Measurements and Units

1 Time

Unit	Notation	Length
1 day	day	24 hours
1 hour	h	60 minutes
1 minute	m	60 seconds
1 second	s	1 second - standard base unit
1 millisecond	ms	0.001 s, or 1000 ms = 1 s
1 microsecond	μs	10^{-6} s, or 1,000,000 μs = 1 s
1 nanosecond	ns	10^{-9} s, or 1,000,000,000 ns = 1 s
1 picosecond	ps	10^{-12} s, or 1,000,000,000,000 ps = 1 s

2 Memory/Storage

Term	Notation	Size
bit	b	1 (stores 0 or 1)
byte	B	8 bits
word	word	typically 32/64 bits (machine dependent)
kilobyte	KB	10^3 bytes = 1000 B
kibibyte	KiB	2^{10} bytes = 1024 B
megabyte	MB	10^6 bytes = 1,000,000 B
mebibyte	MiB	2^{20} bytes = 1,048,576 B
gigabyte	GB	10^9 bytes = 1,000,000,000 B
gibibyte	GiB	2^{30} bytes = 1,073,741,824 B
terabyte	TB	10^{12} bytes = 1,000,000,000,000 B
tebibyte	TiB	2^{40} bytes = 1,099,511,627,776 B

In practice, computer scientists use KB, MB, etc. to refer to 2^n bytes, rather than KiB, MiB, etc.

3 Cycles

Term	Notation	Cycles/Second
hertz	Hz	1 cycle/second
kilohertz	KHz	10^3 (1000) cycles/second
megahertz	MHz	10^6 (1 million) cycles/second
gigahertz	GHz	10^9 (1 billion) cycles/second
terahertz	THz	10^{12} (1 trillion) cycles/second