Old and new

Some of the more obscure hardware I got my hands on, and what I use(d) it for - Christian Horn

Robotron KC85/3



Release year: 1986

Received: 1987

cpu: Z80 clone@1.75Mhz ram: 32kb (16kb free) BASIC, casette, floppy price: 1700 DDR Mark

First blood!

Blinken lights!

- Code was loaded from music cassette
- At that time, if you had the code in your hands, you could use it. Much like OpenSource!
- BASIC!
 - Entering pages of code from magazines, then searching for the typos

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Let's actually use this graph for memory..

32kb

IBM PC 8088



Release year: 1981

Received: 1989

32kb

cpu: Intel 8088@4.77Mhz ram: 32kb? Monochrome, floppy PC speaker, DOS3

- DOS3
- Monochrome
- Did not much with that one

Commodore Amiga600



Release year: 1992

Received: 1993

cpu: Motorola68k@7Mhz ram: 1MB 3.5inch floppy Stereo, 4 channel sound price: 820 Deutsche Mark

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Gaming!

- ...code was loaded from floppy now
- 4 channel sound
- gaming experiences with multiple people in front of one system
- language synthesizer

(rescaled factor 32)

1MB

32kb =

Vobis PC



Release year: 1993

Received: 1994

cpu: Intel 486DX@40Mhz ram: 4MB floppy, 120MB disk price: 2500 Deutsche Mark

The bad...

• Why did I sell the Amiga? This thing did not even have proper sound..

The good..

- Coding!
 - Turbo pascal, with Assembler for performance
 - Quick basic: 4-in-a-row game coded in my time at the army. Good enough to beat most people there ;)
- Gaming!

X

• Some games from the DOS era have aged well.

(rescaled factor 4)

4MB

1MB 32kb

Robotron EC1834



Release year: 1986

Received: 1999

4MB

1MB 32kb cpu: K1810WM86@4.9Mhz ram: 256kb floppy, 20MB disk

- Never seen it running.
- On the attic in Germany.. need to see what's up with this box.

Commodore Amiga500



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4MB

1MB 32kb

Back to the future!

- After many year, I got myself an Amiga.. again.
- Also Amiga emulators on Linux run quite nicely

Thinkpad T41



Release year: 2000

Received: 2004

cpu: Pentium M@1.6Ghz ram: 512MB 40GB harddisk, CD-ROM

- Around 1995, my first Linux experiences started
- 1998 I was the one with Linux at LAN parties
- Thinkpads like this worked really great with Linux - getting drivers for all hardware could be difficult by then
- Linux install parties were a thing!

X

• And Linux user groups, I'm member of {Thueringen,Tokyo} Linux User Groups

(rescaled ^{512MB} factor 128) 1MB

Alphastation 255



Release year: 1996

Received: 2003

cpu: DEC Alpha ram: 64MB 3.5inch ED floppy

512MB

1MB

In 2001, first job started..

• I got this box with Tru64 installed

- => They wanted a license to start rsh/telnet server! *rofl*
- The box had a happy life running NetBSD.
- Just cool to play with IPv6 and other tech on such a system



This was almost for work!

..because I was also administrating Solaris/SUN hardware for some time.

Now..

..this is another box running NetBSD. Actually want to install Solaris8, but the CD/DVD drive has issues.

Fun fact: network interfaces are names hme0 here, for "happy meal". sun++ had style.



Nintendo switch



Release year: 2017

Received: 2018

cpu: ARM A57@1Ghz ram: 4GB aarch64, runs RHEL/Fedora

Only for gaming!?

- Nah, I just bought the Nintendo Switch once a weakness allowed to boot Linux.
- I was probably the first one to run Fedora on this, details are here. Great platform to play with aarch64, better than Raspi4.
- Linux runs with GPU support, tensorflow!
- If you get newer models, careful: they fixed the issue, newer ones just run code which Nintendo blessed.

(rescaled factor 8)

4GB

1MB

Sony Playstation 4 pro



Release year: 2016

Received: 2020

cpu: AMD x86 ram: 8GB 1TB disk, AMD GPU

But now, gaming!

- Well, I played one single game..
- But then, actually, I was again more interested in running Linux on the hardware.
- It's actually quite nice! Linux on NVMe, connected via USB3. Linux distribution, 3D acceleration. The CPU is x86-64 AMD, 8 cores. And Steam runs!

X

• Running Linux on the PS4, article

(rescaled factor 2)

8GB

1MB

FiiO M3K mp3player



Release year: 2018

Received: 2021

8GB

1MB

cpu: Ingenig X1000/40nm ram: 64MB MicroSD card

Wait.. an mp3 player?

- Yea, running Linux and rockbox, which is OpenSource.
- plays mp3, but also mod (Amiga 4 channel), sid and much more
- I ported the "bad apple" animation, click here for the blog article and a video with the result.

X

What didn't make it..



- Commodore 64
- DEC vaxstation 3100 (but like the Alpha, I gave
- them to a colleague)
- Raspies (oh, do they count here?)
- Linux on Apple silicon is running nicely



Thanks, that's all for now!

Images: wikimedia.org, www.okqubit.net, fluxcoil.net