



Measuring Capacity

How do you measure the capacity of the system? Measuring Capacity is determined by bits and bytes organized into Common coding schemes such as ASCII, Unicode, and EBCDIC as noted below:Laptop

- **Bit**—In the binary system, each 0 or 1 is called a bit, which is short for “binary digit.”
- **Byte**—A group of 8 bits is called a byte, and 1 byte represents 1 character, digit, or other value.
- **Kilobyte** —1 kilobyte (K, KB) is about 1,000 bytes. (Actually, it’s precisely 1,024 bytes, but the figure is commonly rounded.)
- **Megabyte** —1 megabyte (M, MB) is about 1 million bytes (1,048,576 bytes).
- **Gigabyte** —1 gigabyte (G, GB) is about 1 billion bytes (1,073,741,824 bytes).
- **Terabyte** —1 terabyte (T, TB) represents about 1 trillion bytes (1,009,511,627,776 bytes).
- **Petabyte** —1 petabyte (P, PB) represents about 1 quadrillion bytes (1,048,576 gigabytes).
- **Exabyte** —1 exabyte (EB) represents about 1 quintillion bytes—that’s 1 billion, billion bytes.

When you type a letter or word, your computer will use a binary Coding schemes to create that letter, that word, that sentence, that paragraph or that dissertation. Each level of communication is translated into machine language known as 1’s and 0’s or bits and bytes. Humans understand the text you see on a document or natural language, but the computer understands natural language converted into machine language representing the electrical activities of 1’s and 0’s. You may find the following links below enlightening:

Here is the complete extended [ASCII table](#)  .