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IBM Model Numbers

IBM equipment tends to have 4-digit model numbers, and it is a great trivia game to see who can keep the numbers straight. This page is an attempt to provide a reference. While the entries in this list sometimes provide links to pictures, many more pictures are found at [Computing at Columbia Timeline](#) by Frank da Cruz.

The pictures at the "nfrpartners" address belong to [John Coelho](#). I hope they stay available there.

There is a longer list of number in [this file](#) which I am still studying.

Finally, [this is a list from IBM Brazil](#).

026

Keypunch (keyboard to 80-column cards)

The 026 was used in the 70x and 70xx era.

029

Keypunch: To enter data onto 80-column punched cards.

The 029 replaced the 026 in the S/360 era. Photo of keyboard at <http://www.nfrpartners.com/comphistory/029.htm> and of card decks at [.../punchcards1.htm](#)

I (Lars Poulsen) used these in 1970 at Copenhagen University.

065

066

Data Transceiver

082

Card Sorter

650 cards per minute, mechanical feed, regular card hopper, 13 pockets.

083

Card Sorter

1000 cards per minute, mechanical feed, regular card hopper, 13 pockets.

084

Card Sorter

2000 cards per minute, vacuum feed, long card feed ramp.

129

Keypunch (late model - successor to 129)

285

Numeric printing tabulator (1933). Photo and description at <http://www.columbia.edu/acis/history/285.html>.

405

Alphabetical accounting machine (1934). Photo and description at <http://www.columbia.edu/acis/history/405.html>.

407

Accounting machine ("tabulator") (1949). Photo and description at <http://www.columbia.edu/acis/history/407.html>. Remained the main workhorse until the 1401 computer became available in 1959.

Used as an offline printer for the IBM 1620 computer.

650

Computer System (1955)

Main storage was a drum, each instruction contained the address to jump to for the next instruction. The SOAP optimizing assembler took care of placing the program so that the next instruction would be ready to read just in time (accounting for the varying amounts of time each instruction took to execute).

A good reference is [IBM 650 Technical Fact Sheet](#) from IBM website

Used with

- 407 printer/card reader
- 652 tape control unit
- 653 high-speed magnetic core storage (660 "bytes" meant as buffer storage for the tape drive)
- 727 magnetic tape unit (about 2 MB per reel)
-

701

"Defense Calculator"

704

Follow-on to the 701 (manual can be found at www.spies.com/aek/pdf/ibm)

709

Computer System

The 709 was a vacuum-tube realization of the same architecture that was later built in transistors as the 7090.

711

Card reader

250 card/min

714

card reader

716

150 line/min printer

717	Printer
719	Printer
721	100 card/min card punch
722	card punch
727	200 BPI 75 IPS 7 track tape drive. Used with 650.
729	200 BPI 75 IPS tape drive
730	Printer
733	8192 word magnetic drum
738	Core storage unit for 709
740	CRT film recorder
755	Tape control for 729
757	Control unit for 717 printer
758	Control unit for 722 card punch
759	Control unit for 714 card reader
760	Printer control unit
766	Data Synchronizer for 709
780	21" CRT display for 740
1009	Data Transmission Unit. Photo at http://www.beagle-ears.com/lars/engineer/comphist/c20-1684

[/fig011.jpg](#)

1011

Papertape reader. Originally developed for 1401, but available as an RPQ feature for S/360 (along with the 1012 papertape punch.)

1012

Papertape punch. Originally developed for 1401, but available as RPQ feature for S/360.

Jim Saum recalls that there was no support for it in the OS/360 system software, and his shop had to write a user-mode EXCP driver for the punch.

"The 1012 was impressively overbuilt. It was a reel-to-reel punch in a cabinet about the size of a medium refrigerator. There were tension arms on both sides between the supply and takeup reels and the punch/read heads. Punch speed was 150 cps. The device was acquired for an application that regularly required punching dozens of reels of aluminized mylar tape. Prior tests showed that other punches didn't endure this gracefully."

1013

Card Transmission Unit

1014

Remote inquiry units

1026

Transmission Control Unit

1030

Data Collection System

1050

Data Communication System

1052

Console printer. Used in 1130 computer system. Also, part of the console typewriter on many IBM360 systems.

Photos at <http://www.nfrpartners.com/comphistory/1052a.htm> and [.../1052b.htm](#)

I used this in 1970 at Copenhagen University.

1060

Data Communication System

1070

Process Communication System

1130

Scientific minicomputer.

The entire [Functional Characteristics Manual](#) is at Howard Shubs' Website. Photos at <http://www.nfrpartners.com/comphistory/1130a.htm> and [.../1130b.htm](#)

I used this in 1970 at Copenhagen University.

1231

Optical Mark Page Reader

1240

Bank Data Processing System

1285

Optical Reader

1301

1302

Disc storage for 7000 series

1311

Disk Storage Drive

1316

Disk pack for 2311 drive. 7.25MB.

Photo at <http://www.nfrpartners.com/comphistory/2311a.htm>

1401

Data processing system. The 1401 designation was used both for the system and for the CPU frame.

1402

Card reader reader/punch (for 1401)

Long feed ramp. Looked a lot like the 2540, which was the corresponding unit for S/360. Like the 2540, it had 5 stacker pockets: The middle one could be addressed both by the reader and by the punch.

1403

Line printer with horizontally rotating type chain/train. Fast, robust and better print quality than the vertically rotating drum printers used by other manufacturers during the same time. The chain design allowed one to change to different character sets for different print jobs: Upper/lowercase for document processing or uppercase-only (or even numeric-only) to increase speed. (The operating system would then replace the table in the printer that mapped chain position to character codes at the same time.) One of the most endearing features was how it hydraulically raised the cover when it ran out of paper, thus easily alerting the operator across the room that it needed attention.

Photos at <http://www.nfrpartners.com/comphistory/1403a.htm> and [.../1403b.htm](http://www.nfrpartners.com/comphistory/1403b.htm)

The 1403 was available in several models; the 1130 system could use a simpler 600 lpm version, while the System/360 family used the full-featured 1100 lpm model N1 shown in these pictures..

I saw this in 1970 at NEUCC, Copenhagen.

1404

Printer

1406

Storage Unit (Core memory for 1401)

1407

Console Inquiry Station (for 1401)

1409

Auxiliary Console

1410

Data Processing System

1412

Magnetic Character Reader

1414

Input-Output Synchronizer

1418

Optical Character Reader

1419

MICR reader/sorter. Read 2000 checks per minute. Used by large banks and by inter-bank clearing centers.

Photos at <http://www.nfrpartners.com/comphistory/1419a.htm> and <http://www.beagle-ears.com/lars/engineer/comphist/c20-1684/fig003.jpg> and <http://www.beagle-ears.com/lars/engineer/comphist/c20-1684/fig096.jpg>

1428

Alphameric Optical Reader

Photo at <http://www.beagle-ears.com/lars/engineer/comphist/c20-1684/fig098.jpg>

1440

Data Processing System, seen [here](#).

1441

1440 CPU

1442

Card reader/punch, used first on 1440, later on 1130 and S/360. A single input hopper fed a card path with first a read station then a punch station, and finally two selectable output stackers. Reading at 300 cpm (M6) or 400 cpm (M7), punching at about 50 cpm. Photo at [Howard Shubs' Website](#).

1444

Card Punch

1445

Printer

1448

Transmission Control Unit

1460

Data Processing System

1461

Input/Output Control

1620

Data Processing System

There was a CDC 1620 - was there also an IBM 1620?

1710

Control System

2040

360/40 CPU

2050

360/50 CPU

2150

Remote Console for S/360.

Photo at <http://www.beagle-ears.com/lars/engineer/comphist/c20-1684/fig013.jpg>

2250

Vector graphics display with light pen. One use of this was for scientific 3-D visualization of data; another was as the "de luxe" console for larger System/360 computer systems as shown at <http://www.nfrpartners.com/comphistory/2250a.htm>

I saw a 2250 in 1971 at NEUCC, Copenhagen.

2260

Alphanumeric raster scan display terminal. I seem to recall it being 15 x 64, and vertical scan. Photo at <http://www.beagle-ears.com/lars/engineer/comphist/c20-1684/fig099.jpg> A screen shot is at <http://www.nfrpartners.com/comphistory/2260a.htm>

The cluster controller for the 2260 dilpsays was the 2848.

I saw 2260s in 1971 at NEUCC, Copenhagen, where they were used as auxiliary consoles for the 360/65 in user areas.

2311

Removable pack disk drive - 7.25MB.

Photos at <http://www.nfrpartners.com/comphistory/2311a.htm> and <http://www.beagle-ears.com/lars/engineer/comphistory/c20-1684/fig054.jpg>

2314

Removeable pack disk drive.

I saw a bunch of these on the 360/65 at NEUCC, Copenhagen in 1971. Photo at <http://www.beagle-ears.com/lars/engineer/comphistory/c20-1684/fig127c.jpg>

2315

single platter front loading removable disc pack

2321

Data Cell - a storage device where data is stored on magnetic strips in long slender bins. The right bin is rotated into position, and then one strip is dropped, picked up by suction and wrapped around a drum, and returned to the bin.

The bins (sub-cells) "made a very good vase for long-stemmed flowers". "A device that Rube Goldberg would have declared to be far too complex". According to a former IBM CE (Customer Engineer) the strip accelerates to 1200 RPM in 1/8 of a revolution as it is pulled out of the cell and it can be read on the first revolution. The mechanism is extremely finicky, and any mishandling by a service engineer results in catastrophic failures: "Mechanical malfunctions 'cascade', bits and pieces of assorted mechanism get strewn about the interior which is [otherwise] tidy enough to use a clean room filter". (johnferrell@sprintmail.com, alt.folklore.computer 2000-08-13) "As for the Data Cell, without its overtime, I would not be able to have near the toys that I have in retirement." (ditto, 2000-08-09)

Photos at <http://www.nfrpartners.com/comphistory/2321a1.htm> and <http://www.beagle-ears.com/lars/engineer/comphist/c20-1684/fig055.jpg> and [.../c20-1684/fig056.jpg](http://www.beagle-ears.com/lars/engineer/comphist/c20-1684/fig056.jpg)

The motivation for building this monster was that disk drives were so expensive that putting 30 million drivers' license records on a hard disk was out of the question (and tapes were too slow for real-time lookups).

2361

Magnetic core memory for S/360-65.

Photo at <http://www.beagle-ears.com/lars/engineer/comphist/c20-1684/fig010.jpg>

2400

2401

Tape drives used in early System/360 models. Also available as an RPQ feature for 1130 computer systems.

Photo at <http://www.nfrpartners.com/comphistory/2400a.htm>

We had two of these on an 1130 at Copenhagen University in 1970.

2415

Tape drive with integrated control unit for S/360.

2501

Card reader

600 cpm and 1000 cpm versions. Used on S/360 and 1130. Photo at [Howard Shubs' Website](#).

2540

Card reader/punch used on S/360.

1000 cpm reading, 200 cpm punching. Photo at <http://www.beagle-ears.com/lars/engineer/comphist/c20-1684/fig011.jpg> Note the long feed ramp. Same 5 stacker pockets as the 1402.

2560

Multi-Function Card Machine (MFCM)

Often pronounced as the Mother-F*cking Card Mangler. Two input hoppers, 5 output stackers and a program-controlled card path between them.

2671

Paper Tape Reader.

Photo at <http://www.beagle-ears.com/lars/engineer/comphist/c20-1684/fig089.jpg>

2701

Telecommunications Control Unit (TCU) for S/360.

The 2701 was the first TCU for the S/360. It supported only a few lines, but had an RPQ that allowed T1/E1 lines (up to 2MBps). Until the 1990s, this was the only IBM controller that supported T1 line speeds.

2702

TCU for S/360. Supported up to 16 (32?) low-speed lines.

2703

TCU for S/360. Supported up to 128 lines.

2703

Communications Control Unit for S/360.

2740

2741

Interactive terminal used for word processing. The 2740 and 2741 were similar, but I remember the 2741 best. The keyboard and print mechanism were based on the IBM Selectric office typewriter, and the whole setup was built into a pedestal that could be extended with a small cabinet on either side to make a desk for a typist.

I wrote a terminal driver for using these under Univac EXEC-8 operating system at Copenhagen University in 1972, but we had already had the terminals for a couple of years before that.

2803

Tape Control Unit for S/360.

Used to attach 2401 drives.

2821

Unit Record Peripheral Control Unit for S/360. Used to attach 1403 and 2540 to multiplexer channel. Typically, the 1052 console typewriter would be at I/O address 009, the printer would be at 00F and a second printer at 00E.

2822

Tape reader control unit used to attach 2671 to S/360.

2841

DASD Control Unit for S/360.

Used to attach 2303 drum, 2311 disk and 2321 Data Cell.

2848

Display cluster controller for 2260 display heads.

Used an acoustic delay line to hold the screen buffer. The character generator used a magnetic core

ROM to hold the character dot matrix lookup table.

3125

System 370/125 CPU.

3270

Display terminal family, consisting of (see below)

- 3271
- 3275
- 3278

3275

Display station.

Photo at <http://www.obsoletecomputermuseum.org/ibm3275.html>

3330

DASD of S/370 vintage. 100 MB per drive. Used controller model 3830.

3350

DASD of S/370 vintage. Used controller model 3830.

3360

Core memory box for 370/155

3705

Programmable Communications Control Unit (Front End Processor) for S/360 and S/370. (1970s and 1980s)

3725

Programmable Communications Control Unit (Front End Processor) for S/370. (1980s)

3800

High-performance laser printer. (Late 1970s)

Prints on fanfold or roll stock and will optionally cut sheets. 30 inches of linear paper per second, or 3.5 pages per second (about 200 pages per minute).

3850

Mass Storage System (1974 to 1990)

A robotic tape storage system, featuring tape cartridges about the size and shape of a 12-ounce soda drink can, containing a wide strip of tape wound on a spool.

The cartridges were stored in two facing walls of honeycomb-arranged slots. Mechanical pickers (one or two, depending on the 3850 model) went back and forth between the storage walls, moved vertically and pivoted to reach the desired slot, then pulled a cartridge and carried it to one of multiple tape drive stations. At the drive, the cartridge cover was removed and the tape was read or written using helical-scan heads like those on a 4mm or 8mm digital tape drive. Each cartridge held about 50MB, a 3330 drive image filled two cartridges.

There were dedicated 3330 disk drives onto which data was staged from cartridges. Once staged, the data was accessed from the 370 mainframe like ordinary disk data. The entry-level 3850 had a total storage capacity of 35GB, but a fully-expanded system could hold much more (up to 472 GB). After the 3330 DASD went out of fashion, 3830 MSS systems were fitted with 3350 drives, but the 3830 code was never updated to use the additional capacity of the newer drives.

Pictures at <http://www.coulmbia.edu/acis/history/mss.html>.

5100

Portable computer (1976). 50 pounds, \$10,000.

Photo at <http://www.obsoletecomputermuseum.org/ibm5100.html>

5150

Personal Computer - the original IBM PC (1981).

Photo at <http://www.obsoletecomputermuseum.org/ibmpc.html> and at <http://www.xs4all.nl/~rimmer/ibmpc.htm>

5155

Portable Computer.

Photo at http://www.obsoletecomputermuseum.org/ibm_port.html

6670

Laser Printer

Started out as IBM copier 3, to which a computer interface was added (and a magnetic card reader input device).

7010

Data Processing System

7030

Stretch Computer System

Lots of information at <http://www.brouhaha.com/~eric/retrocomputing/ibm/stretch/>

7090

Computer System

The 7090 was a transistor realization of the same architecture that was previously built in vacuum tubes as the 709.

7094

Cost reduced 7090

7100

7090 CPU

7101

Stretch CPU

7152

Stretch Operator's Console

7302

Core Storage - 16KW x 72 bits (64 data+8 ECC) used with 7090 and Stretch system.

7330

Magnetic tape drive.

Field Service did not like these at all.

7335

Magnetic tape unit

7340

Hypertape drive

7503

Card Reader - used with Stretch

7553

Card Punch - used with Stretch

7606

7090 multiplexor

7607

Data channel for 7090

7609

Data Channel for 7090

7612

Disk Synchronizer - used with Stretch system

7619

Stretch I/O Exchange - 8/16/24/32 channels

7631

File control for 1301

7640

Hypertape control

7701

7702

Magnetic Tape Transmission Terminal.

Photo at <http://www.beagle-ears.com/lars/engineer/comphist/c20-1684/fig077.jpg>

7710

Data Communication System

7740

Communications Control System

7750

Programmed Transmission Control

7770

Audio Response Unit used with S/360.

Photo at <http://www.beagle-ears.com/lars/engineer/comphist/c20-1684/fig016.jpg>

7950

Harvest Computer System

The 7950 Harvest combined a modified 7030 Stretch processor with a 7951 processing unit.

8232

Communications Gateway.

A PC/AT with channel attach card and LAN cards, providing a mainframe gateway to T/R (token ring) and ethernet LANs. (Late 1980s)

9672

S/390 G5 CPU cluster. 9672-R56 is 5-cpu, 9672-R66 is 6-cpu.

```
$Log: ibm_nos.htm,v $
Revision 1.21  2004/01/23 16:36:32  lars
*** empty log message ***

Revision 1.20  2003/12/29 04:25:39  lars
*** empty log message ***

Revision 1.19  2003/11/21 15:31:05  lars
Added 9672.

Revision 1.18  2001/10/26 13:28:01  lars
Replaced CMC -> Beagle-Ears

Revision 1.17  2001/06/24 17:19:54  lars
*** empty log message ***

Revision 1.16  2001/04/08 16:39:53  lars
Update links.

Revision 1.15  2001/01/14 04:49:46  lars
*** empty log message ***

Revision 1.14  2001/01/08 05:32:55  lars
Added a list from IBM Brazil.

Revision 1.13  2001/01/05 06:37:39  lars
More corrections from a.f.c readers

Revision 1.12  2001/01/04 05:37:55  lars
Yet more model numbers from a.f.c readers.

Revision 1.11  2001/01/04 05:12:23  lars
More models from an anonymous source.

Revision 1.10  2001/01/04 05:00:56  lars
Al Kossow provided many 70x and 70xx peripherals.

Revision 1.9   2001/01/03 17:11:10  lars
Added 27xx/3725.

Revision 1.8   2000/11/22 08:00:38  lars
*** empty log message ***

Revision 1.7   2000/11/07 16:22:15  lars
*** empty log message ***
```

Revision 1.6	2000/10/02	06:15:32	lars
Revision 1.5	2000/09/09	05:46:49	lars
Revision 1.4	2000/08/28	06:35:01	lars
Revision 1.3	2000/08/23	04:43:49	lars
Revision 1.2	2000/08/15	01:25:07	lars