COMMODORE 64, COMMODORE C64

NAME	C64
MANUFACTURER	Commodore
TYPE	Home Computer
ORIGIN	U.S.A.
YEAR	August 1982
END OF PRODUCTION	1993
BUILT IN LANGUAGE	Basic 2.0
KEYBOARD	Full-stroke 66 keys with 4 function keys
CPU	6510
SPEED	0.985 MHz (PAL) / 1.023 MHz (NTSC)
CO-PROCESSOR	VIC II (Video), SID (Sound)
RAM	64 KB
ROM	20 KB
TEXT MODES	40 columns x 25 lines
GRAPHIC MODES	several, most used : 320 x 200
COLORS	16 + 16 border colours
SOUND	3 voices / 9 octaves, 4 waveforms (sound output through TV)
SIZE / WEIGHT	40.4 (W) x 21.6 (D) x 7.5 (H) cm / 1820 g
I/O PORTS	video output (composite, chroma/luma and sound in/out), 2 x Joystick plugs, Cardridge slot, Tape interfarce (300 bps), Serial, User Port, TV RF output
BUILT IN MEDIA	Cassette unit. Provision for 170 KB 5.25'' floppy disc unit (1541)
POWER SUPPLY	External power supply unit
PRICE	$595 (USA, 1982) - £229 (U.K. 1984)

The **Commodore 64**, also known as the **C64**, is an 8-bit home computer introduced in January 1982 by Commodore International (first shown at the Consumer Electronics Show, January 7–10, 1982, in Las Vegas).[4] It has been listed in the Guinness World Records as the highest-selling single computer model of all time,[5] with independent estimates placing the number sold between 12.5 and 17 million units.[2] Volume production started in early 1982, marketing in August for US$595 (equivalent to $1,670 in 2021).[6] Preceded by the VIC-20 and Commodore PET, the C64 took its name from its 64 kilobytes (65,536 bytes) of RAM. With support for multicolor sprites and a custom chip for

waveform generation, the C64 could create superior visuals and audio compared to systems without such custom hardware.

The C64 dominated the low-end computer market (except in the UK and Japan, lasting only about six months in Japan[7]) for most of the later years of the 1980s.[8] For a substantial period (1983–1986), the C64 had between 30% and 40% share of the US market and two million units sold per year,[9] outselling IBM PC compatibles, Apple computers, and the Atari 8-bit family of computers. Sam Tramiel, a later Atari president and the son of Commodore's founder, said in a 1989 interview, "When I was at Commodore we were building 400,000 C64s a month for a couple of years."[10] In the UK market, the C64 faced competition from the BBC Micro, the ZX Spectrum, and later the Amstrad CPC 464.[11] but the C64 was still the second most popular computer in the UK after the ZX Spectrum.[12]

The commodore 64 is, along with the Apple II and the Atari XL computers, the most famous home computer. According to the 2001 edition of Guinness book of records, the C64 was the most "prolific computing device ever manufactured". During its production run from 1982 to... 1993, about 30 million (!) units were sold. To put this number in perspective, that's more than all the Macintoshes in the world.

The C64 was an up-market version of the VIC-20. A wide range of software packages, games and programming languages was available for this machine which was itself available practically anywhere from a toyshop to a business supplier.

Superficially, the C64 closely resembled the VIC-20. It had the same casing, an identical keyboard configuration and virtually the same interfaces and sockets. But the apparent similarity belies some fundamental differences: a MOS 6510 processor and 64 KB of RAM which was quite unusually large at the time for a model of this price range. The C64 also had the ability to recognise user-established priorities by which 'sprites' (or movable blocks) could move independently of displayed text/graphics, enabling the creation of graphics with up to 8 layers.

Music synthesis was performed by a special sound interface chip. Sound envelope could be controlled on all three voices on a full nine octave of each. It was one of the first computers to offer both a high quality sound chip and graphic resolution with many colors and sprites.

A great range of peripherals was developed for this computer and it can also use several of the Vic 20 peripherals.

Several versions of the Commodore 64 were launched :

The first one, **C64-1**, used the VIC 20 case and was to be quickly replaced with the **C64-2** which used the famous brown case, and later by the **C64-3** with small cosmetic changes in the keyboard.

A special version called Educator 64 or PET64 or CBM 4064 was proposed for schools and uses the PET case.

Commodore produced the first generation of C64s until May 1986, then it was discontinued and they introduced the C64C. According to the 64'er magazine, this version has been planned since the Hannover Fair in 1985, but as the old version sold so well during Christmas '85, its release date was delayed.

Then appeared the C64 "Aldi" (1987, only in Germany) and the C64G (1989). They were virtually same machines, this time with the new, short motherboard. So, although the case might look the same and the label says "Commodore 64", the boards may be completely different.

Finally, the C64GS game console was released in 1990. Basically it was a re-boxed C64, without a keyboard or any other interfaces, except for the cartridge slot on top.

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