

BINARY SYSTEM REFERENCE CHART

Base-2 Positional Notation

2^7
128
 2^6
64
 2^5
32
 2^4
16
 2^3
8
 2^2
4
 2^1
2
 2^0
1

DECIMAL (BASE 10)	BINARY (BASE 2)	SUMMATION (POWERS OF 2)
0	0000	0
1	0001	1
2	0010	2
3	0011	2 + 1
4	0100	4

DECIMAL (BASE 10)	BINARY (BASE 2)	SUMMATION (POWERS OF 2)
5	0101	4 + 1
6	0110	4 + 2
7	0111	4 + 2 + 1
8	1000	8
9	1001	8 + 1
10	1010	8 + 2
15	1111	8 + 4 + 2 + 1
16	10000	16
32	100000	32
64	1000000	64

Note: In binary, each position to the left represents a power of 2, starting from 2^0 on the far right.