**Chronology of Personal Computers**

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This document is an attempt to bring various published sources together to present a timeline about Personal Computers.

This web document is a sneak peek at a book project of mine. Since 1994, I have browsed over 1000 sources for date information related to personal computers. This brief summary includes many of the essential happenings that shaped the industry. The full text contains close to 3000 entries. I have tried to keep it open-minded and unbiased, but the annoying fact is that "the winners write the history books".

References are numbered in [brackets], which are listed in [this file](http://www.islandnet.com/~kpolsson/comphist/compsrc.txt). A number after the dot gives the page in the source.

*Last updated: 2005 November 1.*

**1947**

**December 23**

* Three scientists at Bell Telephone Laboratories, William Shockley, Walter Brattain, and John Bardeen demonstrate their new invention of the point-contact transistor amplifier. The name transistor is short for "transfer resistance". (*Miniaturization of electronic circuits via the transistor is a key development making personal desktop computers small, reliable, and affordable.*) [185.84] [202.131] [266.9] [1064.237] [1149.69] [1298.186]

**1952**

**January**

* A complaint is filed against IBM, alleging monopolistic practices in its computer business, in violation of the Sherman Act. (*The government's antitrust investigations and trial against IBM will drag on for thirty years, finally being dismissed in 1982. IBM will cautiously monitor its microcomputer business practices, fearful of a repeat of government scrutiny.*) [569.138] [1298.186]

**1956**

**January**

* A U.S. District Court makes a final judgement on the complaint against IBM filed in January 1952 regarding monopolistic practices. A "consent decree" is signed by IBM, placing limitations on how IBM conducts business with respect to "electronic data processing machines". (*Though personal computers are twenty years in the future, this consent decree will limit IBM's success and ability to compete in the marketplace.*) [569.138]

**(month unknown)**

* The first transistorized computer is completed, the TX-O (Transistorized Experimental computer), at the Massachusetts Institute of Technology. (*While not a microcomputer, this is a step forward in the evolution of reducing the size of computers.*) [624]

**November**

* IBM introduces the RAMAC 350 Disk File, the first hard drive, with 50 24-inch diameter platters. Total capacity is 4.4 MB. (*The first hard drives for personal computers will appear in about 15 years, also with a capacity of about 5 MB.*) [609.89] [798.152] [838.S2] [945.61] [1089.392] [1606.54] [1612.55]

**1958**

**September 12**

* At Texas Instruments, Jack Kilby completes building the first integrated circuit, containing five components on a piece of germanium half an inch long and thinner than a toothpick. [110] [556.9] [732.23] [766.151] [1298.154] [1697.3] (October [1064.237]) (1959 [9] [606.5])

**1959**

**(month unknown)**

* At Fairchild Semiconductor, Robert Noyce constructs an integrated circuit with components connected by aluminum lines on a silicon-oxide surface layer on a plane of silicon. [606.5] [732.25] [766.151] [1298.186] (1958 [1064.237])

**1960**

**(month unknown)**

* Digital Equipment introduces the first minicomputer, the PDP-1, for US$120,000. It is the first commercial computer equipped with a keyboard and monitor. PDP stands for Program, Data, Processor. (*The minicomputer represents an important size and power step from mainframe toward personal computers.*) [203.96] [415.36] [1112.140] [1149.20,31] (minicomputer introduced in 1972 [205.4]) (PDP means Programmed Data Processor [1559])

**1963**

**(month unknown)**

* Douglas Engelbart invents the mouse pointing device for computers. (*The mouse will be re-born some twenty years in the future, when personal computers become powerful enough to support graphical user interfaces.*) [1112.140] [1254.88] [1298.186] (1962 [1084.30]) (1964 [1606.54])

**1964**

**May 1**

* At Dartmouth College, in Hanover, New Hampshire, the BASIC programming language runs for the first time. The language was developed by professors John Kemeny and Thomas Kurtz, BASIC is an acronym for Beginners All-purpose Symbolic Instruction Code. It is based on FORTRAN and Algol, and was developed for a General Electric 225 mainframe computer. (*BASIC becomes the most popular introductory programming language for microcomputers, often stored in ROM and executing commands interactively.*) [9] [132] [266.140] [801.65] [1038.155] [1069.268] [1149.23] [1280.40] [1299.26] [1556.9] (1965 [1112.142])

**(month unknown)**

* The American Standard Association adopts ASCII (American Standard Code for Information Interchange) as a standard code for data transfer. (*This standard, defining 7-bit character codes, will be used for most personal computers in the Western world.*) [1112.140]

**1965**

**(month unknown)**

* Gordon Moore, head of research and development for Fairchild Semiconductor, predicts that transistor density on integrated circuits would double every 12 months for the next ten years. (*This prediction is revised in 1975 to doubling every 18 months, and becomes known as Moore's Law.*) [29.91] [732.18] [1298.186] (1965 [876.17] [941.58] [947.102] [1000.20]) (every 18 months [876.17] [947.102]) (every 18-24 months [941.58])

**1966**

**May**

* Steven Gray founds the Amateur Computer Society, and begins publishing the ACS Newsletter. (*Some consider this to be the birth-date of personal computing.*) [208.64]

**1968**

**June 4**

* The US Patent & Trademark Office grants patent 3,387,286 to Dr. Robert Dennard, of the IBM T.J. Watson Research Center. The patent is for a one-transistor DRAM cell and the basic idea in the three-transistor cell. (*Dynamic RAM (Random Access Memory) will become the standard short-term storage medium for programs and data during processing.*) [911]

**(month unknown)**

* Robert Noyce and Gordon Moore found Intel Corporation. (*Intel begins as a memory chip producer, but will soon switch to the new field of microprocessors.*) [346.58] [1280.40]

**October 4**

* An advertisement in *Science* magazine by Hewlett-Packard introduces first programmable scientific desktop calculator, which Hewlett-Packard calls "the new Hewlett-Packard 911A personal computer". (*This is claimed as coining the term "personal computer".*) [213.5] [1559]

**December**

* Douglas C. Engelbart, of the Stanford Research Institute, demonstrates his system of keyboard, keypad, mouse, and windows at the Fall Joint Computer Conference in San Francisco's Civic Center. He demonstrates use of a word processor, a hypertext system, dynamic file linking, and remote collaborative work with colleagues on a shared screen. [180.42] [185.98] [716.88] [753] [1280.40] [1298.186]

**1969**

**January 17**

* United States attorney general Ramsey Clark charges IBM with unlawful monopolization of the computer industry, and requests the federal courts break it up. (*13 years later, the US Justice Department will drop the case.*) [606.10] [1149.166] [1298.186] [1559]

**(month unknown)**

* Honeywell releases the H316 "Kitchen Computer", the first home computer, priced at US$10,600 in the Neiman Marcus catalog. [1112.142]
* Busicom, a Japanese calculator manufacturer, asks Intel to build a custom-chip set for a new calculator. Ted Hoff suggests that instead of set of chips, they create a general-purpose programmable chip. (*Intel is initially not anxious to produce processor chips to compete with their customers for memory chips, but eventually decides to take a chance in this new field.*) [106.103] [900] [1038.145] [1064.240] (ETI company [266.11])

**May**

* Advanced Micro Devices is founded by Jerry Sanders and seven others from Fairchild Semiconductor. [141] [732.54] [1280.40]

**(month unknown)**

* Computer Terminal Corporation visits Intel, asking them to integrate about 100 TTL components of their Datapoint 2200 terminal's 8-bit CPU into a few chips. Ted Hoff says they could put it all on one chip, so Intel and CTC sign a contract for it. (*The resulting chip becomes Intel's 8008 processor.*) [1038.148]
* IBM builds SCAMP, one of the world's first personal computers. [606.22]
* For the Busicom project, Intel's Marcian (Ted) Hoff and Stan Mazor design a 4-bit CPU chip set architecture that could receive instructions and perform simple functions on data. The CPU becomes the 4004 microprocessor. [266.12] [556.9] [1038.146]

**October**

* Engineers from Japan's Busicom company meet with Intel to inspect work on their calculator IC project. They accept the Intel design for a chip set, and sign an exclusive contract for the chips. [208.67] [556.9] [606.17] (ETI company [266.13])

**(month unknown)**

* Intel announces a 1 kilobit RAM chip, which has a significantly larger capacity than any previously produced memory chip. [9]

**1970**

**March**

* Xerox announces that it will create a computer laboratory to research digital technology. (*The resulting laboratory, PARC, will develop many personal computer technologies, but fail to bring them to market.*) [716.49]

**(month unknown)**

* Intel begins work on the layout of the circuit for what would be the 4004 microprocessor. Federico Faggin directs the work. [266.13]

**June**

* Xerox opens the Palo Alto Research Center (PARC). [266.267] [716.56] [1112.142] (1969 [203.59]) (founded by Kay Power in 1972 [343.41])

**(month unknown)**

* Bell Labs develops Unix. (*Unix will become the dominant operating system of high end microcomputers, or workstations.*) [1112.142] (1969 [1280.40])
* Intel creates the 1103 chip, the first generally available DRAM memory chip. [176.74] [202.163] [1112.142] [1280.40]

**December**

* Gilbert Hyatt files a patent application entitled "Single Chip Integrated Circuit Computer Architecture", the first basic patent on the microprocessor. (*Twenty years later, the US Patent Office will grant his patent, but five years after that will overturn the award.*) [162] [185.193] [590.5]
* At Intel, the first run of 4004 microprocessors is fabricated. However, due to a missing masking layer, the entire run is unusable. At the time the chip is called a "mini-programmer". [106.104] [900] [1038.146]

**1971**

**January**

* At Intel, a second fabrication run of 4004 processors is made. This time, the processors work with only minor errors. [1038.146]

**February**

* At Intel, a third fabrication run of 4004 processors is made, with corrected masks. [1038.146]

**March**

* Intel ships sample calculator chip sets to Busicom, each set consisting of four 4001 ROM chips, two 4002 RAM chips, two 4003 I/O chips, and one 4004 CPU. [1038.146] (February [556.10])

**(month unknown)**

* Intel decides to market the 4000 family. [1038.148]
* Intel renegotiates its contract with Busicom, gaining Intel the right to market the 4004 microprocessor openly in non-calculator applications. Intel returns US$60,000 to Busicom in exchange for product rights to the 4004 processor. [266.14] [606.18] [900] [1038.148]
* IBM introduces the 23FD floppy disk drive. It uses an 8-inch floppy plastic disk, called a "memory disk", coated with iron oxide on one side. The drive can only read the disks. [202.170] [971.F9] [1089.392] [1280.41] (1965 [363.46]) (1970 [1112.142])
* Texas Instruments develops the first microcomputer-on-a-chip, containing over 15,000 transistors. [714] [1280.41]

**June**

* Texas Instruments runs an advertisement in *Electronics* magazine, showing a "CPU on a Chip" that it developed for Computer Terminal's Datapoint 2200 terminal. (*However, the chip is never marketed due to unresolved problems in operation.*) [1038.148]
* Gary Boone, of Texas Instruments, files a patent application relating to a single-chip computer. [590.5]

**(month unknown)**

* 3M introduces a 1/4-inch tape drive and cartridge, the first such system practical for desktop computer use. Tape storage capacity is 30 MB. [1089.364]
* The National Radio Institute introduces the first computer kit, for US$503. [208.66]
* The Kenback Corporation introduces the Kenback-1 computer, for US$750. It uses a 1 kB MOS memory made by Intel. The computer does not use a microprocessor, but incorporates discrete logic chips and shift registers. [208.66] (Kenbak [1112.146] [1299.65])
* Niklaus Wirth invents the Pascal programming language. (*Pascal was developed as a teaching language, but becomes a popular general-use programming language.* ) [132] [1112.142] (1969 [447.385])
* Wang Laboratories introduces the Wang 1200 word processor system. (*Though not a general purpose computer system, dedicated word processing systems such as this became early targets of desktop computer systems.*) [202.185]
* Intel introduces the 1101 chip, a 256-bit programmable memory, and the 1701 chip, a 256-byte erasable read-only memory (EROM). [208.70]
* Datapoint (formerly Computer Terminal) decides it no longer needs the 1201 microprocessor that Intel is working on for them. Datapoint agrees to let Intel use its architecture in exchange for canceling the development charges. (*This chip becomes the Intel 8008 processor.*) [1038.148]

**August**

* The newly developed device, the EPROM, is integrated with the 4004 to enhance development cycles of microprocessor products. [778]

**(month unknown)**

* Steve Wozniak and Bill Fernandez build a computer with lights and switches, mostly from chips rejected by local semiconductor companies. They call it the Cream Soda Computer, as they drank Cragmont cream soda while they worked. [266.205] [548.414] (fall 1970 [930.26])

**November**

* In major trade publications including Electronic News, Intel officially introduces the MCS-4 (Microcomputer System 4-bit) microcomputer system. It is comprised of the 4001 ROM chip, 4002 RAM chip, 4003 shift register chip, and the 4004 microprocessor. Clock speed of the CPU is 108 kHz. Performance is 60,000 operations per second. It uses 2300 transistors, based on 10-micron technology. It can address 4 kB memory via a 4-bit bus. Initial price is US$200. Documentation manuals were written by Adam Osborne. The die for the chip measures 3x4 mm. [9] [62] [176.74] [202.165] [266.14] [296] [393.6] [556.11] [900] [953.28] [1254.78] [1280.41] (108 kHz [1233.135]) (1972 [339.86])

**1972**

**(month unknown)**

* Federico Faggin urges Intel management to allow him to begin development of a successor to the 8008 processor. Management decides to wait to see how reception of the 8008 goes first. [1038.150]

**April**

* Intel introduces its 200 kHz 8008 chip, the first commercial 8-bit microprocessor, part of the MCS-8 product family of chips. It accesses 16 kB of memory. It uses 3500 transistors, based on 10-micron technology. Speed is 60,000 instructions per second. The processor was originally developed for Computer Terminal Corporation (later called Datapoint). [9] [62] [106.104] [208.66] [266.13] [296] [556.10] [900] [953.28] [1038.150] [1064.246] [1280.41] (1971 [208.70] [266.xiv]) (1973 [1146.50])

**(month unknown)**

* At Xerox PARC, Alan Kay proposes they build a portable personal computer, called the Dynabook, the size of an ordinary notebook. PARC management does not support it. [716.84] (1971 [910.218] [1141.67])
* Xerox PARC engineers Chuck Thacker and Butler Lampson ask Alan Kay if they could try building the Dynabook. (*They proceed, but the result is the Alto, a large desktop workstation.*) [1141.67]
* Brian Kernighan and Dennis Ritchie develop the C programming language. (*C becomes perhaps the most popular language for professional software development, and is the basis for the C++ object-oriented extensions ten years later.*) [176.121] [865.48] (1974 [9]) (1975 [132])
* Wang Laboratories introduces its first small business computers, the 2200 series. [202.185]
* Intel management allows Federico Faggin to begin work on an improved 8008 processor. [1038.150]

**August**

* Scelbi Computer Consulting Company begins design work on what would be the Scelbi-8H microcomputer. [208.71]

**(month unknown)**

* The People's Computer Company is founded. [266.xiv]
* Xerox decides to build a personal computer to be used for research. Project "Alto" begins. [263.58] [266.267] [716.85]
* Canada's Automatic Electronic Systems introduces the world's first programmable word processor with a video screen, the AES 90. The computer system uses magnetic disks for storage, and a custom-built microprocessor. [615.94]
* Gary Kildall implements PL/I on the Intel 4004 processor. [266.xiv]
* At Xerox PARC, Jack Hawley develops the first digital mouse. [1304.C4]
* Rockwell announces the PPS-4 microprocessor family, similar to Intel's MCS-4 (with 4004 processor). [1038.150]
* Traf-O-Data develops a primitive microcomputer based on Intel's 8008 microprocessor for recording automobile traffic flow on a highway. [266.xiv] [346.12]
* 5.25-inch diskettes first appear. [346.28] (1978 [971.F9])

**October**

* The first issue of *People's Computer Company* magazine is released. [353.172]

**November**

* Researchers at PARC begin work on a prototype Alto personal computer. [716.93]

**(month unknown)**

* At Texas Instruments, Gary Boone and Michael Cochran create the TMS1000 one-chip microcomputer. It integrates 1 kB ROM and 32 bytes of RAM with a simple 4-bit processor. [556.11] [1064.246] (1974 [110])

**1973**

**January**

* Intel files a patent application for a "memory system for a multichip digital computer". [556.30]

**March**

* The first prototype Alto workstation computer is turned on at Xerox' Palo Alto Research Center. Its first screen display is a bitmapped image of the Sesame Street character Cookie Monster. [203.59] [716.14,93] (completed in 1974 [266.267])

**April**

* The first operational Alto computer is completed at Xerox PARC. [714.95,167]

**(month unknown)**

* In France, R2E introduces the Micral microcomputer, powered by an Intel 8008 microprocessor. It is the first commercial non-kit computer based on a microprocessor. The term "microcomputer" is first used in print in reference to the Micral. [900] [1112.146] [1299.65]

**May 22**

* At Xerox PARC, Bob Metcalfe invents the Ethernet computer connectivity system, describing in a memo how the technology would work. The name "Ethernet" refers to medium-independent transmission of data packets, and is based on a discredited physical theory of an existing "ether" in space allowing transmission of light rays from the sun to the Earth. [156] [1559]

**June**

* At the Lakeside prep school in Washington state, Bill Gates tells a friend "I'm going to make my first million by the time I'm 25.". [1149.51]

**(month unknown)**

* Gary Kildall creates the PL/M programming language for the Intel 8008, based on PL/I. [266.137]
* IBM introduces the IBM 33FD floppy disk drive. The drive can read and write both sides of an 8-inch disk, storing a total of 400 kB. Code name during development was Igor. [1089.392]
* IBM introduces the IBM 3340 hard disk unit, known as the Winchester, IBM's internal development code name. The recording head rides on a layer of air 18 millionths of an inch thick. It uses four 8-inch diameter platters, giving it a capacity of 70 MB. [202.170] [838.S3] [1310]
* Shugart Associates announces the SA901 disk drive, an 8-inch floppy drive compatible with the IBM 33FD. [1089.392]
* Shugart Associates announces an 800 kB version of its SA901 8-inch floppy drive. [1089.392]
* Scelbi Computer Consulting Company offers the first computer kit in the U.S. using a microprocessor, the Intel 8008-based Scelbi-8H, for US$565, with 1 kB programmable memory. An additional 15 kB is available for US$2760. The name Scelbi stands for SCientific, ELectronic, and BIological. [9] [208.66] (1974 [1299.65])

**September 8**

* In Toronto, Ontario, Canada, Mers Kutt of Micro Computer Machines officially introduces the MCM-70 personal computer. It features Intel 8008 processor, plasma screen, cassette drives, keyboard, 2 to 8 kB RAM, 14 kB ROM. Weight is 20 pounds; price is CDN$4500. [1558.12]

**December**

* At Intel, the first fabrication run of the 8080 processor is made. [1038.150]

**(month unknown)**

* Gary Kildall writes a simple operating system in his PL/M language. He calls it CP/M (Control Program/Monitor). [266.138] (Control Program for Microcomputer [346.50]) (Control Program / Microprocessor [1076.18]) (1974 [443.433] [1298.187])

**1974**

**April**

* Intel releases its 2 MHz 8080 chip, an 8-bit microprocessor. It can directly access 64 kB of memory via 2-byte memory addressing. It incorporates 6000 transistors, based on 6-micron technology. Speed is 0.64 MIPS. [9] [41] [108] [176.74] [266.30] [296] [346.19] [879.116] [953.28] [1298.187] (1973 [208.70]) (March [1038.150])

**(month unknown)**

* Rockwell introduces the PPS-8 microprocessor family, similar to but slower than Intel's 8080 processor. [1038.150]
* In a desperate act to save his failing calculator company, MITS company owner Ed Roberts begins building a small computer based on Intel's new 8080 chip, with plans to sell it for the unheard-of price of US$500. Roberts is able to buy 8080 chips from Intel for US$75 each in large volume. [185.109] [266.31] [1149.72] [1299.66]

**June**

* Intel receives a patent for a "memory system for a multichip digital computer". [556.30]

**(month unknown)**

* Southwest Technical Products Company introduces the TVT-11 kit for US$180, and ASCII keyboard kit for US$40. [208.67]
* National Semiconductor introduces the 16-bit IMP-16 microprocessor. [1064.246] (1972 [208.70])
* Gary Kildall, of Microcomputer Applications Associates, develops the CP/M operating system for Intel 8080-based systems. [9] [176.64] [258.224]
* RCA releases the 1802 processor, running at 6.4 MHz. It is considered one of the first RISC chips. [32] [556.12]
* Engineer David Ahl suggests Digital Equipment produce an inexpensive version of its PDP-8 minicomputer, for US$5000. Top management call the idea foolish. [203.10]

**July**

* *Radio Electronics* magazine publishes an article on building a Mark-8 microcomputer, designed by Jonathan Titus, using the Intel 8008 processor. [208.67]

**(month unknown)**

* Federico Faggin and Ralph Ungermann leave Intel to form a competing microprocessor company. [1038.150]

**August**

* MITS completes the first prototype Altair 8800 microcomputer. His original name for the computer is "PE-8", in honor of the *Popular Electronics* magazine. [744.2] [900]
* Bill Mensch, Chuck Peddle, and others leave Motorola to work for MOS Technology. [824]

**(month unknown)**

* Ed Roberts decides that the programming language of his new microcomputer should be BASIC. [1149.74]
* David Bunnell, MITS technical writer, suggests the name "Little Brother" for the new MITS computer. [1149.72]

**September**

* *Creative Computing*, the first magazine for home computer users, is founded. [9]
* Hal Singer starts the Micro-8 Newsletter for enthusiasts of the Mark-8 microcomputer. [208.67]
* Bravo is developed for the Xerox Alto computer. It is the first WYSIWYG program for a personal computer. [477.158]
* Despite being US$300,000 in debt, Ed Roberts is able to borrow an additional US$65,000 from the bank to complete work on what would become the Altair computer. [266.33] [1299.66]

**(month unknown)**

* Gary Kildall and John Torode begin selling the CP/M disk operating system for microcomputers. [266.xv] [1149.175]
* Motorola introduces its 6800 chip, an early 8-bit microprocessor used in microcomputers and industrial and automotive control devices. The 6800 was designed by Chuck Peddle and Charlie Melear. [556.11] [1038.150] [1146.50]

**November**

* Hal Chamberlin and others begin publishing *The Computer Hobbyist* magazine. [208.67]
* Zilog is founded. [1038.150] (1975 [233.194])

**(month unknown)**

* Railway Express loses Ed Robert's only prototype Altair computer, en route to New York for review and photography for publishing by *Popular Electronics* magazine. [266.34] [353.190] [1149.73] [1299.66]
* MITS engineers create an empty Altair box with switches and lights on the front, send it to Les Solomon for display on the cover of Popular Electronics. [1149.73]
* Lauren Solomon, 12 year old daughter of Les Solomon, publisher of *Popular Electronics*, suggests the name "Altair" for Ed Robert's new microcomputer. Altair was the name of where Star Trek's Enterprise was going that night on TV. [266.34] [353.190] [930.31] [1149.72]

**December**

* Scelbi sells its last Scelbi-8H, discontinuing hardware to concentrate on software. [208.71]
* *Popular Electronics* publishes an article in its January 1975 issue by MITS announcing the Altair 8800 computer for US$397 in kit form, or US$439 assembled. It features a 2 MHz Intel 8080 processor, and 256 bytes of RAM. The Altair pictured on the cover of the magazine is actually a mock-up, as an actual computer was not available. [9] [106.104] [123] [185.109] [192.3] [208.67] [218] [205.18] [1298.187] [1299.63] (US$397 [266.35] [346.19] [353.190] [415.15])
* Paul Allen sees the *Popular Electronics* issue with the Altair story, and tells Bill Gates that the microcomputer revolution is just beginning. [346.21] [1149.67]

**(month unknown)**

* Intel introduces the 3000 series of microprocessor chips. [949.361]

**1975**

**January 1**

* Bill Gates signs a document formalizing the existence of the Traf-O-Data company. Owners of assets are: Bill Gates 43%, Paul Allen 36%, and Paul Gilbert 21%. This step was necessary for Gates and Allen to use Traf-O-Data's 8008 simulator to develop BASIC for the Altair. [1299.69]

**January 2**

* Bill Gates and Paul Allen write to MITS, saying they have a BASIC language for the Intel 8080 processor. They propose licensing it for use on the Altair in exchange for royalty payments. (*They then spend the next eight weeks writing the software.*) [1149.74] [1299.70]

**January**

* Bill Gates begins writing BASIC for the Altair, basing it on Digital Equipment's RSTS-11 BASIC-PLUS. [1299.71]
* Harry Garland and Roger Melen receive Altair number 0002. They had proposed in December to attach their Cyclops camera to the Altair, for use as a security camera. [266.38]
* At Harvard, Monte Davidoff helps Bill Gates and Paul Allen write the floating-point routines for their 8080 BASIC. [1149.78]

**(month unknown)**

* Ed Roberts coins the term "personal computer" as part of an advertising campaign for the Altair. [1149.72]

**February**

* The Xerox PARC-developed Gypsy word-processing system is first field-tested by end-users. Gypsy is one of the first word processors termed "WYSIWYG", meaning what you see is what you get. Gypsy runs on the PARC-developed Alto personal computer. [716.111]
* Paul Allen flies from Harvard to Albuquerque, New Mexico, to meet with Ed Roberts at MITS, to demonstrate the newly written BASIC interpreter for the Altair. Allen writes a paper tape reader on the plane trip, for the Altair to load the BASIC software. [346.24,257] [1149.80] [1299.74]
* At MITS, Paul Allen enters the paper tape loader on an Altair with 7 kB RAM, the Altair reads the paper tape, and it is ready to execute BASIC instructions. Allen types "PRINT 2 + 2", and the Altair responds "4". Despite Gates and Allen never having touched an Altair before, their BASIC works flawlessly. Paul then types in the BASIC source code for a Lunar Lander game from a book. This becomes the first software program ever run on what would later become Microsoft BASIC. [346.24,257] [606.17] [1149.80] [1299.74]
* Bill Gates and Paul Allen license their newly written BASIC to MITS, their first customer. MITS will pay a small royalty with a ceiling of US$180,000. This is the first computer language program written for a personal computer. [123] [176.122] [389.28] [1701.158]

**March**

* Fred Moore and Gordon French hold the first meeting of a new microcomputer hobbyist's club in French's garage, in Menlo Park, California. 32 people meet, including Bob Albrect, Steve Dompier, Lee Felsenstein, Bob Marsh, Tom Pittman, Marty Spergel, Alan Baum, and Steven Wozniak. Bob Albrect shows off an Altair, and Steve Dompier reports on MITS, and how they had 4000 orders for the Altair. (*After a few meetings, the club is given the nickname "Homebrew Computer Club".*) [185.110] [266.104] [301.55] [346.18] [353.200] [346.257] [930.31] [1149.98] [1298.187] [1299.80] (April [208.67] 266.39)
* Ed Roberts hires Paul Allen as Vice President and Director of Software at MITS. [266.40] [1149.83] [1299.76] (May [346.25])

**(month unknown)**

* The second meeting of Fred Moore/Gordon French's computer hobbyists group is held at the Stanford AI lab. 40 attend. The name for the group is chosen: Bay Area Amateur Computer Users Group - Homebrew Computer Club. [353.203]

**April**

* At MITS, David Bunnell starts the Computer Notes newsletter. [1149.92] [1299.77]
* The third meeting of the Homebrew Computer Club is held. [353.208]
* The fourth meeting of the Homebrew Computer Club is held at the Peninsula School in Menlo Park. Steve Dompier plays parts of the music "Fool on the Hill" and "Daisy" using the Altair and a radio. [346.20] [353.203] [1299.80]
* Bill Gates and Paul Allen found Micro-Soft (the hyphen is later dropped). [41] [1149.90] [1280.42] [1298.187] [1526.82] (July [346.26]) (August [346.257])
* MITS delivers the first generally-available Altair 8800, sold for US$375 with 1 kB memory. [208.67] (256 bytes [266.38])
* Bob Marsh and Gary Ingram found Processor Technology. [266.45] [353.208]

**May**

* The Amateur Computer Group of New Jersey is formed. [208.67] [266.xv]

**June**

* MOS Technology announces the MC6501 processor for US$20 and the MC6502 for US$25. [9] [261.304] (Fall [824])
* Bob Marsh delivers the first Processor Technology 4 kB memory boards for the Altair. [266.110] [353.210]
* The Southern California Computer Society is formed. [266.184]
* At Xerox, John Ellenby proposes they build the Alto II personal computer, a modified Alto, making it easier to produce, more reliable, and more easily maintained. His request is approved. [716.205]
* Paul Terrell signs a deal with MITS in which Terrell would receive a 5% commission on every Altair sold in Northern California, for promoting and selling the Altair. [266.188]

**(month unknown)**

* Motorola sues MOS Technology over the similarity of the 6501 and 6502 processors to the 6800. (*In an out-of-court settlement, MOS Technology withdraws the 6501 from the market.*) [824]
* At IMS Associates, Joseph Killian begins designing the first Altair-compatible microcomputer. [266.63] [1702.11]
* Hard drive maker Tandon is formed. [971.F9]
* Gordon Moore revises his 1965 prediction about transistor density, from doubling every 12 months to doubling every 18 months. This becomes known as Moore's Law. [1000.20]
* Intel develops the Multibus 8-bit memory bus structure. [999.77]
* Wavemate releases the Jupiter II computer kit. [218]
* Southwest Technical Products releases the M6800 computer kit. [218] [208.67]
* Microcomputer Associates releases the JOLT computer kit. [218]
* In the USSR, the Elektronika S5-01 is introduced. The microprocessor is the K586 NMOS chip series. [949.356]
* MITS begins work on a Motorola 6800-based Altair. [266.47]
* MITS sales of Altair computers hits US$1 million. [346.31]
* Sphere Corporation introduces its Sphere I computer kit, featuring a Motorola 6800 CPU, 4 kB RAM, ROM monitor, keyboard, and video interface, for US$650. [9.200] [16.371]
* Harry Garland and Roger Melen found Cromemco. The company is named after the Crowthers Memorial dorm at Stanford. [266.xv] [353.207]
* Digital Equipment introduces the LSI-11 microcomputer (board with microprocessor), with 8 kB RAM. It is the first American microcomputer using a 16-bit architecture. [949.358]
* IBM's John Cocke begins work on project "801", to develop a scaleable chip design that could be used in small computers as well as large. [205.103]
* Wayne Green founds *BYTE Magazine*. [713.219]
* A patent on Ethernet computer networking is applied for by David Boggs, Butler Lampson, Bob Metcalfe, and Charles Thacker of Xerox PARC. [1298.187]

**July**

* Dick Heiser opens Arrow Head Computer Company, subtitled "The Computer Store", in Los Angeles, selling assembled Altair computers, boards, peripherals, and magazines. This is the first independent retail computer store in the USA. [266.185] [684.41] [1299.85]

**July 22**

* Bill Gates and Paul Allen sign a licensing agreement with MITS, for their implementation of the BASIC language. Gates and Allen receive US$3,000 immediately, with royalties of US$30 per copy of 4K BASIC, and US$35 for 8K BASIC. [299.8] [1149.92] [1299.82]

**July**

* Bill Gates and Paul Allen ship 4K and 8K versions of BASIC v2.0 to MITS. [123] [1149.92] [1299.83]

**(month unknown)**

* IMS Associates announces the IMSAI 8080 microcomputer. [346.32] [647.95]

**September**

* IBM's Entry Level Systems unit unveils the IBM 5100 Portable Computer. It is a briefcase-size minicomputer with BASIC, 16 kB RAM expandable to 64 kB, tape storage drive holding 204 kB per tape, keyboard, and built-in 5-inch screen. Price: US$8975-19975. Weight: 55 pounds. Code name during development was Project Mercury. [9] [197.xi] [606.22] [902.137] [1112.144] [1310] (Price over US$10,000 [203.10])
* The first issue of *BYTE magazine* is published. [9] [266.159]

**October**

* The October issue of MITS' Computer Notes newsletter announces availability of BASIC 2.0 from Micro Soft for the Altair 8800, in 4K and 8K editions. (*This is the earliest known reference to "Micro Soft".*) [9] [123] [208.67] [346.257] [1299.86]
* The October issue of MITS' Computer Notes newsletter announces a new Altair 680 based on the Motorola 6800 processor. Price is US$293 as an unassembled kit. [1299.86]

**November**

* In Kansas City, the first standards conference of the microcomputer industry is held. A single standard is agreed to for storing data on audio cassette tapes. [1299.89]

**(month unknown)**

* MITS decides to release a floppy disk storage system for the Altair computer. [1149.98]

**December**

* Paul Terrell opens the Byte Shop, in Mountain View, California, one of the first computer stores in the United States. [34] [266.189]
* Bill Gates writes an open letter to microcomputer hobbyists, complaining about software piracy, to be published in an Altair newsletter. [346.30]
* IMS Associates hires Ed Faber as Director of Sales. [266.193] (1976 January [266.64])
* Lee Felsenstein and Bob Marsh begin work on a complete computer, 8080-based with a keyboard and color video display capabilities built-in. [353.240]

**December 16**

* IMS Associates begins ships its first IMSAI 8080 computer kits to customers. [1702.18]

**December 31**

* To date, MITS has sold 2,000 Altair 8800 systems. IMS Associates has shipped 50 IMSAI 8080 systems. [176.54] [1702.18] (5,000 [1298.187])

**1976**

**January**

* David Jackson founds Altos Computer Systems. [163.58]
* Paul Terrell begins signing dealership agreements, allowing Byte Shop franchises to open elsewhere in the US. [266.189]
* IMS Associates raises the price of the IMSAI 8080 computer from US$439 to US$499, so that resellers could be given a greater discount (15%). [1702.33]
* Ric Weiland completes writing 6800 BASIC for Micro-Soft. [1299.88]

**January 24**

* IMS Associates fires 17 employees, nearly half of its workforce. [1702.20]

**(month unknown)**

* Micro-Soft licenses 6800 BASIC to MITS for a flat fee of US$31,200, to be paid US$1300 per month over two years. [1299.95]
* MITS unveils the Altair 680b, based on the Motorola 6800 microprocessor. [192.42] [548.303]
* Steve Wozniak offers his new computer (Apple) to Hewlett-Packard, who reject it as a non-viable product. [930.34]
* Hewlett-Packard begins Project Capricorn, to build a computer-like calculator. (*The result will be the HP-85 computer.*) [266.264]

**February 3**

* David Bunnell publishes in his "Computer Notes" Altair newsletter an article from Bill Gates, complaining of software piracy. [346.30] [389.28] [1149.102] [1299.91]

**February**

* Bill Gates writes software routines for BASIC on the Altair to use diskettes for storage. [346.28] (January [1299.90])
* Lee Felsenstein and Bob Marsh deliver the first Processor Technology Sol computer to *Popular Electronics* magazine publisher Les Solomon. [353.242]

**(month unknown)**

* MOS Technology ships the 6502 microprocessor. The 6502 was developed by Chuck Peddle. [556.11]
* MOS Technology announces the KIM-1 Microcomputer System, with 1 MHz 6502 CPU, 1 kB RAM, 2 kB ROM monitor, 23-key keypad, LED readout, cassette and serial interfaces, for US$245. [193.14] [261.304] (1975 [9])

**March**

* Steve Wozniak and Steve Jobs finish work on a computer circuit board, that they call the Apple I computer. [46]
* IMS Associates raises the price of the IMSAI 8080 computer from US$499 to US$599, so that resellers could be given a greater discount (25%). [1702.33]

**March 26**

* The First Annual World Altair Computer Convention is held, at the Airport Marina Hotel near Albuquerque, New Mexico, over three days. This is the first such convention for the microcomputer industry. At the conference, Bill Gates explains his position on software piracy. In the hotel's penthouse suite, Processor Technology holds its own "booth" to promote their 4 kB memory boards for the Altair. [123] [266.46] [346.31] [1149.104] [1299.93]

**March**

* Paul Terrell incorporates Byte, Inc. [266.189]
* Intel introduces the 5 MHz 8085 microprocessor. Speed is 0.37 MIPS. It uses 6500 transistors, based on 3-micron technology. It supports an 8-bit bus, and operates on a single 5-volt power supply. [62] (1978 [120])

**(month unknown)**

* Stephen Wozniak demonstrates the Apple I at the Homebrew Computer Club. [266.xv]
* Bill Gates offers to sell all rights and ownership of his 8080 BASIC to Ed Roberts and MITS for about US$6500. Roberts declines the offer. [1149.102]

**April 1**

* Steve Jobs and Steve Wozniak incorporate the Apple Computer Company, on April Fool's Day. [9] [46] [140] [218] [606.18] [1112.138] [1298.187] (1977 January 3 [861.33]) (1977 March [353.259])

**April**

* Apple Computer co-founder Ron Wayne sells his share for US$800. [1112.138]
* David Bunnell's Computer Notes Altair newsletter publishes Bill Gates' "A Second and Final Letter" article on software piracy. [346.32] [1149.106]
* Microsoft hires its first permanent programmer, Marc McDonald. [346.34] [1149.108] [1299.96]
* National Semiconductor releases the SC/MP 8-bit microprocessor, providing early advanced multiprocessing. [32] [556.11]

**(month unknown)**

* The term "personal computer" first appears in print, in the May issue of *Byte* magazine. [1056.372]
* Gary Kildall and wife Dorothy McEwen found Intergalactic Digital Research. (*The name is soon shortened to Digital Research.*) [266.xv] [346.51] [346.280] [994.ss48] [1149.175]

**May**

* In Japan, IBM Japan announces the IBM 5100 desktop system, with 5-inch monochrome display. Price is about US$10,000. [902.146]
* Digital Research copyrights the CP/M operating system. [41]
* The Trenton Computer Festival is held, in New Jersey. [266.180]

**June**

* Western Digital introduces the MCP-1600 3-chip CPU. [32]
* Texas Instruments introduces the TMS9900, the first 16-bit microprocessor. The microprocessor implements the 16-bit architecture used on the TI 990 minicomputer. [32] [556.11]
* Wang Laboratories announces a word-processing system using advanced computer technology, rather than traditional electromechanical devices. The price is US$30,000, more than twice that of the most expensive competitor's word-processor. [716.175]
* At the PC '76 conference at the Shelbourne Hotel in Atlantic City, Processor Technology unveils the Sol-20 microcomputer. The Sol-20 uses an Intel 8080 processor, and is sold in a kit form. [205.20] [266.116] [353.242]

**(month unknown)**

* Microsoft licenses 8080 BASIC to General Electric, for US$50,000. Half of the fee is paid to MITS. [1299.101]
* In the USSR, the Elektronika S5-11 microcomputer is introduced. [949.356]
* Advanced Micro Devices and Intel sign a patent cross-license agreement, giving Advanced Micro Devices the right to copy Intel's processor microcode and instruction codes. [141] [659.7] [752.1]
* Xerox management rejects two proposals to market the Alto computer. [716.174]
* Wang Laboratories updates the Wang WPS word processor, adding a CRT display, a large disk storage, and a fast letter-quality printer. [33] [202.185]
* At Xerox, John Ellenby proposes they build the Alto III, to be marketed as an advanced word processing system. The proposal is shelved. [716.206]
* Processor Technology releases VDM, a video display module. It works on the Altair, IMSAI, Sol, Polymorphic computers, and any other with an S-100 bus. [266.133]
* Dynalogic of Canada creates its own advanced microcomputer. [615.170]
* Gary Kildall grants a license to CP/M to GNAT Computers for US$90. [346.51]
* Kentucky Fried Computers is founded. [266.xv]
* Tom Snyder's "Tomorrow" TV show features the Sol computer, playing a game called "Target". [353.243]
* IMS is renamed IMSAI. [647.95]
* John Martin sells Bill Millard on the idea of a chain of computer stores. Bill promises John shares in the company in exchange for the idea. (*The chain later becomes ComputerLand.*) [647.95]
* U.S. Robotics is founded, in Skokie, Illinois. [235]
* Chuck Peddle designs the Commodore PET. [713.29]
* Steve Wozniak proposes that Hewlett-Packard create a personal computer. The idea is rejected. [9]
* Steve Jobs proposes that Atari create a personal computer. The idea is rejected. [9]
* Lore Harp and Carole Ely form Vector Graphic Incorporated in Los Angeles, California, selling memory boards for S-100 bus systems. [202.201] [930.124]
* George Morrow founds the MicroStuf company. [266.xv]
* The first issue of *Dr. Dobbs* magazine is published. [266.xv]
* IMSAI begins shipping the IMSAI 8080 microcomputer. [266.48]
* Polymorphic Systems introduces the Polymorphic 8800. It is the first microcomputer with an interface for a video monitor, a connection for a cassette tape recorder, and its basic operating system in ROM. [266.48] [714.83]
* The bus of the Altair is named (or renamed) the S-100 bus. [266.48]
* An IBM senior staff planning exercise forecasts the personal systems market in the 1990s would be worth US$100 billion. [606.83]

**July**

* The Apple I computer board is sold in kit form, and delivered to stores by Steve Jobs and Steve Wozniak. Price: US$666.66. [46] [218] [593.350]
* IMS Associates releases its first single-sided disk drive, the FDC 1. [1702.45]
* Paul Terrell orders 50 Apple computers from Steve Jobs, for his Byte Shop. [266.213]
* Zilog releases the 2.5 MHz Z80, an 8-bit microprocessor whose instruction set is a superset of the Intel 8080. [32] [202.168] (early 1975 [9]) (1975 [556.11]) (1975 December [346.257] [1038.150])

**August**

* Paul Terrell receives his order of 50 Apple computers. [266.213]
* iCOM advertises their "Frugal Floppy" in *BYTE* magazine, an 8-inch floppy drive, selling for US$1200. [9]
* In Atlantic City, New Jersey, the Personal Computing Festival is held. Several computer hobbyist clubs hold their first convention there. [185.111] [266.181]
* Steve Wozniak begins work on the Apple II. [266.218]

**September 21**

* Computer Shack is incorporated, created by William Millard. (*The name is later changed to ComputerLand, due to objections from Radio Shack.*) [266.xv] [1702.48,233] (ComputerLand is incorporated [647.95])

**October 1**

* Harry Margolis, Robert Dunnett, and Ondrej Kojnok formally incorporate IMSAI Manufacturing Corporation. [1702.49]

**October**

* Commodore International buys MOS Technology. [261.304] [266.49] [548.302] [624.172] [824] [1299.100] (1978 [1061.D6])
* Mike Markkula, ex-marketing wizard at Intel, visits Steve Jobs' garage, to see the Apple computers. [266.215] [930.34]
* Steve Wozniak decides to remain at Hewlett-Packard, but is soon convinced that he should leave and join Apple Computer permanently. [266.218]

**November**

* The tradename "Microsoft" is registered. [123] [389.28]
* ComputerLand opens a pilot store in Hayward, California, as a retail outlet and a training facility for franchise owners. [266.194] [346.258] [548.433]
* Paul Allen resigns from MITS. [266.50] [346.35] [1149.110] [1299.103]
* Paul Allen begins full time work at Microsoft. [346.35] [1149.110] [1299.103]

**(month unknown)**

* At Xerox, the Display Word Processing Task Force recommends that Xerox produce an office information system like the Alto. Code name for the project is Janus. The result will be the Star computer. [716.230]

**December**

* Bill Gates drops out of Harvard, to devote his full attention to Microsoft. [346.35] (January 1976 [1149.110])

**December 3**

* Pertec Computer signs a letter of intent to acquire MITS for US$6 million of stock. [1299.101]

**December**

* Ed Faber leaves IMSAI Manufacturing. [1702.90]
* Michael Shrayer completes writing the Electric Pencil word-processing program for microcomputers. [9] [266.148] [346.258] [662.33] (1975 [1112.144])
* Shugart Associates announces its Model SA400 5.25-inch "minifloppy" disk drive for US$390. Disk capacity is 110 kB. The disk size is based on a cocktail napkin which a customer requested, rather than the usual eight inch size. [9] [346.29] [363.46] [264.50] [346.258] [1084.396]
* Dick Wilcox demonstrates his Alpha Micro, a multi-user CPU board, at a meeting of the Homebrew Computer Club. [266.116]
* Don French and Steve Leininger are given official approval to develop and sell a microcomputer for Radio Shack. [266.197] [548.413]
* Steve Wozniak and Randy Wigginton demonstrate the first prototype Apple II at a Homebrew Computer Club meeting. [353.254]

**December 31**

* To date, MITS has shipped over 10,000 Altair 8800 kits. [208.67]
* Personal computer market share: MITS 25%, IMSAI 17%, Processor Technology 8%, SWTP 8%. Smaller companies include The Digital Group, Polymorphic, Ohio Scientific, Cromemco, MOS Technology. [1299.101]

**1977**

**January**

* Mike Markkula invests US$91,000 in Apple Computer, and backs a US$250,000 line of credit with Bank of America, in exchange for one-third interest in Apple Computer stock. [930.34] [1702.94]
* Apple Computer employees move into an office on Stevens Creek Boulevard in Cupertino, California. [266.219] (February [353.259])
* A working model of the first Radio Shack computer is demonstrated to company president, Charles Tandy. [266.197]
* Commodore first shows a prototype PET computer at the Winter Consumer Electronics Show. [713.32]
* Chuck Peddle, of Commodore International, shows the first PET computer to Radio Shack, hoping to have Radio Shack sell it. [445.256]

**February**

* Bill Gates and Paul Allen sign a partnership agreement to officially create the Microsoft company. Gates owns 64 percent, Allen owns 36 percent. [123] [1299.103] [1526.83]

**February 14**

* Computer Shack hires John Martin (Musumeci) as Director of Franchise Sales. [1702.69]

**February 18**

* The first Computer Shack franchise is opened in Morristown, New Jersey. 112 people visit in the first day. [9] [266.194] [548.433] [1702.64] (Tandy franchise [346.258])

**April**

* Microsoft announces FORTRAN-80 language compiler. Price is US$500. [1299.110]

**April 15**

* The First Annual West Coast Computer Faire is held, in San Francisco's Brooks Civic Auditorium, over three days. 12,750 attended the weekend event. [203.7] [266.145] [353.265] [747.74] [1299.106]

**April 16**

* Commodore International shows its Commodore PET 2001 computer at the West Coast Computer Faire. The PET includes a MOS Technology 6502 processor, 4 kB RAM, 14 kB ROM, keyboard, 9-inch monochrome display, and cassette tape drive, for US$595. The computer shown is a one-off prototype. [9] [266.182] [346.46] [445.256] [713.30] [747.74] [1298.187] [1299.100,106] (US$800 [176.54] [190.81]) (March [41]) (June [624.172])
* Apple Computer introduces the Apple II at the West Coast Computer Faire. The computer features a 6502 CPU, 4 kB RAM, 16 kB ROM, keyboard, 8-slot motherboard, game paddles, graphics/text interface to color display, and built-in BASIC, for US$1298. It is the first personal computer with color graphics. [9] [41] [46] [120] [140] [176.54] [203.7] [266.182] [346.47] [593.350] [1280.42] [1298.187] (March [185.114]) (July [716.234])

**April**

* Apple Computer delivers its first Apple II system. [196.20] (May [528.352]) (June [1559])

**April 20**

* Bill Gates and Paul Allen write to MITS complaining of overdue royalty payments on 8080 BASIC, and of MITS' failure to sub-license and promote the product to others. They state that if the situation is not remedied within ten days, the licensing agreement for 8080 BASIC would be terminated. [1149.114] [1299.109]

**April 21**

* An attorney for MITS denies Microsoft's charges, claiming MITS is up-to-date on royalty payments, and did not have to license 8080 BASIC to competitors. [1299.109]

**(month unknown)**

* An attorney for MITS pays Microsoft US$14,526 to cover 8080 BASIC royalty payments since December 1, 1976. [1299.109]
* MITS files for arbitration to seek a decision on whether its 8080 BASIC contract with Microsoft is still valid. [1299.109]

**May 5**

* MITS files for a restraining order against Microsoft, to prevent Microsoft from licensing 8080 BASIC until the dispute with MITS is resolved. [1149.114] [1299.109]

**May 12**

* A judge grants MITS' restraining order against Microsoft licensing 8080 BASIC, until July 8 or until the arbiter's determination is made. [1299.109]

**May**

* 10 months after its introduction, 175 Apple I kits have sold. [218]

**May 22**

* Pertec buys MITS and the Altair line for US$6 million in stock. [233.194] [266.51] [346.44] [548.384] [1149.114]

**June**

* Camp Retupmoc ("computer" spelled backwards), the first week-long computer camp, is held in Terre Haute, Indiana. [9]
* Apple II computers are first shipped to Europe by independent distributor Eurapple. [46]
* Commodore shows its first production PET computers at the Summer Consumer Electronics Show. [713.30]

**June 15**

* The National Computer Conference is held in Dallas, Texas. For the first time, an area is set up for microcomputer companies. [1149.123] [1405.D1] [1406.43]

**(month unknown)**

* The name of Computer Shack is changed to ComputerLand. [1702.65]
* Gary Kildall grants a distribution license for CP/M to Seymour Rubenstein of IMSAI Manufacturing, for US$25,000. [346.51] [266.139] [1149.175]
* Vector Graphic introduces the Vector Graphic I system. [202.203]
* The first issue of *Personal Computing* is published, by David Bunnell. [266.xv]
* A patent on Ethernet computer networking is granted to David Boggs, Butler Lampson, Bob Metcalfe, and Charles Thacker of Xerox PARC. [1298.187]
* Bally completes designs of a home computer. [267.48]
* Dan Bricklin conceives the idea for the VisiCalc spreadsheet program. [346.101]
* Officials of the US National Institute for Occupational Safety and Health first begin measuring radio-frequency radiation from display monitors. They report emissions are too low for their instruments to measure. [558.138]
* The Altair Software Distribution Company changes its name to Peachtree Software. [548.434]
* Gilbert Hyatt adds a claim to a single-chip computer to his 1970 patent application. [590.5]
* Quote by Kenneth Olsen, founder and president of Digital Equipment: "There is no reason anyone would want a computer in their home.". [1584.332]
* Microsoft creates the File Allocation Table to store data on diskettes for the Microsoft Stand-alone Disk Basic. [1626.18]

**July**

* Microsoft ships "Microsoft FORTRAN" for CP/M-based computers. [123] [346.49]

**(month unknown)**

* Digital Equipment introduces the LSI-11/2 microcomputer (board with microprocessor), with 8 kB RAM. [949.358]

**August 3**

* At the Warwick Hotel in New York City, Radio Shack (a division of Tandy Corporation) announces the TRS-80 microcomputer. It features Zilog Z80 processor, 4 kB RAM, 4 kB ROM, keyboard, black-and-white video display, and tape cassette for US$599. [9] [195.49] [202.198] [319.43] [548.413] [862.14] [1149.120] [1298.187] [1299.111] (US$300 [266.198]) (June [41]) (1978 [205.24])

**September**

* One month after launching the TRS-80, 10,000 are sold, exceeding sales projections of only 3,000 in the first year. [266.198] [548.413] [346.46]

**(month unknown)**

* Dennis Hayes forms Hayes Microcomputer Products. [1298.187] (Spring 1978 [451.A1])

**October**

* Radio Shack opens its first all-computer store, in Fort Worth, Texas. [266.198]

**(month unknown)**

* Microsoft licenses its 6502 BASIC to Apple Computer for US$21,000. [346.48] [1299.111] (early 1978 [949.300])

**November**

* Apple Computer releases Applesoft, a version of BASIC with floating-point capabilities. It is licensed from Microsoft. [218]
* Heath Schlumber Company introduces its first microcomputer kit, the H-8 personal computer kit, based on the Intel 8080. [246.81] [744.3]
* Paul Terrell sells his chain of 74 Byte Shops, valued at US$4 million. [266.190]

**(month unknown)**

* Xerox renames its Janus workstation project to Star. [716.231]
* IMSAI Manufacturing begins shipping the VDP-80 computer. [1702.96]

**December**

* At an executive board meeting at Apple Computer, president Mike Markkula lists the floppy disk drive as the company's top goal. [218] [266.225]
* Steve Wozniak writes disk controller software for use with the Shugart 5.25-inch floppy disk drive for the Apple II. [618.63] [930.62]
* Microsoft wins an important legal battle against Pertec, on ownership of the BASIC software Bill Gates and Paul Allen wrote and licensed to MITS. [346.45] (September [1299.111])

**December 31**

* Total shipments of personal computers worldwide during the year: 48,000. [1559]

A list of [references](http://www.islandnet.com/~kpolsson/comphist/compsrc.txt) to all source material is available.

A free but brief timeline is [available here](http://www.islandnet.com/~kpolsson/comphist/mini.htm).
Also check my list of [other timelines](http://www.islandnet.com/~kpolsson/timeline.htm).

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