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The SSDF Chess Engine Rating List, 2022-01

Lars Sandin *
Chairman, Svenska schackdatorföreningen, Sweden

This last list of 2021 and first list of 2022, will be dedicated in honor of the late Guy Haworth. On this new years list, we can present seven new programs on our two hardware levels.

First one out is Mark Lefler and Larry Kaufman's latest version of Dragon Komodo, named 2.51. We have initially tested the non-MCTS version and after the first 240 games it has reached a rating of 3569, that is 22 points stronger than the last non-MCTS Dragon Komodo we tested. It is now just four points behind the leader from the last rating list – Lc0. It is also nine points below Stockfish 13 – which now has taken over the leader spot in the rating list. Dragon Komodo 2.51 is now more than 100 points stronger than the best non-NNUE version of Komodo we have tested! As before we have used the opening book "out10-35.bin" of Erdogan Gunes for the testing of Dragon Komodo.

Next one out is the latest creation from team Stockfish, namely Stockfish 14. After the first 202 games it has reached a rating of 3554, which is 24 points behind Stockfish 13 in first place, and 4 points behind Stockfish 12. For the testing of Stockfish 14 we have used the opening book by Fauzi Dabat named "Aggressive 5.0 by Fauzi.abk". More games will probably be needed to stabilise the rating against the other engines in the top, lower the error bars and see if it will be able to supersede the older version as more games are played.

We have also tested two new engines from Jon Dart, named Arasan 22.3 and the neural network architecture (NNUE) version named 23.01. For the testing of these two engines, we have used Arasan's own opening book. Arasan 22.3 has reached the rating of 3363 after the 240 games. This is 78 points stronger than the last Arasan 21.2 version we have tested. The NNUE version: Arasan 23.01, has then gained a further 74 points on that, resulting in the rating of 3437 after the first 240 games.

We also have the latest (and last) free Pedone-version in this rating list. It is Pedone 3.1 by Fabio Gobbato. Like the 3.0-version of the same program, it uses NNUE in the search. We have tested it on both our hardware levels. On the 1800X – Pedone 3.1 has reached a rating of 3423 after 220 games played. On the Q6600 hardware, Pedone 3.1 has achieved a rating of 3376 after 260 games. The difference between the two hardware is 47 points, and Pedone 3.1 on the 1800X is 37 points stronger than Pedone 3.0 1800X. On the Q6600, the difference between Pedone 3.1 and 3.0 is 53 points. We have used Pedone's own opening book for the testing of Pedone 3.1.

We can also present a rating of Alex Morozov's latest Booot program, named Booot 6.5. We have tested this program on two of our hardware levels. On our 1800X hardware, Booot 6.5 has received a rating of 3432 after 200 games. On our Q6600 hardware, Booot 6.5 has reached a rating of 3359 after 240 games. The difference between the two different hardware is 73 points. The 6.5-version is 64 points ahead of the formerly tested Booot 6.4 on the 1800X and on the Q6600, the difference between Booot 6.5 and Booot 6.3.1 is 68 points. We have used Sedat Canbaz's "Perfect2021.abk" for the testing of Booot 6.5.

*Corresponding author. E-mail: lars.sandin@telia.com.

We are also able to welcome a Swedish newcomer in this rating list! Probably the first Swedish program in the list after Per Ola Valfridsson's–Ruffian, I guess? It is Martin Danielsson's engine: Marvin 5.1.0, which we have tested on both our hardware levels. We have used Marvin's own opening book for the testing. Marvin is from the 5.0.0-version a neural network architecture (NNUE)-program.On our 1800X hardware, Marvin 5.1.0 has reached a rating of 3324 after 240 games. On the Q6600 hardware, Marvin 5.1.0 has gotten a rating of 3225 after the first 147 games. The difference between the two hardware is just shy of 100 points.

Last, but not least, are the two Wasp-programs from John Stanback. The first one is Wasp 4.5, which uses ordinary search, and has received a rating of 3264 after the first 140 games. This is nine points ahead of the formerly tested Wasp 4. Wasp 5.0 uses a neural network for position evaluation. This has proven to be valuable for Wasp, and Wasp 5.0 1800X has received a rating of 3378 after the first 120 games. Albeit it's early in the testing, the difference between the two versions is now 114 points at least!

3 Dragon Komodo 2.51 x64 1800X 3.6 GHz, 3569					
LC0 3060Ti	19.5-20.5	Stoc14 1800X	20-20	Arasa23 1800X	25.5-14.5
Boo65 1800X	28-12	Wasp5 1800X	31-9	Wasp45 1800X	35.5-4.5
5 Stockfish 14 x64 1800X 3.6 GHz, 3554					
LC0 3060Ti	19-21	Dra251 1800X	20-20	SF12NU 1800X	21.5-18.5
Ped31 1800X	26-14	Komo11 1800X	2-0	Arasa22 1800X	31-9
16 Arasan 23.01 x64 1800X 3.6 GHz, 3437					
LC0 3060Ti	14.5-25.5	Dra251 1800X	14.5-25.5	Ped31 1800X	19-21
Arasa22 1800X	23.5-16.5	Mar51 1800X	24.5-15.5	Ped21 1800X	31-9
17 Booot 6.5 x64 1800X 3.6 GHz, 3432					
Stoc13 1800X	10.5-29.5	LC0 3060Ti	13-27	Dra251 1800X	12-28
Arasa22 1800X	25-15	Mar51 1800X	26.5-13.5		
18 Pedone 3.1 x64 1800X 3.6 GHz, 3423					
LC0 3060Ti	9-31	Stoc14 1800X	14-26	Arasa23 1800X	21-19
Wasp5 1800X	21-19	Wasp45 1800X	41-19		
21 Wasp 5 x64 1800X 3.6 GHz, 3378					
LC0 3060Ti	10-30	Dra251 1800X	9-31	Ped31 1800X	19-21
22 Pedone 3.1 x64 Q6600 2.4 GHZ, 3376					
Komo12 Q6600	18-22	Boo65 Q6600	22-18	DShre13 Q6600	22-18
Arasa21 Q6600	26.5-13.5	Mar51 Q6600	45.5-14.5	DRybka3 Q6600	28-12
24 Arasan 22.3 x64 1800X 3.6 GHz, 3363					
LC0 3060Ti	8-32	Stoc14 1800X	9-31	Dra2MC 1800X	11.5-28.5
Arasa23 1800X	16.5-23.5	Boo65 1800X	15-25	Mar51 1800X	23-17
25 Booot 6.5 x64 Q6600 2.4 GHz, 3359					
Ped31 Q6600	18-22	Ped3 Q6600	22.5-17.5	DShre13 Q6600	25-15
Arasa21 Q6600	26-14	Chiro3 Q6600	60.5-19.5		
27 Marvin 5.1.0 x64 1800X 3.6 GHz, 3324					
LC0 3060Ti	6-34	Ko14 1800X	9-31	Arasa23 1800X	15.5-24.5
Boo65 1800X	13.5-26.5	Arasa22 1800X	17-23	DHiar14 1800X	28-12
33 Wasp 4.5 x64 1800X 3.6 GHz, 3264					
LC0 3060Ti	5.5-34.5	Dra251 1800X	4.5-35.5	Ped31 1800X	19-41
35 Marvin 5.1.0 x64 Q6600 2.4 GHz, 3225					
Ped31 Q6600	14.5-45.5	Ped3 Q6600	2.5-4.5	DRybka4 Q6600	24-16
Spike14 Q6600	27.5-12.5				

Table 1
The recently tested 'Selected 50' from SSDF rating list '2022-01', 158725 games played by 418 computers

		Rating	+	−	Games	Won	Oppo
1	Stockfish 13 x64 1800X 3.6 GHz	3578	42	−38	360	71%	3424
2	Lc0 0.26.3 Cuda(67362) 3060Ti	3573	29	−27	680	68%	3445
3	Dragon Komodo 2.51 x64 1800X 3.6 GHz	3569	49	−45	240	66%	3436
4	Stockfish 12 NNUE x64 1800X 3.6 GHz	3558	30	−29	560	62%	3471
5	Stockfish 14 x64 1800X 3.6 GHz	3554	51	−48	202	59%	3502
6	Dragon by Komodo x64 1800X 3.6 GHz	3547	34	−32	460	63%	3456
7	Stockfish 11 x64 1800X 3.6 GHz	3540	36	−34	450	70%	3398
8	Stockfish 10 x64 1800X 3.6 GHz	3516	25	−24	880	68%	3383
9	Dragon Komodo 2 MCTS x64 1800X 3.6 GHz	3482	45	−44	240	55%	3453
10	Stockfish 9 x64 1800X 3.6 GHz	3477	26	−24	882	70%	3333
11	Komodo 13.1 x64 1800X 3.6 GHz	3465	30	−29	560	62%	3383
12	Komodo 14 x64 1800X 3.6 GHz	3464	33	−32	440	55%	3434
13	Komodo 13.02 x64 1800X 3.6 GHz	3458	30	−29	600	65%	3349
14	Komodo 12.3 x64 1800X 3.6 GHz	3449	27	−26	760	66%	3332
15	Stockfish 9 x64 Q6600 2.4 GHz	3441	32	−31	480	56%	3398
16	Arasan 23.01 x64 1800X 3.6 GHz	3437	45	−44	240	53%	3428
17	Booot 6.5 x64 1800X 3.6 GHz	3432	48	−50	200	44%	3486
18	Pedone 3.1 x64 1800X 3.6 GHz	3423	46	−47	220	48%	3420
19	Dragon Komodo MCTS x64 1800X 3.6 GHz	3415	41	−41	280	52%	3404
20	Pedone 3 x64 1800X 3.6 GHz	3386	44	−45	240	43%	3436
21	Wasp 5 x64 1800X 3.6 GHz	3378	63	−73	120	32%	3526
22	Pedone 3.1 x64 Q6600 2.4 GHZ	3376	45	−43	260	62%	3285
23	Booot 6.4 x64 1800X 3.6 GHz	3368	36	−36	360	51%	3364
24	Arasan 22.3 x64 1800X 3.6 GHz	3363	45	−49	240	35%	3467
25	Booot 6.5 x64 Q6600 2.4 GHz	3359	48	−44	240	63%	3267
26	Deep Shredder 13 x64 1800X 3.6 GHz	3355	24	−24	880	64%	3255
27	Marvin 5.1.0 x64 1800X 3.6 GHz	3324	44	−47	240	37%	3416
28	Pedone 3 x64 Q6600 2.4 GHz	3315	45	−43	247	57%	3263
29	Booot 6.3.1 x64 Q6600 2.4 GHz	3291	30	−30	520	53%	3268
30	Vajolet2 2.8 x64 1800X 3.6 GHz	3291	27	−28	650	38%	3376
31	Arasan 21.2 x64 1800X 3.6 GHz	3285	25	−26	800	36%	3387
32	Wasp 4.5 x64 1800X 3.6 GHz	3264	64	−83	140	21%	3512
33	Wasp 4 x64 1800X 3.6 GHz	3255	42	−45	280	33%	3377
34	Marvin 5.1.0 x64 Q6600 2.4 GHz	3225	56	−58	147	47%	3254
35	Deep Hiarcs 14 1800X 3.6 GHz	3213	23	−24	880	38%	3298
36	Deep Rybka 4 x64 Q6600 2.4 GHz	3195	19	−18	1488	63%	3103
37	Revelation 2 Hiarcs 14.1 PXA320 800 MHz	2925	47	−45	228	56%	2882
38	Chessmaster King 3.5 x64 Q6600 2.4 GHz	2859	24	−25	932	30%	3008
39	Revelation Hiarcs 13.3 PXA255 500 MHz	2772	57	−52	177	66%	2660
40	Revelation Shredder 12 PXA255 500 MHz	2705	60	−58	140	56%	2665
41	Revelation Rybka 2.2 PXA255 500 MHz	2634	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	2535	52	−51	180	56%	2495
44	Revelation Ruffian 2.1 PXA255 500 MHz	2346	68	−71	100	45%	2384
45	Millennium ChessGenius Excl. M7 300 MHz	2247	54	−51	180	59%	2183
46	Mephisto London 68030 33 MHz	2194	31	−31	482	50%	2191

Table 1
(Continued)

		Rating	+	−	Games	Won	Oppo
47	Millennium ChessGenius Pro M4 120 MHz	2162	59	−54	160	63%	2066
48	Mephisto London 68020 12 MHz	2094	67	−60	131	65%	1987
49	Millennium ChessGenius ARM M4 48 MHz	2069	45	−43	251	58%	2015
50	Mephisto London 68000 12 MHz	2004	59	−58	140	53%	1981