

# 1. The Final ChessCard



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## The ChessMachine/The Final ChessCard

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Schachprogramme	
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## The Final ChessCard für PC/Commodore 64

**PC-Version:** Die Final ChessCard hat den vollständigen Funktionsumfang und die Bedienoberfläche der ChessMachine. Sie basiert jedoch auf dem 8 bit-Prozessor 6502 mit 5 MHz Taktfrequenz. Die Spielstärke liegt bei (europäischen) 1700 Elo-Punkten. Besonders für langsamere PC's (z.B. XT-Kompatible) ist die Final ChessCard die preiswerte Alternative.

**C 64-Version:** Die Final ChessCard befindet sich in einer Cartridge und verfügt über eine batteriegepufferte RAM-Disk. Sie besitzt dieselbe Spielstärke wie die PC-Version und nützt die Hardware des C 64 voll aus, wenn auch systembedingt nicht alle Möglichkeiten des PC's zur Verfügung stehen.

The ChessMachine und The Final ChessCard: © und ™ TASC B.V., Postbus 55178, NL-3008 ED Rotterdam

The Final ChessCard by TASC was released in 1989 for the Commodore 64/128 and PC. The C64/C128 version plugs into the Expansion(cartridge) slot and the PC version comes with an ISA Card.

The ChessCard forms a stand-alone computer with 32K of ROM, 8K of RAM and an extra CPU running at 5 Mhz. Program software was delivered on disk for the PC and the C64 software is loaded from an additional 32K ROM on the C64/128 cartridge.

[http://www.spacious-mind.com/html/the\\_final\\_chess\\_card\\_for\\_commo.html](http://www.spacious-mind.com/html/the_final_chess_card_for_commo.html):

The Final ChessCard created by TASC B. V. and written by Mark Derksen came out in 1989 as an ISA Card for PC's and as a Cartridge for the Commodore 64/128, which could be inserted into the Commodore's Cartridge Slot.

The software and hardware used to play the game all resided on the Card, which allowed it to load instantly upon switching on your Commodore 64. This also made the program stronger than all the chess software available for a Commodore 64/128

since these were limited to the speed of the Computer of 0.985 MHz for a PAL (Europe) version and 1.022 MHz for a NTSC (U. S. A.) version.

The Final ChessCard ran at 5 MHz making the CPU 5 times as fast as a normal Commodore 64/128.

The Game Software is graphically represented on a TV or a Monitor attached to the Commodore 64/128. The game is loaded with features and game settings and also has a good Opening Book. You could even create your own custom Opening Books and load them into the game.

The strong chess program as well as the great graphical chess interface made The Final ChessCard easily the best chess game available for a Commodore 64/128.

Because The Final ChessCard runs independently, and does not use a Computer's Processor, it is classified as a Dedicated Chess Computer. Purists however will often debate this since The Final ChessCard does not use its own dedicated electronic chess board and relies on a graphical chess board interface from your Commodore 64/128.

[https://www.chessprogramming.org/The\\_Final\\_Chesscard:](https://www.chessprogramming.org/The_Final_Chesscard:)

### The Final Chesscard,

A chess playing entity by TASC, developed by Marc Derksen, and forerunner of the famous ChessMachine. As independent chess computer it ran at 5 MHz on a 65C02 processor with 64 Kib ROM and RAM each, inside an expansion-cartridge of a host home- or personal computer, as already realized in 1986 with the The Final Cartridge III by Riska B.V. with Wil Sparreboom and Marc Derksen involved. The Final Chesscard, first released in 1989 for Commodore 64 and Commodore 128 home computers, was also available as pluggable ISA card for the IBM PC. Rather than a dedicated board, it used a for that time sophisticated GUI with 2D Graphics Board of its host.





directly to customers. Since magnetic media were not widely available at the time, the authors placed an advert in Byte magazine selling for \$15 photocopied listings that would work in any Z80-based microcomputer. Availability of the source code allowed porting to other machines. For example, the March–April 1979 issue of Recreational Computing describes a project that converted Sargon to an 8080 program by using macros. Later the Spracklens were contacted by Hayden Books and a book was published.

When magnetic media publishing became widely available, a US Navy petty officer, Paul Lohnes, ported Sargon to the TRS-80, altering the graphics, input, and housekeeping routines but leaving the Spracklen's chess-playing algorithm intact. Paul consulted with the Spracklens, who were both living in San Diego at the time, to make the TRS-80 version an instant success with the help of Hayden Book's newly established software division: Hayden Software. Paul was not involved in further refinements to the TRS-80 version due to his reassignment to sea duty shortly after signing the deal with Hayden Software.

In the early 1980s, SARGON CHESS was ported to several other early microcomputers, including the Nascom (by Bits & PCs, 1981), Exidy Sorcerer, and Sharp MZ 80K. A complete rewrite was necessary later for the Apple II port, made by Kathleen's brother Gary Shannon. Both were published by Hayden Software.

The Spracklens made significant improvements on the original program and released **Sargon II**. In 1978 it tied for third at the ninth North American Computer Chess Championship despite being seeded ninth of 12 entries. Sargon finished only behind Belle and Chess 4.7, and defeated AWIT—running on a \$5 million Amdahl mainframe—amazing the audience.

That year they published a series of articles in BYTE on computer chess programming, stating "we think it would be nice if not everyone had to reinvent the wheel".

**Sargon II** was ported to a variety of personal computers popular in the early 1980s, Apple II, Atari 8-bit, **Commodore VIC-20**, Commodore 64, TRS-80

The game engine featured multiple levels of lookahead to make it more accessible to beginning chess players. BYTE in 1980 estimated that Sargon II had a 1500 rating at the highest tournament-time difficulty level, and speculated that it was the best chess program on sale, including dedicated devices.

Sargon 2.5, sold as a ROM module for the Chafitz Modular Game System, was identical to Sargon II but incorporated pondering. It received a 1641 rating at the Paul Masson tournament in June–July 1979, and 1736 at the San Jose City College Open in January 1980.

Sargon 3.0 finished in seventh place at the October 1979 North American Computer

Chess Championship. The competition had improved, but 3.0 drew against Cray Blitz and easily defeated Mychess, its main microcomputer rival. In December, 3.0 easily won the second microcomputer championship in London.

Sargon III was a complete rewrite from scratch. Instead of an exchange evaluator, this version used a capture search algorithm. Also included was a chess opening repertoire. This third version was written originally for the 6502 assembler and was commercially published by Hayden Software in 1983. Apple contacted the Spracklens and, after a port for 68000 assembly, Sargon III was the first third-party executable software for the Macintosh Apple II and Amiga, Atari 8-bit, Atari ST, Commodore 64, Macintosh, PC.

After the demise of Hayden Software, later chess programs were also released under the name Sargon, including Sargon IV (Spinnaker Software) written for Macintosh and PC.

Sargon V (Activision) and a CD-i title simply named Sargon Chess was written for Macintosh, PC, Philips CD-i

The Spracklens concurrently wrote the engines for the dedicated chess computers produced by Fidelity Electronics, which won the first four World Microcomputer Chess Championships.