

Alpha numeric codes :

It is an assignment of bit combinations to the letters of the alpha bet , the decimal digit (0-9) , punctuation marks , and several special character such as # .

The most widely used of alpha numeric codes are :

1- EBCDIC (Extended Binary Coded Decimal Interchange Code).

EBCDIC(pronounced "ebb see dick") is short for extended binary coded decimal interchange code is eight bits, or one byte, wide. This is a coding system used to represent characters-letters, numerals, punctuation marks, and other symbols in computerized text. A character is represented in EBCDIC by eight bit. EBCDIC mainly used on IBM [mainframe](#) and IBM midrange [computer operating systems](#). Each byte consists of two nibbles, each four bits wide. The first four bits define the class of character, while the second nibble defines the specific character inside that class.

2- ASCII (American Standard Code for Information Interchange).

ASCII Stands for American Standard Code for Information Interchange (pronounced 'as-key'). This is a standard set of characters understood by all computers, consisting mostly of letters and numbers plus a few basic symbols such as \$ and %. Which employs the 128 possible 7-bit integers to encode the 52 uppercase and lowercase letters and 10 numeric digits of the Roman alphabet, plus punctuation characters and some other symbols. The fact that almost everyone agrees on ASCII makes it relatively easy to exchange [information](#) between different programs, different [operating systems](#), and even different computers.

The EBCDK code uses 8-bit to represent each symbols while the ASCII code use 7-bit code.

Character	ASCII code	Binary code
null character	0	0000000
a	97	1100001
b	98	1100010
c	99	1100011
A	65	1000001
B	66	1000010
C	67	1000011
%	37	0100101
+	43	0101011
0	48	0110000
1	49	0110001
Delete	127	1111111