Commodore 64 Games System

From Wikipedia, the free encyclopedia

Main page
Contents
Featured content
Current events
Random article
Donate to Wikipedia

Interaction
Help
About Wikipedia
Community portal
Recent changes
Contact Wikipedia

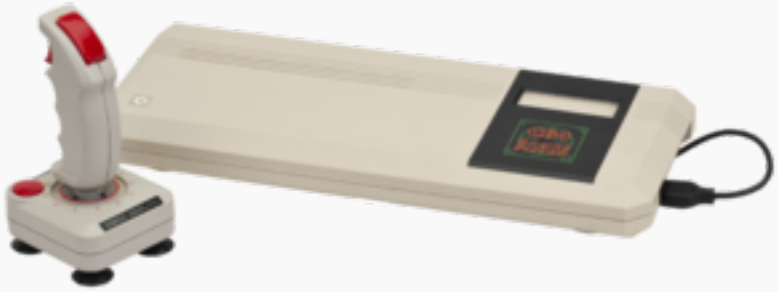
Toolbox

Print/export

Languages
Deutsch
Hrvatski
Italiano

This article **needs additional citations for verification**. Please help improve this article by adding citations to reliable sources. Unsourced material may be challenged and removed. *(September 2007)*

Commodore 64GS



Manufacturer	Commodore International
Type	Video game console
Generation	Third generation (8-Bit era)
Media	Cartridge

The **Commodore 64 Games System** (often abbreviated **C64GS**) was the cartridge-based game console version of the popular Commodore 64 home computer. It was released by Commodore in December 1990 as a competitor in the booming console market. It was only ever released in Europe and was a considerable commercial failure.

During its short life, the C64GS came bundled with a cartridge with four games: *Fiendish Freddy's Big Top O'Fun*, *International Soccer*, *Flimbo's Quest* and *Klax*.

The C64GS was not Commodore's first gaming system based on the C64 hardware. However, unlike the 1982 MAX Machine (a game-oriented computer based on a very cut-down version of the same hardware family), the C64GS was internally very similar to the "proper" C64 with which it was compatible.

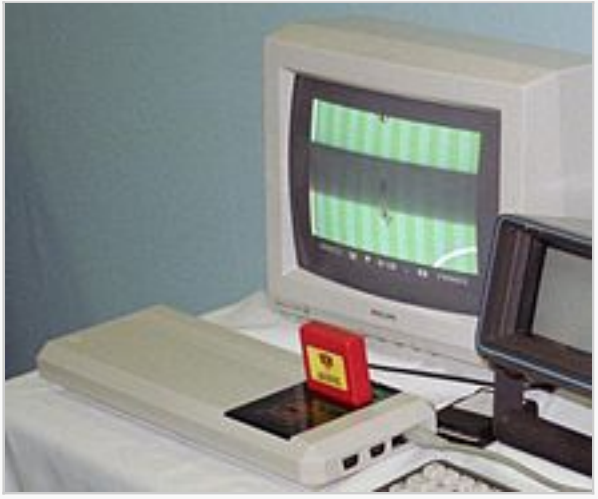
Contents [hide]

Nederlands
日本語
Русский
Simple English
Srpskohrvatski / српскохрватски
Svenska
Edit links

Contents [hide]

1 Available software
2 Hardware-based problems
3 Primary reasons for failure
4 Technical specifications
4.1 Internal hardware
4.2 I/O and power supply
5 See also
6 References
7 External links

Available software [edit]



Support from games companies was limited, as many were unconvinced that the C64GS would be a success in the console market. Ocean Software were the most supportive, offering a wide range of titles, some C64GS cartridge-based only, offering features in games that would have been impossible on cassette-based games, others were straight ports of C64 games. Domark and System 3 also released a number of titles for the system, and conversions of some Codemasters and Microprose games also appeared. Denton Designs also released some games, among them Bounces, which was released in 1985.

The software bundled with the C64GS, a four-game cartridge containing *Fiendish Freddy's Big Top O'Fun*, *International Soccer*, *Flimbo's Quest* and *Klax*, were likely the most well-known on the system. These games, with the exception of *International Soccer*, were previously ordinary tape-based games, but their structure and control systems (no keyboard needed) made them well-suited to the new console. *International Soccer* was previously released in 1983 on cartridge for the original C64 computer.

Ocean produced a number of games for the C64GS, among them a remake of *Double Dragon* (which

seemed to be more linked to the NES version than the original C64 cassette version), *Navy SEALS*, *Robocop 2*, *Robocop 3*, *Chase HQ 2: Special Criminal Investigation*, *Pang*, *Battle Command*, *Toki*, *Shadow of the Beast* and *Lemmings*. They also produced *Batman The Movie* for the console, but this was a direct conversion of the cassette game, evidenced by the screens inciting the player to "press PLAY" that briefly appeared between levels. Some of the earliest Ocean cartridges had a manufacturing flaw, where the connector was placed too far back in the cartridge case. The end result was that the cartridge could not be used with the standard C64 computer. Members of Ocean staff had to manually drill holes in the side of the cartridges to make them fit.

System 3 released *Last Ninja Remix* and *Myth: History in the Making*, although both were also available on cassette. Domark also offered two titles, *Badlands* and *Cyberball*, which were available on cartridge only.

Through publisher The Disc Company a number of Codemasters and Microprose titles were also reworked and released as compilations for the C64GS. *Fun Play* featured three Codemasters titles: *Fast Food Dizzy*, *Professional Skateboard Simulator* and *Professional Tennis Simulator*. *Power Play* featured three Microprose titles: *Rick Dangerous*, *Stunt Car Racer* and *Microprose Soccer*, although *Rick Dangerous* was produced by Core Design, not Microprose themselves. *Stunt Car Racer* and *Microprose Soccer* needed to be heavily modified to enable them to run on the C64GS.

Uncharacteristically, Commodore never produced or published a single title for the C64GS beyond the bundled four-game cartridge. *International Soccer* was the only widely-available game for the C64GS but had actually been written for the C64.

Hardware-based problems [edit]

The C64GS was plagued with problems from the outset. Firstly, despite the wealth of software already available on cartridge for C64, the lack of a keyboard meant that most could not be used with the console. This meant that people often bought secondhand C64 software on cartridge only to find that the games were not compatible. The C64 version of *Terminator 2: Judgment Day* was designed for the console, but was included on a cartridge that required the user to press a key to access the game, rendering it unplayable.

To partially counter the lack of a keyboard, the basic control system for the C64GS was a joystick supplied by Cheetah called the Annihilator. This joystick, while using the standard Atari 9-pin plug, offered two

independent buttons, with the second button located on the base of the joystick. This 9-pin plug was standard of many systems of the era, and the joysticks were fundamentally compatible with the ZX Spectrum's Kempston Interface and the Sega Master System. The Cheetah Annihilator joystick was poorly built, had a short life, and was not widely available, making replacements difficult to come by.

Primary reasons for failure [edit]

Prior to the console's release, Commodore had generated a great deal of marketing hype to generate interest in an already crowded market. *Zzap! 64*, a Commodore 64 magazine of the era, reported that Commodore had promised "up to 100 titles before December", even though December was two months from the time of writing. In reality 28 games were produced for the console during its shelf life - most of which were compilations of older titles, and a majority of which were from Ocean. Of those 28 titles, only 9 were cartridge exclusive titles, the remainder being ports of older cassette-based games.

While most of the titles that Ocean announced did appear for the GS (with the notable exception of *Operation Thunderbolt*), a number of promises from other publishers failed to materialize. Although Thalamus, The Sales Curve, Mirrorsoft and Hewson had expressed an interest, nothing ever materialized from these firms. Similar problems plagued rival company Amstrad when they released their GX4000 console the same year.

There were other reasons attributed to the failure of the C64GS, the major ones being the following:

- *Poor software support:* Most existing software on cartridge did not function well with the C64GS, and enthusiasm from publishers was low. Ocean Software, Codemasters, System 3, Microprose and Domark developed titles for the system, but probably only because the games were compatible with the original C64, providing the titles with a commercial safety net in case the C64GS failed. And failure to reprogram the games for use with the cut-back system was another blame for the fault.
- *The C64 computer:* The C64GS was essentially a cut-back version of the original Commodore 64, and the games developed for it could also be run on the original computer. The C64 was already at an affordable price, and the C64GS was sold for the same. People preferred to keep with the original C64, particularly since the cassette versions of games could often be picked up for a fraction of the cost of the cartridge versions, and did not seem to mind the much longer loading times as much as

Commodore had perhaps banked on.

- *Obsolete technology:* The C64 was introduced in 1982; by 1990 the technology was way past its prime.
- *An already saturated console market:* The 8-bit C64GS entered the market in 1990 parallel to newer 16-bit consoles such as the Mega Drive and the Super Nintendo. The Nintendo Entertainment System and Sega Master System were already dominating the market with more popular titles, and did so until around 1992.
- *TV hookup*, joystick support and cartridge slots were already found on regular C64 machines. Hence normal C64s were already recognized as "game consoles" despite looking more like a home computer with an integrated keyboard.

Commodore eventually shipped the four-game cartridge and Cheetah Annihilator joysticks in a bundle with standard Commodore 64 computer. Several years later Commodore's next attempt at a games console, the Amiga CD32, encountered many of the same problems although overall it was a lot more successful than the C64GS.

Technical specifications [edit]

The specifications of the C64GS is a subset of those of the C64, the main differences being the leaving out of the unnecessary user port, serial bus port, and tape drive port. These ports are in fact present, the system board being the C64C's board, but simply not exposed at the rear.

Internal hardware [edit]

- Microprocessor CPU:
  - MOS Technology 8500 (the 6510/8500 being a modified 6502 with an integrated 8-bit I/O port)
  - Clock speed: 0.985 MHz (PAL)
- RAM:
  - 64 KB (65,535 bytes).
  - 0.5 KB Color RAM
- ROM:
  - 20 KB (7 KB KERNAL, 4 KB character generator providing two 2 KB character sets)

The ROM contains two important differences to a standard C64 ROM. The first is that switching on the machine without a cartridge present results in a character-based animation asking the user to insert a cartridge. The second is an additional set of windowing commands, designed to compensate for the lack of a keyboard. However, there is no known software that uses it.

- Video hardware: MOS Technology VIC-II MOS 8569 (PAL)
  - 16 colors
  - Text mode: 40×25; user-defined characters; smooth scrolling
  - Bitmap modes: 320×200, 160×200 (multicolor)
  - 8 hardware sprites, 24×21 pixels
- Sound hardware: MOS Technology 8580 "SID"
  - 3 voices, ADSR programmable.
  - 4 Waveforms: Triangle, Sawtooth, Variable Pulse, Noise
  - Oscillator Synchronization, Ring modulation
  - Programmable Filter: High Pass, Low Pass, Band Pass, Notch Filter

I/O and power supply [edit]

- I/O ports:
  - High-quality Y/C (S-Video) (8-pin DIN plug) with chroma/luma out and sound in + out, used with some Commodore video monitors (DIN-to-phono plug converter delivered with monitor).
  - Composite video (one-signal video output to monitor included in aforementioned 8-pin DIN plug, and separate integrated RF modulator antenna output, which also carries sound, to TV on an RCA socket)
  - 2 × screwless DE9M game controller ports (Atari 2600 de facto standard, supporting one digital joystick each)
  - Cartridge slot (44-pin slot for edge connector with 6510 CPU address/data bus lines and control signals, as well as GND and voltage pins;[1] used for program modules)
- Power supply: 5V DC and 9V AC from external "monolithic power brick", attached to computer's 7-pin female DIN-connector

See also [edit]

- Commodore 64
- Commodore MAX Machine

References [edit]

1. ^ The Hardware Book

External links [edit]

- "The C64 Console!" / "Inside the future: The C64GS" – By Ed Stu, *Zzap 64* magazine, issue 66, October 1990
- The Commodore C64 Games System – Photos and information from Bo Zimmermann's collection
- 8Bit-Homecomputermuseum – Nice pictures of the C64GS

Wikimedia Commons has media related to: ***Commodore 64 GS***

V · T · E · **Third-generation video game consoles (1983-1992)** [hide]

Action Max · Amstrad GX4000 · Atari 7800 · Atari XE Games System · Casio PV-1000 · **Commodore 64 Games System** · Nintendo Entertainment System · Master System · SG-1000 ·

← 2nd generation 4th generation →

Submit ratings

Categories: Third-generation video game consoles | CBM hardware | Commodore 64 | Products introduced in 1990