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Timeline:
Show Images

Year	Model
1970	Datapoint 2200
1971	Kenbak-1
1972	HP-9830A **NEW!**
1973	Micral
	Scelbi-8H
1974	Mark-8
	MITS Altair 8800
	SwTPC 6800
1975	Sphere
	IMSAI 8080
	IBM 5100
	MOS KIM-1
	Sol-20
	Hewlett-Packard 9825
1976	PolyMorphic
	Cromemco Z-1
	Apple I
	The Digital Group
	Rockwell AIM 65
	Compucolor 8001
	ELF, SuperELF
	Wameco QM-1A
	Vector Graphic Vector-1
	RCA COSMAC VIP
1977	Apple II
	Commodore PET
	Radio Shack TRS-80
	Atari VCS (2600)
	NorthStar Horizon
	Heathkit H8
	Intel MCS-85
	Heathkit H11
	Bally Astrocade
	Netronics ELF II
	IBM 5110
	VideoBrain Family Computer
	Compucolor II
	Exidy Sorcerer
1978	Ohio Scientific Superboard II
	Synertek SYM-1
	Interact Model One
	Research Machines 380Z
	Magnavox Odyssey 2
	Cybervision 2001
	APF Imagination Machine
	Cromemco System 3
	Z80 Starter Kit
	TRS-80 model II
	Bell & Howell
	SwTPC S/09
	Heathkit H89
1979	Atari 400
	Atari 800
	TI-99/4
	Findex
	Sharp MZ 80K
	Intertec SuperBrain
	HP-85
	Micro Ace
	IBM 5120
	TRS-80 Color Computer
1980	TRS-80 model III
	TRS-80 Pocket

AT&T EO 440
Personal Communicator

Available: April 1993
Price: US$1,999+
Size: 7x11x1 inches, 2.2 lbs
CPU: AT&T "Hobbit" @2MHz
Memory: 4-12MB RAM
Display: 4.3 x 6-inch monochrome LCD
                7.5-inch diagonal
                480 x 640 graphics
Ports: serial, parallel ports
                PCMCIA, PS/2 keyboard
Storage: optional internal 20MB HD
                optional external floppy drive
                PCMCIA flash card
OS: GO PenPoint on 8MB ROM card

Floppydisk.com

New 1.44 MB 3.5 floppy disks. External USB floppy drives too

● ○

It took about six years from concept to fruition before you could purchase your own **EO-440 Personal Communicator** system - a portable, hand-held pen-only PDA (**P**ersonal **D**igital **A**ssistant) computer system with handwriting-recognition technology. When fully decked-out, the

1981
- Dynabyte 5100
- TFC 3450 By Fujitsu
- Commodore VIC-20
- Sinclair ZX81
- Apple III
- Xerox 820
- Osborne 1
- Micro-Professor
- TI-99/4A
- IBM System/23
- IBM PC
- LNW-80
- Rockwell AIM 65/40
- BBC Micro
- NEC PC-6001A

1982
- Timex Sinclair 1000
- Kaypro II
- Otrona Attache
- GRiD Compass 1101
- Victor 9000
- NEC APC
- SAGE II
- DEC Rainbow 100
- Sinclair ZX-Spectrum
- Lobo MAX-80
- Panasonic/ Quasar HHC
- Franklin Ace 100
- Franklin Ace 1000
- HP-75C
- Commodore 64
- Commodore B128
- Toshiba T100
- Epson HX-20
- Zorba

1983
- Dynalogic Hyperion
- Compaq Portable
- TI CC-40
- Jupiter Ace
- Apple Lisa
- TRS-80 model 100
- Kyotronic 85
- Olivetti M-10
- NEC PC-8201a
- Tomy Tutor
- Gavilan SC
- SAGE IV
- Altos 586
- Pied Piper
- Spectravideo CompuMate
- Mattel Aquarius
- Coleco Adam
- Timex Sinclair 1500
- TRS-80 MC-10
- Apple III Plus
- Visual Commuter
- TI Portable Professional

1984
- Commodore SX-64
- Apple Macintosh
- Sinclair QL
- IBM Portable
- TRS-80 model 200
- Epson PX-8
- Ampro Little Board
- IBM PCjr
- Apple IIc
- Sord IS-11
- HP 110
- Amstrad CPC
- Tano Dragon
- Data General One
- Morrow Pivot
- Tandy 1000
- Sharp PC-5000
- Atari 520ST

mail it to multiple team members listed in your address book, with an attached audio message for additional vocal emphasis; Track daily tasks, appointments, and events in the Day Planner, then make a cell-phone call to confirm your reservations.

It all started in August of 1987 when GO Corporation was founded by Jerry Kaplan, formerly of Lotus Development Corp, to create his dream - a leading-edge, hand-held, pen-operated computer, which he first envisioned a few months earlier in February 1987.

After two years of work and million of dollars, in June of 1989, GO Corp. had a hobbled-together partially-working prototype to demonstrate to investing partners. State Farm Insurance and IBM were two of their largest potential customers.

After another two years, in April 1991, their PenPoint operating system "developers release" is completed and available to third-party developers. Designed to run on Intel CPU-based systems, it is an entirely new computer operating system, not just an addition to MS-DOS, utilizing a notebook-like user-interface with graphical icons, drag-and-drop capabilities, and dozens of simple pen-based gestures for document editing and on-screen navigation.

Later that year, BYTE magazine awards GO's PenPoint operating system their Award of Excellence in their annual Best Products edition.

While GO did produce a model G400 prototype, they were having difficulties developing both the software and hardware aspects, and to appease their largest investor - IBM, in July 1991 GO spun-off a separate and independant company named "EO Inc." ("eo" is Latin for "go") - GO would concentrate on the software, EO would produce and market the hardware. AT&T becomes a major investor in new EO, owning 20% of the company.

AT&T also buys Active Book Company, who is working on a simlar project, utilizing the ARM processor, just months from release. Active Book Company is dissolved and incorporated into EO. This new company will concentrate on producing a pen-based system using AT&T's new Hobbit CPU chipset, which was originally developed for the Apple Newton, a competing pen-based portable computer system from Apple Computer. Unsatisfied with the Hobbit, the Apple Newton eventually went with the ARM processor instead.

In April of 1992, GO released PenPoint version 1.0 to all interested third-party developers. IBM announces their ThinkPad 700T (model 2521) hand-held pen-based tablet, running the PenPoint operating system, to ship in October 1992. NCR and GRiD also announce products running PenPoint OS.

Within 16 months of spinning-off from GO, EO's **440 Personal Communicator**, not yet for sale, was demonstrated in the AT&T booth at the Fall 1992 COMDEX show, in Las Vegas, NV. The industrial design (basically the ears on the sides to differentiate it from competitors) was by Frog Design, Inc.

The **EO-440** and it's larger sibling the **EO-880** were available to the public on April of 1993. They were advanced but expensive, with the most basic system going for almost $2,000.

System	Price
EO-440 w/ 4MB RAM	$1,999

4MB RAM module	$299
8MB RAM mudule	$499
external floppy drive	$199
internal 20MB HD (EO-440)	$499
internal 64MB HD (EO-880)	$699
cell phone module	$799

- Pensoft Personal Perspective - an appointments calendar, address book, and information manager you use to manage time and monitor to-do items.
- EO Phone - dial the phone and place voice calls.
- EO Sound - add voice notes - sound recordings - to documents.
- EO Calc - a miniature "columnar pad" you use to work with numbers.
- EO Lock - provides password protection for the EO to keep your data secure.
- GO Mail - to send, receive, and work with electronic mail (e-mail) (requires 8MB RAM).
- GO Fax - send and receive group-3 compatible faxes (requires 8MB RAM).
- GO MiniNote - create simple graphics and handwritten notes in electronics ink.
- GO PenTOPS and PenCentral - allows exchange of data with IBM compatatible personal computers directly or remotely.

Timeline (left column):

Year	System
1985	Kaypro 2000
	Amiga 1000
	Zenith Z-171
	Sharp PC-7000
	AT&T UNIX PC
	Toshiba T1100
	Amstrad PCW
1986	Compaq Portable II
	IBM Convertible
	Apple IIGS
1987	Zenith eazy PC
	Amiga 500
	Amiga 2000
	DynaMac
	Canon Cat
	Linus Write-Top
	Commodore 128D (USA)
	Compaq Portable III
1988	Apple IIc Plus
	Atari Portfolio
	Macintosh Portable
	Atari Stacy
1989	NeXT
	Atari ST Book
	Psion MC-600
	Zenith MinisPort
	GRiDPad
	Outbound
1990	Poqet PC
	Atari TT030
	Amiga 3000
1991	Commodore CDTV
	HP 95LX
	NCR-3125
	Macintosh PowerBook
1992	Amiga 600
	Zeos Pocket PC
	Amiga 4000
	Amiga 1200
	IBM ThinkPad
1993	AT&T EO 440
	Amstrad PenPad
	Dauphin DTR-1
	Apple Newton

GREEN=Acquired
RED=Wanted

Click on the blue text for more information

The AT&T Hobbit chipset is composed of four large chips, which consume a large portion of the system motherboard. Other prominent chips are by Wacom, for their electromagnetic resonance pen-sensing technology, with additional components incorporated into the LCD display.

The optional **EO-440** internal hard drive is the tiny and amazing Kittyhawk 20MB 1.3-inch micro-drive from Hewlett-Packard, at the time the smallest hard drive in the world. Fragile? No - a built-in accelerometer parks the drive heads to protect itself from hard falls, in fact making it the most reliable hard drive available. Kittyhawk was claimed to be able to survive a 3-foot drop onto concrete while operating without loss of data - perfect for use in a handheld portable computer system. The Dauphin DTR-1 from 1993 also utilized the tiny Kittyhawk hard drive.
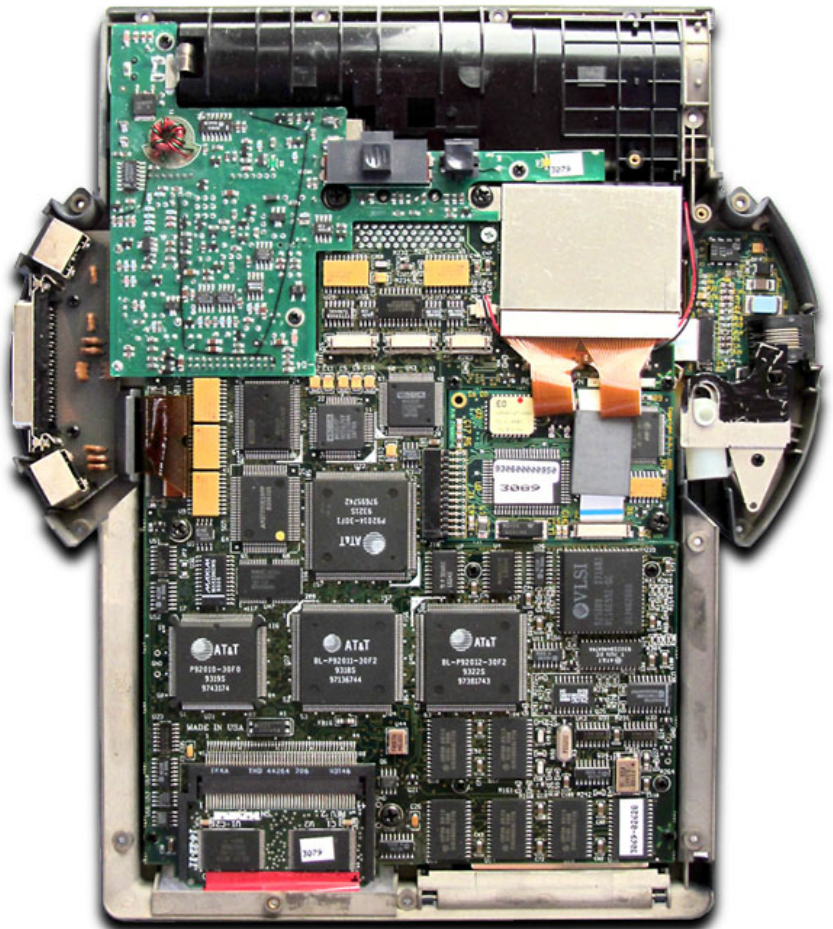
For removeable mass storage, consider the SunDisk (not SanDisk) PCMCIA flash card, which allows quick and easy, but very expensive, data storage expansion. Sizes available include: 1.8MB ($249), 5MB ($449), 10MB ($749), 20MB ($1,199).

The larger (13x9x1-inch, 4.0 lbs) and more powerful **EO-880** ($2,499) has a faster CPU - 30MHz instead of 20MHz, and a larger 9.4-inch display, which is backlit instead of reflective as in the **EO-440**. A larger 64MB hard drive ($699) as well as VGA, SCSI, and a second PCMCIA port round-out this powerful system.

Using the serial port and included software, Both **EO-440** and **EO-880** can communicate with IBM-compatible machines for sending and retrieving data.
The parallel port is to connect to laser and dot-matrix printers, and data storage on the optional external 3-1/2 inch 1.44MB floppy drive.
A standard PS/2 connector allows the use of an external PC-compatible keyboard for heavy data entry.

GO and EO both had a hard time of it, though, as cheaper but less capable systems were available from other companies, and predatory Microsoft had effectively locked them out of the Intel-based market. In June of 1993, AT&T acquired a majority 51% stake in EO, and in August buys GO entirely, combining the two companies into EO, only to shut it down entirely in July 1994 when it was obvious that their products were selling poorly. It is estimated that about 10,000 EO systems were sold.

Kaplan, the founder of GO, wrote a book about his experiences at GO Corporation entitled "Startup--A Silicon Valley Adventure", published in May of 1995 by Houghton-Mifflin.

Related Links

- Excerpts from the book 'A History of Silicon Valley' from Piero Scaruffi
- About Tablet Computing, Old and New from Dan Bricklin
- The DigiBarn collection
- "I worked at EO..." from David Hembrow

- Personal Computer World review from David Tebbutt
- PC Magazine review, Aug 1993
- Office Depot sells the AT&T EO-440 - Dec 1993
- Go Computer, Inc. v. Microsoft Corp.

- [Introducing PenPoint](#) - GO Corporation - 1991
- [PenPoint Demonstration](#) - GO Corporation - 1991
- [Computer Chronicles PDA Review](#) - 1993
- ["Getting Acquainted With Your AT&T EO Personal Communicator"](#) - 1993
- ["AT&T - You will..."](#) 1993 TV commercials
- [Demonstration of PenPoint for ATT EO](#) - 1994

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