Centra Mono

Centra No.1 Black
Centra No.1 Black Italic
Centra No.1 Extrabold
Centra No.1 Extrabold Italic
Centra No.1 Bold
Centra No.1 Bold Italic
Centra No.1 Medium
Centra No.1 Medium Italic
Centra No.1 Book
Centra No.1 Italic
Centra No.1 Light
Centra No.1 Light Italic
Centra No.1 Thin
Centra No.1 Thin Italic
Centra No.1 Hairline
Centra No.1 Hairline Italic

Centra No.2 Black
Centra No.2 Black Italic
Centra No.2 Extrabold
Centra No.2 Extrabold Italic
Centra No.2 Bold
Centra No.2 Bold Italic
Centra No.2 Medium
Centra No.2 Medium Italic
Centra No.2 Book
Centra No.2 Italic
Centra No.2 Light
Centra No.2 Light Italic
Centra No.2 Thin
Centra No.2 Thin Italic
Centra No.2 Hairline
Centra No.2 Hairline Italic

Centra Mono Bold
Centra Mono Bold Italic
Centra Mono Medium
Centra Mono Medium Italic
Centra Mono Book
Centra Mono Italic
Centra Mono Light
Centra Mono Light Italic

KEYBOARDS

Bold – 72pt

CONFIGURE

Medium – 72pt

VARIABLES

Book – 72pt

WEBMASTER

Light – 72pt

WHIRLWIND

Bold Italic – 72pt

EQUATIONS

Medium Italic – 72pt

COMPUTING

Italic – 72pt

INTERFACE

Light Italic – 72pt

Equipment

Bold – 72pt

Solutions

Medium – 72pt

Registers

Book – 72pt

Bandwidth

Light – 72pt

Algorithm

Bold Italic – 72pt

Grimsdale

Medium Italic – 72pt

Mainframe

Italic – 72pt

Hypertext

Light Italic – 72pt

BINARY ARITHMETIC
Integer precision

Bold – 36pt

J. PRESPER ECKERT
Delay line memory

Medium – 36pt

LOGICAL OPERATION
Thinking machines

Book – 36pt

SUPER CALCULATORS
Electromechanical

Light – 36pt

COMPUTER LANGUAGE
Conditional loops

Bold Italic – 36pt

FREDERIC WILLIAMS
Manchester “Baby”

Medium Italic – 36pt

BITS OR MEGABYTES
Hexadecimal value

Italic – 36pt

RUSSELL KIRSCH 57
1st scanned image

Light Italic – 36pt

18pt / 23 – Mixed Weights

The Motorola 68000 microprocessor exhibited a processing speed **far greater** than its contemporaries. This **high performance** processor found its place in **powerful** work stations intended for **graphics-intensive** programs common in engineering.

14pt / 20 – Mixed Weights

The fastest machine of its day. The Cray-1's speed comes partly from its shape, a "C," which reduces the length of wires and thus the time signals need to travel **across them. High packaging density of integrated circuits and a novel *Freon cooling system* also contributed to its speed.**

11pt / 17 – Mixed Weights

Created almost five years after the original Apple II, ***Franklin's Ace 1000*** *main logic board is nearly identical to that in the* Apple II+ *computer, and other models were later* ***cloned*** *as well. Franklin was able to undercut Apple's pricing even while offering some features not available on the original. Initially, Franklin won a court victory* ***allowing them to continue cloning*** *the machines, but in 1988, Apple won a copyright lawsuit against Franklin,* ***forcing them to stop making*** **Apple II "clones."**

8pt / 12 – Mixed Weights

The Osborne 1 is released!
Weighing **24 pounds** and costing **$1,795**, the Osborne 1 is the first mass-produced portable computer. Its price is *especially attractive* as the computer included *very useful* productivity software worth about $1,500 alone. It featured a **5-inch** display, **64 KB** of memory, a modem, and two **5.25-inch** floppy disk drives.

6pt / 10 – Mixed Weights

RCA introduces its **Model 501** transistorized computer in 1958. **The 501 is built on a *'building block'* concept which allows it to be highly flexible for many different uses and could simultaneously control up to 63 tape drives—very useful for large databases of information. For many business users, quick access to this huge storage capability outweighed its relatively slow processing speed. *Customers included US military as well as industry.***

90pt

Program

40pt / 50

The process of writing or editing source code.

30pt / 37

“Hello, World!” **is often the first program written by people learning to code.**

20pt / 26

Programming — the way to give intructions to machines — is also being studied in the laboratories. Several new ideas of importance have developed as a result.

18pt / 24

A computer program is a detailed plan or procedure for solving a problem with a computer; more specifically, it combines data and an unambiguous, ordered sequence of computational instructions necessary to achieve a specific solution.

14pt / 20

Computer programs can be categorized by *the programming language paradigm* used to produce them: *imperative or declarative*. The former specifies a sequential algorithm using declarations, expressions, and statements while the latter kind describes what computation should be performed but not how to compute it.

11pt / 17

Programs stored in the memory of a computer enable the computer to perform a variety of tasks in sequence or even intermittently. The idea of an internally stored program was introduced in the late 1940s by the Hungarian-born mathematician *John von Neumann*. The first digital computer designed with internal programming capacity was the EDVAC (acronym for *Electronic Discrete Variable Automatic Computer)*, constructed in 1949.

8pt / 12

Software, instructions that tell a computer what to do. Software comprises the entire set of programs, procedures, and routines associated with the operation of a computer system. The term was coined to differentiate these instructions from hardware—*i.e.*, the physical components of a computer system. A set of instructions that directs a computer's hardware to perform a task is called a *program*, or *software program*.

6pt / 10

We call* machine language *the numeric codes for the operations that a particular computer can execute directly. The codes are strings of 0s and 1s, or binary digits ("bits"), which are frequently converted both from and to hexadecimal (base 16) for human viewing and modification. Machine language is difficult to read and write, since it does not resemble conventional mathematical notation or human language, and its codes vary from computer to computer.

90pt

Simon 1

40pt / 50

A masterly intrument for obtaining new knowledge.

30pt / 37

In his book *Giant Brains, or Machines That Think* Edmund Berkeley noted:

20pt / 26 (SS03 - Square dots)

“A machine can handle information; it can calculate, conclude and choose; it can perform reasonable operations with information. A machine, therefore, can think.”

18pt / 24 (SS04 - Reverse Left Quotes)

“These new machines are called sometimes mechanical brains and sometimes sequence-controlled calculators and sometimes by other names. Essentially, though, they are machines that can handle information with great skill and great speed.”

14pt / 20

“We shall now consider how we can design a very simple machine that will think. Let us call it Simon, because of its predecessor, *Simple Simon* (…)
We can say Simon has a mentality of 4. We mean not age 4 but just the simple fact that Simon knows only four numbers and can do only four operations with them.”

11pt / 17

Simon was a relay-based computer, described by Edmund Berkeley in a series of thirteen construction articles in Radio-Electronics magazine, from October 1950. Intended for the educational purpose of demonstrating the concept of digital computer, it could not be used for any significant practical computation since it had only two bits of memory. It is sometimes described as the "first personal computer".

8pt / 12

“Some day we may even have small computers in our homes, drawing their energy from electric-power lines like refrigerators or radios ... They may recall facts for us that we would have trouble remembering. They may calculate accounts and income taxes. Schoolboys with homework may seek their help. They may even run through and list combinations of possibilities that we need to consider in making important decisions. We may find the future full of mechanical brains working about us…”

6pt / 10

The Simon's architecture was based on relays. The programs ran from a standard paper tape, with five rows of holes for data. The registers and ALU stored only 2 bits. The user entered data via punched paper, or by five keys on the front panel. The machine output data through five lamps.
The punched tape served not only for data entry, but also as memory storage. The machine executed instructions in sequence, as it read them from the tape. It could perform four operations: addition, negation, greater than, and selection.

90pt

Turing

40pt / 50

“Machines take me by surprise with great frequency.”

30pt / 37 (SS02 - Alternate ‘a’ & ‘g’)

Alan Turing is considered the father of theoretical computer science.

20pt / 26

“A computer would deserve to be called intelligent if it could deceive a human into believing that it was human,” Turing wrote in 1950 defining his now-famous *Turing Test*.

18pt / 24

“We are trying to build a machine to do all kinds of different things simply by programming rather than by the addition of extra apparatus,” Turing said at a symposium on large-scale digital calculating machinery in 1947 in Cambridge, Massachusetts.

14pt / 20

Turing imagined an electromechanical machine called *the bombe*, which could break Enigma more effectively than the Polish *bomba kryptologiczna*, from which its name was derived. *The bombe* became one of the primary tools, and the major automated one, used to decipher German Enigma-machine-encrypted secret messages during World War II.

11pt / 17

Peter Hilton wrote, about his experience working with Turing: *“It is a rare experience to meet an authentic genius. Those of us privileged to inhabit the world of scholarship are familiar with the intellectual stimulation furnished by talented colleagues. We can admire the ideas they share with us and are usually able to understand their source; we may even often believe that we ourselves could have created such concepts and originated such thoughts…”*

8pt / 12

“However, the experience of sharing the intellectual life of a genius is entirely different; one realizes that one is in the presence of an intelligence, a sensibility of such profundity and originality that one is filled with wonder and excitement. Alan Turing was such a genius, and those, like myself, who had the astonishing and unexpected opportunity, created by the strange exigencies of the Second World War, to be able to count Turing as colleague and friend will never forget that experience, nor can we ever lose its immense benefit to us.”

6pt / 10

Turing's design for the Automatic Computing Engine (ACE) was the first complete specification of an electronic stored-program all-purpose digital computer. Had Turing's ACE been built as he planned, it would have had vastly more memory than any of the other early computers, as well as being faster. However, his colleagues at NPL thought the engineering too difficult to attempt, and a much smaller machine was built, the Pilot Model ACE.

90pt

Devices

40pt / 50 (SS01 - Centra No.1 Alternates)

“Software comes from heaven when you have good hardware.”

30pt / 37

Includes memory, cabling, power supply, peripheral devices and circuit boards.

20pt / 26

Hardware is so-termed because it is *“hard”* or rigid with respect to changes, whereas software is *“soft”* because it is easy to change.

18pt / 24

In the early 1970s the introduction of large-scale integration (LSI)—*which made it possible to pack thousands of transistors, diodes, and resistors onto a silicon chip less than 0.2 inch (5 mm) square*—led to the development of the microprocessor.

14pt / 20

The vacuum tube is a glass tube that has its gas removed, creating a vacuum. This device controls electric current flow in a high vacuum between electrodes to which an electric potential difference has been applied. It was commonly used in early computers as a switch or an amplifier, before being replaced by transistors.

11pt / 17

The computer industry used the term "*central processing unit*" as early as 1955. A central processing unit (CPU), *also called a central processor, main processor or just processor*, is the electronic circuitry within a computer that executes instructions that make up a computer program. The CPU performs basic arithmetic, logic, controlling, and input/output (I/O) operations specified by the instructions in the program.

8pt / 12

Mainframe: Digital computer designed for high-speed data processing with heavy use of input/output units such as large-capacity disks and printers. They have been used for such applications as payroll computations, accounting, business transactions, information retrieval, airline seat reservations, and scientific and engineering computations. Mainframe systems, with remote "dumb" terminals, have been displaced in many applications by client-server architecture.

6pt / 10

Paper tape could be read into computers at up to 1,000 characters per second.[6] In 1963, a Danish company called Regnecentralen introduced a paper tape reader called RC 2000 that could read 2,000 characters per second; later they increased the speed further, up to 2,500 cps. As early as World War II, the Heath Robinson tape reader, used by Allied codebreakers, was capable of 2,000 cps while Colossus could run at 5,000 cps using an optical tape reader designed by Arnold Lynch.

Centra Mono Glyph Overview

Uppercase

A B C D E F G H I J K L M
N O P Q R S T U V W X Y Z

Lowercase

a b c d e f g h i j k l m
n o p q r s t u v w x y z

Punctuation and Symbols

. , … : ; ¡ ! ¿ ? ( ) [ ] { } ⟨ ⟩
/ | ¦ ‖ \ ' " ‘ ’ “ ” ‹ › « » - – — _
~ ^ · † ‡ ¶ § & @ * ° ™ © ®

Diacritics Uppercase

Á À Â Ã Ä Å Ā Ă Ą Ʌ Æ Ǽ Ç Ć Ĉ Ċ Č Ď Đ
Ð É È Ê Ë Ē Ĕ Ė Ę Ě Ĝ Ğ Ġ Ģ Ĥ Ħ Í Ì Î
Ï Ĩ Ī Ĭ Į Ĵ Ʊ Ķ Ĺ Ľ Ļ Ŀ Ł Ń Ņ Ň Ñ Ŋ Ó
Ò Ô Õ Ō Ö Ŏ Ő Ø Ǿ Œ Þ Ŕ Ŗ Ř Ś Ŝ Š Ş Ș
ß Ţ Ŧ Ť Ú Ù Û Ü Ũ Ū Ů Ű Ŭ Ų Ẃ Ẁ Ẅ Ŵ Ý
Ỳ Ŷ Ÿ Ź Ż Ž

Diacritics Lowercase

á à â ã ä å ā ă ą æ ǽ ç ć ĉ ċ č ď đ ð
é è ê ë ē ĕ ė ę ě ĝ ğ ġ ģ ĥ ħ ɪ í ì î
ï ĩ ī ĭ į i ȷ ĵ ij ķ ĸ ĺ ľ ļ l· ł ń ņ ň
ñ ŋ ó ò ô õ ō ö ŏ ő ø ǿ œ þ ŕ ŗ ř ś ŝ
š ş ș ß ţ ŧ ť ú ù û ü ũ ū ů ű ŭ ų ẃ ẁ
ẅ ŵ ý ỳ ŷ ÿ ź ż ž

Lining Figures (Default)

1 2 3 4 5 6 7 8 9 0

Oldstyle Figures

1 2 3 4 5 6 7 8 9 0

Superscript / Subscript

⁺ ⁻ ⁼ ⁽ ⁾ ¹ ² ³ ⁴ ⁵ ⁶ ⁷ ⁸ ⁹ ⁰

₁ ₂ ₃ ₄ ₅ ₆ ₇ ₈ ₉ ₀ ₊ ₋ ₌ ₍ ₎

Pre-Built Fractions

1/2 1/3 2/3 1/4 3/4 1/5 2/5 3/5 4/5 1/6 5/6 1/8 3/8 5/8 7/8

Superscript Ordinals

ᵃ ᵇ ᶜ ᵈ ᵉ ᶠ ᵍ ʰ ⁱ ʲ ᵏ ˡ ᵐ ⁿ ᵒ ᵖ ᵠ ʳ ˢ ᵗ ᵘ ᵛ ʷ ˣ ʸ ᶻ

Currency

$ ¢ € £ ¥ £ ₹ ₦ ₱ ₩ ₪ ₮ ₱ ฿ ₺ ₽ ƒ ¤

Mathematical Symbols

+ − × ÷ = ≈ ≠ ± ≡ ¬ < > ≤ ≥
π ∂ ◊ Δ ∏ Σ √ ∫ ∞ # % ‰

Arrows

← → ↑ ↓ ↖ ↗ ↙ ↘

Centra Mono OpenType Features

Case Specific Punctuation

(/) [\ ] { | } ⟨ ¦ ⟩ ‖
@ ¡ ¿ « · » ‹ · › - – —

(dpi) → (DPI)

Superscript Ordinals

a b c d e f g h i j k l m
n o p q r s t u v w x y z

Jan 23rd

Supercript / Subscript

+ - = ( ) 1 2 3 4 5 6 7 8 9 0

0 1 2 3 4 5 6 7 8 9 + - = ( )

$10^{2} \times 9^{(3+5)}$

$H_{2}O \quad C_{4}H_{10}$

Old Style Figures

0123456789 → 0123456789

Centra Mono OpenType Features

Stylistic Set 01 - Centra No.1 Alternates

GJS
aest
235?
§$£€

Graphics → Graphics
Johnniac → Johnniac
Software → Software
$325? → $325?

Stylistic Set 02 - Centra No.2 Alternates

a → ɑ
g → g

magnetic → magnetic

Stylistic Set 03 - Square Dots

ë → ë

unit:bit → unit:bit

Stylistic Set 04 - Reverse Left Quotes

“ → “

“random” → “random”

Languages

ISO 8859-1 / Latin1
Afrikaans, Albanian, Basque, Breton, Catalan, Catalan, Corsican, Czech, Danish, Dutch, English (UK and US), Estonian, Faroese, Finnish, French, Galician, German, Hungarian, Icelandic, Indonesian, Irish, Irish (new orthography), Italian, Latin (basic classical orthography), Leonese, Luxembourgish (basic classical orthography), Malay, Manx, Māori, Norwegian (Bokmål and Nynorsk), Occitan, Portuguese, Rhaeto-Romanic, Scottish Gaelic, Spanish, Swahili, Swedish, Turkish, Walloon, Welsh

ISO 8859-2 / Latin2
Bosnian, Croatian, Czech, German, Hungarian, Polish, Romanian, Serbian (when in the Latin script), Slovak, Slovene, Upper Sorbian, and Lower Sorbian

ISO 8859-3 / Latin3
Esperanto, Maltese, Turkish

ISO 8859-4 / Latin4
Estonian, Latvian, Lithuanian, Greenlandic, Sami

ISO 8859-9 / Latin5
Turkish

ISO 8859-10 / Latin6
Nordic languages

ISO 8859-13 / Latin7
Baltic languages

ISO 8859-15 / Latin9
Afrikaans, Albanian, Breton, Catalan, Danish, Dutch[b], English (US and modern British), Estonian, Faroese, Finnish, French, Galician, German, Icelandic, Irish (New orthography), Italian, Kurdish (Unified Alphabet), Latin (basic classical orthography), Luxembourgish (basic classical orthography), Malay (Rumi script), Norwegian (Bokmål and Nynorsk), Occitan, Portuguese (European and Brazilian), Rhaeto-Romanic, Scottish Gaelic, Scots, Spanish, Swahili, Swedish, Tagalog, Walloon

ISO 8859-16 / Latin10
Albanian, Croatian, French, German, Hungarian, Irish Gaelic (new orthography), Italian, Polish, Romanian, Serbian, Slovenian

File formats

Desktop: OTF
Web: WOFF, TTF, EOT, SVG
App: OTF

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Sharp Type is a digital type foundry based in New York City. The foundry produces custom & retail typefaces for print, digital, and environmental design– for brands, design houses, and publications. Sharp Type designs typefaces with utility and beauty for the modern era.