

# 1984: An Important Year in Home Computing

- US Government passes the Comprehensive Crime Control Act to combat computer fraud
- IBM PC and clones sold 2 million plus units
- 8.2% of American households now had a home computer
- 24.6% of employed adults were using a computer at work on a daily basis
- 30% of K-12 students were using a computer on a daily basis
- Average computer price was \$1684, equivalent to over \$5000 today







# Apple II

- Apple II introduced in 1976
- Quickly dominated the education market
- Apple II+ released in 1979 and sold through 82
- Apple IIe replaced II+ in 1983 and sold through 93
- 6502 CPU
- Color and high-resolution monochrome graphics



### Macintosh 128K

- Macintosh released in 1984
- First successful computer with a GUI.
- The Apple Lisa introduced in 1983 had flopped, the macintosh was a heavily cost reduced version
- Classic "1984" advertisement used for the launch
- 68000 CPU
- High-resolution monochrome graphics



# Apple IIc

- Released in 1984
- Compact/portable version of the lie
- Available with an LCD screen, docking station with CRT monitor or by itself
- Base computer is equivalent of having 5 expansion cards in a IIe.
- 65C02 CPU











### PET

- Introduced in 1977 and ran through 82
- Aimed at school and business use
- Ran CBM Basic, licensed from Microsoft in 1976
- 6502 CPU
- 80 column text with internal monochrome display, PETSCII graphics

### Vic-20

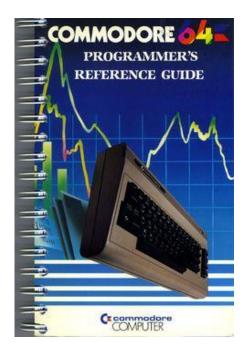
- Introduced in 1980 and ran through 85
- Aimed at home use, became very popular for gaming
- CBM Basic
- 6502 CPU 5Kb ram
- 22 column text, 16 color PETSCII graphics, composite video output

### C64

- Introduced in 1982 and ran through 94
- Cutting edge sound chip
- CBM Basic
- Best selling computer ever, 12.5-17
  million estimated units sold worldwide
- 6510 CPU with 64K ram
- 40 column text, 320 x 200 16 color
  PETSCII grapics with 8 sprites, svideo output

























# Tandy 1000

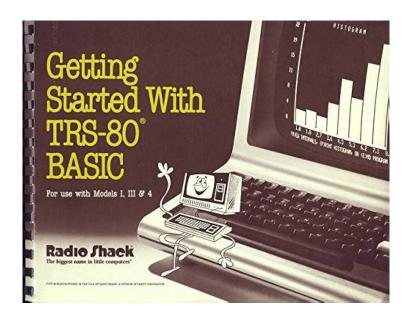
- Introduced in 1984 and ran through 86
- Tandy's first IBM PC compatible
- Aimed at home market and small business use
- 8088 CPU
- Very successful, created a new line of Tandy PCs
- CGA video with 16 colors and up to 640 x 200 resolution

### TRS 80 Model IV

- Introduced in 1983 and ran through 91
- Last of the Z80 based Tandy machines
- Available with or without floppy drives
- Aimed at home and small business use
- 80 column monochrome display

## Color Computer II

- Introduced in 1983 and ran through 86
- Follow up to address issues with the CoCo L
- 6809 CPU
- Available with up to 64K ram
- Aimed at the home education market
- Up to 8 colors and 256 x 192 graphics resolution, RF video output

















### The IBM Personal Computer

- Introduced in 1981 and ran through 87
- 8088 CPU with socket for an 8087 coprocessor
- IBMs first product aimed at home use
- Open architecture for 3<sup>rd</sup> party software and hardware, a new concept
- Introduced with PCDOS (MSDOS)
- Overwhelmingly popular with clones flooding the market soon after it's release.
- IBM released the XT in 1983, including more expansion slots and 10-20mb hard disk



#### The IBM AT

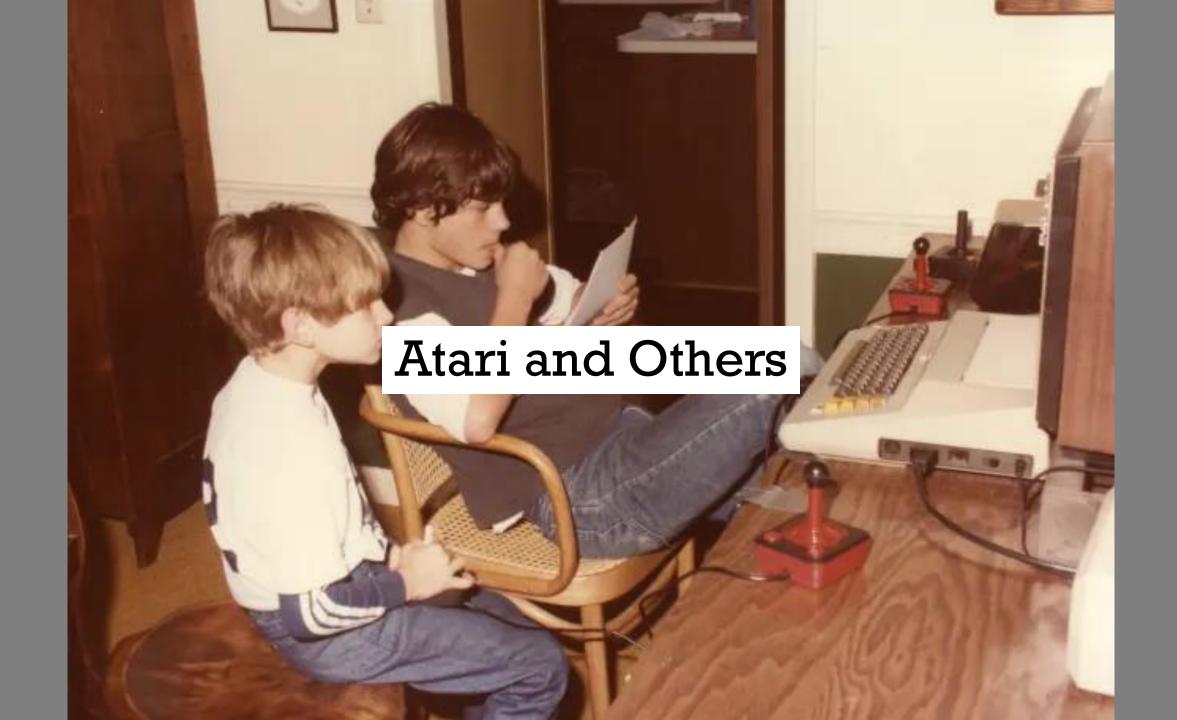
- Introduced in 1984 and ran through 87
- An industry first with the 80286 and 16 bit ISA bus
- Aimed at home and business use
- Fully backwards compatible with PC hardware and software
- First computer to use the now standard 101 key layout















### Atari 400 & 800

- Introduced in 1979 and ran through 84
- Aimed at the home entertainment market
- 400 had 4Kb of ram, 800 had 8Kb
- 6502 CPU
- Predominately used with cartridge software
- 128 color graphics and up to 8 sprites
- Allowed for up to 4 joysticks for 4 player games

#### Atari 600XL & 800XL

- Introduced in 1983 and ran through 85
- Aimed at the home entertainment market
- 600 had 16Kb of ram, 800 had 64kb
- 6502 CPU
- Predominately used with cartridge software
- 256 color graphics and up to 8 sprites
- An upgrade of the 400 & 800



#### Osborne 1

- Introduced in 1981 and ran through 1983
- The first commercially successful portable computer
- Included a large collection of software almost equal to the value of the computer
- Aimed at traveling executives
- 3 inch monochrome text display
- Z80 CPU
- CP/M operating system
- Follow up Osborne Executive introduced in 1983 just prior to bankruptcy



### Kaypro II

- Introduced in 1983 and ran through 1985 with some updates
- Direct competitor to the Osborne 1
- Included a large collection of software
- Aimed at home/business use
- Z80 CPU
- CP/M operating system
- 9 inch green monochrome text display
- Significantly cheaper than the Osborne, stealing sales



### Mattel Aquarius

- Introduced in 1983
- Z80 CPU, 4Kb of ram, Basic OS
- Limited cartridge games available
- 80 x 72 video resolution with 16 colors
- "A system for the 70s" as put by one computer magazine
- Mattel pulled from the shelves after 4 months due to extremely poor sales



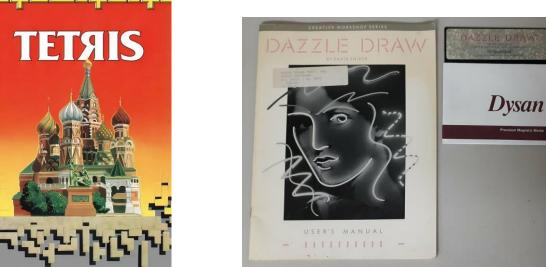
Franklin Ace 1000

- Introduced in 1983 and ran through 85
- Exact clone of the Apple II+, including OS and ROMs
- Follow up to the Ace 100, an Apple II clone
- Color video chip is installed by the user, an attempt to keep Apple happy
- Apple sues Franklin in 1984, wins but Franklin continues to sell computers

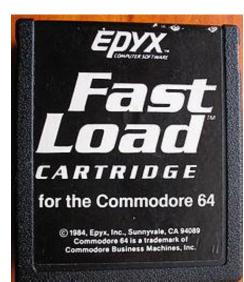
# Popular software in 1984....

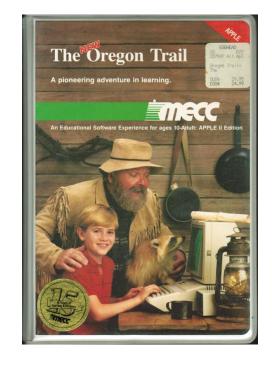






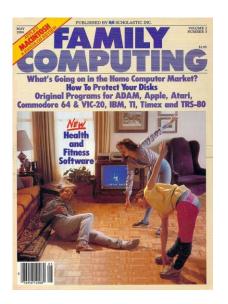


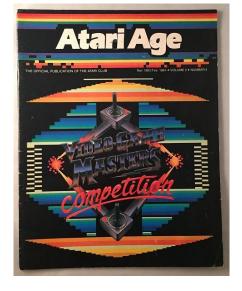




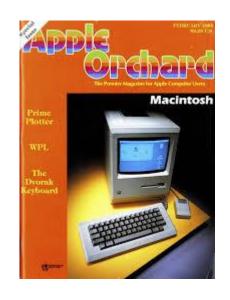


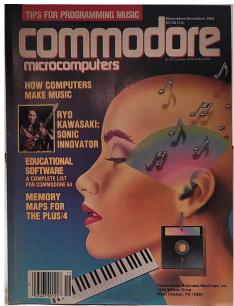
# Some computer publications from 1984...

















# Important Computer events in 1984...

- CD-ROM is invented by Phillips, utilizing an audio storage format for data storage
- Flash memory is invented by Toshiba, a vital component of all computer systems in the modern age
- The 3.5" floppy disk was introduced and widely accepted by manufacturers
- The first 3D printer was created and demonstrated
- HP introduces the first Laser printer, the Laserjet
- IBM introduced EGA video, a vast improvement over CGA
- The first home computer graphics pad was introduced, the Koala pad
- MMS (Multimedia Messaging Service) was invented
- ASN.1 protocols first defined and implemented
- The first wireless mouse developed by Logitech
- Dell Computer was founded May 3<sup>rd</sup>
- Atmel was founded by a former Intel employee
- Lenovo was founded November 1st
- First GUI online service Prodigy is launched



# Curious to try some 1984 computing?

Some online emulators to try.....

Commodore 64 emulator→	https://c64online.com/c64-online-emulator/
TRS80 emulator→	https://www.my-trs-80.com/
Commodore VIC-20 emulator→	https://www.mdawson.net/vic20chrome/vic20.php
IBM PC emulator	https://www.pcjs.org/machines/pcx86/ibm/5150/cga/
Apple IIe emulator→	https://www.scullinsteel.com/apple/e