | -28 | 650 | 38% | 3370 |
| 35 | Deep Hiarc 14 1800X 3.6 GHz | 3210 | 23 | -24 | 880 | 38% | 3283 |
| 36 | Deep Rybka 4 x64 Q6600 2.4 GHz | 3193 | 18 | -18 | 1528 | 62% | 3106 |
| 37 | Revelation 2 Hiarc 14.1 PXA320 800 MHz | 2924 | 47 | -45 | 228 | 56% | 2881 |
| 38 | Chessmaster King 3.5 x64 Q6600 2.4 GHz | 2857 | 24 | -25 | 932 | 30% | 3006 |
| 39 | Revelation Hiarc 13.3 PXA255 500 MHz | 2772 | 57 | -52 | 177 | 66% | 2660 |
| 40 | Revelation Shredder 12 PXA255 500 MHz | 2706 | 60 | -58 | 140 | 56% | 2666 |
| 41 | Revelation Rybka 2.2 PXA255 500 MHz | 2635 | 45 | -43 | 260 | 63% | 2546 |
| 42 | Revelation Deep Sjeng 3 PXA255 500 MHz | 2600 | 62 | -67 | 120 | 41% | 2664 |
| 43 | Millennium The King Exclusive 300 MHz | 2534 | 51 | -49 | 190 | 55% | 2499 |
| 44 | Revelation Ruffian 2.1 PXA255 500 MHz | 2346 | 68 | -71 | 100 | 45% | 2385 |
| 45 | Millennium ChessGenius Excl. M7 300 MHz | 2245 | 50 | -48 | 200 | 57% | 2194 |
| 46 | Mephisto London 68030 33 MHz | 2195 | 31 | -31 | 482 | 50% | 2192 |
| 47 | Millennium ChessGenius Pro M4 120 MHz | 2162 | 59 | -54 | 160 | 63% | 2066 |
| 48 | Mephisto London 68020 12 MHz | 2089 | 60 | -53 | 171 | 68% | 1955 |
| 49 | Millennium ChessGenius ARM M4 48 MHz | 2069 | 45 | -43 | 251 | 58% | 2015 |
| 50 | Mephisto Roma II 68000 10 MHz | 1891 | 65 | -63 | 119 | 54% | 1862 |