

The SSDF Chess Engine Rating List, 2019-02

Article

Accepted Version

The SSDF report

Sandin, L. and Haworth, G. ORCID: <https://orcid.org/0000-0001-9896-1448> (2019) The SSDF Chess Engine Rating List, 2019-02. ICGA Journal, 41 (2). 113. ISSN 1389-6911 doi: 10.3233/ICG-190107 Available at <https://centaur.reading.ac.uk/82675/>

It is advisable to refer to the publisher's version if you intend to cite from the work. See [Guidance on citing](#).

Published version at: <https://doi.org/10.3233/ICG-190085>

To link to this article DOI: <http://dx.doi.org/10.3233/ICG-190107>

Publisher: The International Computer Games Association

All outputs in CentAUR are protected by Intellectual Property Rights law, including copyright law. Copyright and IPR is retained by the creators or other copyright holders. Terms and conditions for use of this material are defined in the [End User Agreement](#).

www.reading.ac.uk/centaur

CentAUR

Central Archive at the University of Reading

Reading's research outputs online



	Rating	+	-	Games	Won	Oppo
	-----	----	----	-----	----	-----
1 Stockfish 9 x64 1800X 3.6 GHz	3494	32	-30	642	74%	3308
2 Komodo 12.3 x64 1800X 3.6 GHz	3456	30	-28	640	68%	3321
3 Stockfish 9 x64 Q6600 2.4 GHz	3446	50	-48	200	57%	3396
4 Stockfish 8 x64 1800X 3.6 GHz	3432	26	-24	1059	77%	3217
5 Stockfish 8 x64 Q6600 2.4 GHz	3418	38	-35	440	72%	3251
6 Komodo 11.01 x64 1800X 3.6 GHz	3397	23	-22	1134	72%	3229
7 Deep Shredder 13 x64 1800X 3.6 GHz	3360	25	-24	830	66%	3246
8 Booot 6.3.1 x64 1800X 3.6 GHz	3352	29	-29	560	54%	3319
9 Komodo 9.1 x64 Q6600 2.4 GHz	3340	21	-20	1435	72%	3175
10 Komodo 11.01 x64 Q6600 2.4 GHz	3333	32	-31	482	55%	3300
11 Stockfish 6 x64 Q6600 2.4 GHz	3326	22	-21	1216	68%	3192
12 Deep Shredder 13 x64 Q6600 2.4 GHz	3296	24	-23	884	64%	3193
13 Booot 6.3.1 x64 Q6600 2.4 GHz	3280	41	-39	320	64%	3179
14 Komodo 7 x64 Q6600 2.4 GHz	3270	23	-23	974	65%	3160
15 Arasan 21.2 x64 1800X 3.6 GHz	3269	61	-68	127	35%	3375
16 Komodo 5.1 x64 Q6600 2.4 GHz	3245	22	-22	1038	64%	3145
17 Deep Hiarcs 14 1800X 3.6 GHz	3219	26	-27	680	41%	3280
18 Wasp 3 x64 1800X 3.6 GHz	3218	27	-28	642	43%	3266
19 Stockfish 3 x64 Q6600 2.4 GHz	3203	19	-18	1420	61%	3127
20 Deep Rybka 4 x64 Q6600 2.4 GHz	3201	21	-20	1288	67%	3080
21 Deep Rybka 3 x64 Q6600 2.4 GHz	3194	22	-21	1371	75%	3003
22 Deep Hiarcs 14 Q6600 2.4 GHz	3189	19	-18	1450	61%	3112
23 Chiron 3.01 x64 Q6600 2.4 GHz	3180	27	-27	656	45%	3217
24 Wasp 2.01 x64 1800X 3.6 GHz	3159	26	-28	726	34%	3276
25 Naum 4.2 x64 Q6600 2.4 GHz	3146	21	-21	1123	60%	3078
26 Deep Junior Yokohama x64 Q6600 2.4 GHz	3126	22	-22	1010	42%	3184
27 Naum 4 x64 Q6600 2.4 GHz	3121	19	-18	1436	61%	3040
28 Deep Junior 13.3 x64 Q6600 2.4 GHz	3116	19	-19	1290	50%	3119
29 Spike 1.4 Q6600 2.4 GHz	3108	15	-15	1951	52%	3092
30 Deep Shredder 12 x64 Q6600 2.4 GHz	3104	18	-18	1507	62%	3016
31 Hiarcs 14 Athlon 1.2 GHz	3100	29	-29	560	55%	3065
32 Deep Fritz 13 Q6600 2.4 GHz	3097	24	-24	826	55%	3064
33 The Baron 3.43 x64 1800X 3.6 GHz	3095	32	-35	538	27%	3265
34 Deep Rybka 3 Athlon 1.2 GHz	3071	36	-35	372	53%	3048
35 Wasp 2.01 x64 Q6600 2.4 GHz	3065	40	-46	404	20%	3302
36 Crafty 25 x64 Q6600 2.4 GHz	3028	25	-26	804	35%	3134
37 The Baron 3.43 x64 Q6600 2.4 GHz	3023	33	-33	440	51%	3019
38 Arasan 17.2 x64 Q6600 2.4 GHz	3000	26	-26	686	46%	3029
39 Revelation 2 Hiarcs 14.1 PXA320 800 MHz	2924	47	-46	220	55%	2889
40 Chessmaster King 3.5 x64 Q6600 2.4 GHz	2861	24	-25	932	30%	3009
41 Revelation Hiarcs 13.3 PXA255 500 MHz	2772	57	-52	177	66%	2661
42 Revelation Shredder 12 PXA255 500 MHz	2703	60	-58	140	56%	2663
43 Revelation Rybka 2.2 PXA255 500 MHz	2628	47	-44	240	62%	2545
44 Revelation Deep Sjeng 3 PXA255 500 MHz	2599	68	-76	100	37%	2692
45 ChessGenius 3 ZTE Apex3 ARM A53 1.3 GHz	2457	75	-68	100	62%	2376
46 Revelation Ruffian 2.1 PXA255 500 MHz	2353	68	-71	100	45%	2390
47 TASC R30 v. 2.5 ARM6 30 MHz	2273	42	-38	343	69%	2136
48 Millenium ChessGenius Pro M4 120 MHz	2176	67	-59	140	68%	2048
49 Millenium ChessGenius ARM M4 48 MHz	2078	51	-47	210	62%	1990
50 Mephisto London 68000 12 MHz	2035	69	-70	100	49%	2043

2 Komodo 12.3 x64 1800X 3.6 GHz, 3456

Stock9 1800X	18,5-21,5	Stock9 Q6600	20-20	Stock8 1800X	22,5-17,5
Stock8 Q6600	20-20	Kom011 1800X	22-18	DShre13 1800X	28-12
Booot6 1800X	24-16	Komo9.1 Q6600	27-13	Kom011 Q6600	56,5-23,5
Booot6 Q6600	31-9	Arasa21 1800X	30,5-9,5	DHiar14 1800X	34,5-5,5
Wasp3 1800X	30,5-9,5	Wasp201 1800X	35-5	Baro343 1800X	36,5-3,5

3 Stockfish 9 x64 Q6600 2.4 GHz, 3446

Stock9 1800X	16,5-23,5	Komol2 1800X	20-20	Komol1 1800X	21,5-18,5
Booot6 1800X	26,5-13,5	Booot6 Q6600	29,5-10,5		

13 Booot 6.3.1 x64 Q6600 2.4 GHz, 3280

Komol2 1800X	9-31	Stock9 Q6600	10,5-29,5	Stockf6 Q6600	20,5-19,5
DjunYok Q6600	27,5-12,5	Hiarcl4 A1200	33-7	DRybka3 A1200	34,5-5,5
Shred12 A1200	35-5	Rybk231 A1200	35,5-4,5		

15 Arasan 21.2 x64 1800X 3.6 GHz, 3269

Komol2 1800X	9,5-30,5	Stock8 1800X	7,5-31,5	DShrel3 1800X	11,5-18,5
Baro343 1800X	15,5-2,5				

18 Wasp 3 x64 1800X 3.6 GHz, 3218

Stock9 1800X	6,5-33,5	Komol2 1800X	9,5-30,5	Stock8 1800X	5,5-34,5
Stock8 Q6600	7,5-32,5	Komol1 1800X	6,5-33,5	DShrel3 1800X	14,5-25,5
Booot6 1800X	11-29	Komo7.0 Q6600	13,5-26,5	DHiar14 1800X	19,5-20,5
Stockf3 Q6600	17,5-22,5	Chiro3 Q6600	23-17	Wasp201 1800X	25-15
Spike14 Q6600	27-13	Baro343 1800X	29,5-10,5	Zap!Mx2 Q6600	30,5-9,5
Wasp201 Q6600	29-13				

50 Mephisto London 68000 12 MHz, 2035

MCG Pro	6,5-13,5	MCG	10-10	Star Sapphire	6,5-13,5
Milano Pro	12,5-7,5	Nigel Short	13-7		

On our latest February rating list we can present six new Chess Computer programs. First out is the winner of all three classes at the ICGA World Championship that was played in Stockholm/Sweden last summer - namely Komodo. Komodo is written by Mark Lefler, Larry Kaufman and the late Don Dailey. The version we have tested is named Komodo 12.3 and it has achieved a very strong rating of 3456 after 640 games played on our 1800X hardware level. This is 59 points stronger than the 11.01 version we tested last time. We have used Komodo's opening book by Erdogan Guenes for the testing.

The next new version we have on this list is Stockfish 9, which now have sufficient amount of games on our Q6600-hardware level. After the first 200 games it has reached the rating of 3446. This is 28 points stronger than Stockfish 8 on the same platform, and is 48 points lower than the same version on our 1800X hardware. We have of course used the same opening book as we previously used on our 1800X hardware, when we tested Stockfish 9; that is the free "Aggressive 3.5 by Fauzi.abk" opening book by Fauzi Dabat.

We have also got enough games with Booot 6.3.1 on our Q6600 hardware to be able to introduce it on the list. The rating is 3280 after the first 320 games. This is 72 points lower than the 1800X version which we introduced on the last rating list.

Just in time for this rating list, we could also present an early rating of the latest Arasan program by Jon Dart. We have tested it on our 1800X hardware, with it's own included opening book and it has reached a rating of 3269 after the first 127 games. More games will be needed to get a more reliable rating, but the rating of 3269 is still 269 points stronger than the last Arasan version we have tested! Even though some of the difference are due to the fact that we tested the 17.2 version on our Q6600-hardware, the performance gain from improvements made in the software is impressive.

Next out is the Wasp 3.0 program by John Stanback. We have played 642 games with Wasp 3.0 on our 1800X hardware, and it has reached the rating of 3218. This is 59 points stronger than the 2.01 version which we introduced in our

rating list in January 2018. We have used the free opening book by Sedat Canbaz, called "Perfect2017.abk" for the testing of Wasp 3.0.

Last out in this rating list is the manually tested "oldie" - the dedicated Mephisto London 68000 chess computer. This is a computer which we never got to test back in the days, but now are able to finally introduce in the rating list, 23 years after it was introduced back in 1996!

The Mephisto London is the program of Richard Lang and uses the module hardware for the old Modular/Exclusive/München boards. It features an Motorola 68000 processor at 12 MHz and uses 512 kB RAM for hash-tables. The rating after the first 100 games is 2035 and this is 18 points stronger than the Berlin 68000, which previously was the strongest Lang program on the 68000 hardware in our rating list.

Compared to the last rating list, Deep Hiarcs 14 1800X gained 8 points and Novag Star Sapphire gained 6 points. Meanwhile The Baron 3.43 1800X lost 20 points, Millenium ChessGenius lost 9 points and Stockfish 9 1800X lost 8 points.

For our next list we will focus on getting more games with Komodo 12.3 on our Q6600 hardware and also Arasan 21.2 on both the 1800X and Q6600 level. We will also begin testing of Stockfish 10, Wasp 3.5 and hopefully also the Monte Carlo Tree Search (MCTS) version of Komodo.

We are also manually testing both the Millenium ChessGenius Exclusive and the latest Millenium The King Exclusive now.

Our next rating list will probably be out before summer.

Lars Sandin