Really early computer

Charles Babbage’s Difference Engine (reconstructed 1991)
Pre-Eniac Computers

George Stibitz’ hand-made relay computer, ca. 1939

Konrad Zuse’s electromechanical Z3, ca. 1941

Both of these machines work in binary
First Commercial Computers

Univac I – all vacuum tubes

The LEO – a business computer made by the Lyons Tea Company
Early Supercomputers

MIT Whirlwind – first real-time computer, first magnetic cores, ca. 1952

Manchester University Mark I, started in 1948
Mainframes

IBM 360/67, designed for timesharing

Besides the System \360, no one really counted
Minicomputers

DEC PDP-8

DEC VAX 11/780
Personal Computer

MITS Altair, ca. 1975

First
IBM PC, 1981

Xerox Alto, ca. 1973

First
Macintosh 1984
Memory Devices

Mercury Delay Lines

Williams Tube

Magnetic Core
Mass Storage

Magnetic Drum

IBM RAMAC 305 – First disk drive (5MB), 1956
Microprocessor

First Micro – Intel 4004, 1971

Intel 8086

Pentium P4
Embedded Computer

Apollo Guidance Computer – about 6K gates
Microprocessor Evolution

Intel 4004 (1971)
2000 Transistors

Nvidia GT300 (2009)
2.4B Transistors

Source: Intel
Source: Nvidia
Technology Evolution

2” Wafer (Intel 4004) vs. 12” Wafer (Intel Core 2 Duo)

Source: Intel