

Computers History bit by bit helps us understand how we got here

TechKing released a [pretty good infographic that spans almost 70 years of computing evolution](#) and helps us understand where we came from (and somehow where we're heading).

It's cool to see what brought us from vacuum tubes up to the iPad I'm using right now.



As a subscriber to [Computer.org](#) Digital Library, I've been reading [Annals of Computing](#) and found extremely interesting the british Leo computer history: the very first commercial-grade computer.

It defies everything we all take for granted - today.

Annals of Computing by the way published an article in which described the birth of software market (late 60s, early 70s) which happened by means of an IBM-hardware-based flow-chart software.

Before that, software had no price - or, it was considered part of the hardware offer, so it had no market by itself.

This infographic, of course, is missing a lot of computers achievements (and misachievements, so to speak) so, since I'm a great retrocomputing fan, here I am writing my very own list of "don't you forget about me" computers from the past.

Check my [Flickr retrocomputers page](#) with (just) a few computers from my personal collection.

Sinclair computers

Starting from 1979, Sir Clive Sinclair built pocket calculators, tiny portable TVs and the Sinclair **ZX80**, 1 Kbyte of RAM (that's right, ONE!), 4 Kbytes of ROM (what we would call Operating System today).

That's my first computer my parents bought me for Xmas 1981! (and still running!).

Later, Sinclair introduced the **ZX81**, smaller, with fewer components, lower priced and better performing: a best seller worldwide, not only in Europe, it even sparkled cloning (in former-USSR too).

The **ZX Spectrum** (which I still proudly own) reminds me of time when the world was divided in two: USA and USSR?

Nope, ZX Spectrum versus Commodore 64 fans!

Spectrum again was hugely successful and ignited an economy on its own about software and exotic peripherals.

Sinclair QL was the following step, using a Motorola MC68008 processor - a scaled-down version of the 32-bit MC68000, and trying to bring multitasking to human beings.

It was flawed and had several problems associated to its Microdrive - magnetic strings storage, which eventually led users to turn to 3,5" floppy drives, but it was significantly different from the previous bunch of (so-called) home computers.

Sinclair Z88 was a diskless (flash memory-based) portable computer that, beside a clunky keyboard and a tiny display, was large as an A4 sheet of paper, powered by AA batteries and... worked fine!



The British Invasion

Too many in the 80s, to name but a few:

Dragon 32 - nice keyboard,

Oric 1 and Atmos - wannabe competitor to Spectrum,

Grundig Newbrain - almost portable with a 2-line display,
Jupiter Ace - the only home computer without Basic: it used Forth language,
Elan Enterprise - high expectations and big project flaws doomed this exceptional Z80-based computer.

Atari ST

It started a brand new wave of home computers with 32-bit processors, was successful in Europe (Germany mostly) and was popular among musician for its built-in MIDI ports and music editing software.

Amiga simply blew it off IMHO (I was an early Amiga 1000 user).

Silicon Graphics

Back then, SGI were the dream workstation (and servers) used in Hollywood (Jurassic Park, namely) for high-end 3D graphics and still now are excellent *nix workstation although with proprietary hardware (MIPS processors) and complex software settings.

Hint: look for an O2 workstation on ebay and grab a chunk of great technology.

BBC Model B aka 'The Beeb'

Acorn computer designed and built this extremely successful (in UK) home computer that, along with a standard 6502 processor, featured plenty of educational software and primitive (but working) Econet networking features.

Built by Acorn Computers for the BBC Computer Literacy Project, operated by the British Broadcasting Corporation. Designed with an emphasis on education, it was notable for its ruggedness, expandability and the quality of its operating system. [from [Wikipedia](#)]

Epson HX-20

Maybe the very first portable system to allow roadwarriors actually **work**: built-in cassette recorder (for unlimited storage!), printer and serial port were outstanding features in 1983.

Hewlett Packard HP-41 and Texas Instruments TI-59

Back in the days of programmable calculators (late 70s, early 80s), these were the only competitors in the arena: you were either on the AOS or RPN side of the Force, no other way!

Those calculators exploited very few bytes (or k-bytes) of memory with elegant programming techniques and almost limitless expansion with protocol such as the HP-IL interface loop that allowed the HP-41 to hook up to plenty of scientific HP instruments.

Ok, enough is enough... too many of them!
Let me know your favorite retro-computer!