

The following table is a list of selected binary floating point values and the corresponding decimal value. All binary numbers are 64 bits - one bit to the left of the radix point and 63 to the right. The notation "2^59" means 2 raised to the 59th power where "59" is a decimal value.

These values were computed using the IEEE-754 Analysis calculator available at <http://babbage.cs.qc.cuny.edu/IEEE-754/> using the Binary128 calculator but truncating the rightmost 48 bits after ensuring that they are all zero.

1. 000000000000000000000000000000000000000000000000000000000000000000000000000000000000000 x2^00 = 1

...

1. 101111000001011011010110011101001110110010000000000000000000000000000000000000000000000000000000000 x2^59 = 1,000,000,000,000,000,000

1. 1011110000010110110101100111010011101100100000000000000000000001 x2^59 = 1,000,000,000,000,000,000.0625

1. 1011110000010110110101100111010011101100100000000000000000000010 x2^59 = 1,000,000,000,000,000,000.125

1. 1011110000010110110101100111010011101100100000000000000000000011 x2^59 = 1,000,000,000,000,000,000.1875

1. 1011110000010110110101100111010011101100100000000000000000000100 x2^59 = 1,000,000,000,000,000,000.25

...

1. 1111111111111111111111111111111111111111111111111111111111111111111110 x2^59 = 1,152,921,504,606,846,975.8125

1. 1111111111111111111111111111111111111111111111111111111111111111111110 x2^59 = 1,152,921,504,606,846,975.875

1. 1111111111111111111111111111111111111111111111111111111111111111111111 x2^59 = 1,152,921,504,606,846,975.9375

1. 000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000 x2^60 = 1,152,921,504,606,846,976

1. 0000000000000000000000000000000000000000000000000000000000000001 x2^60 = 1,152,921,504,606,846,976.125

1. 0000000000000000000000000000000000000000000000000000000000000010 x2^60 = 1,152,921,504,606,846,976.25

...

1. 1111111111111111111111111111111111111111111111111111111111111111111111 x2^60 = 2,305,843,009,213,693,951.875

1. 000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000 x2^61 = 2,305,843,009,213,693,952

1. 0000000000000000000000000000000000000000000000000000000000000001 x2^61 = 2,305,843,009,213,693,952.25

...

1. 1111111111111111111111111111111111111111111111111111111111111111111111 x2^62 = 4,611,686,018,427,387,903.75

1. 000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000 x2^62 = 4,611,686,018,427,387,904

1. 0000000000000000000000000000000000000000000000000000000000000001 x2^62 = 4,611,686,018,427,387,904.5

...

1. 1111111111111111111111111111111111111111111111111111111111111111111110 x2^62 = 9,223,372,036,854,775,807

1. 1111111111111111111111111111111111111111111111111111111111111111111111 x2^62 = 9,223,372,036,854,775,807.5

1. 000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000 x2^63 = 9,223,372,036,854,775,808

1. 0000000000000000000000000000000000000000000000000000000000000001 x2^63 = 9,223,372,036,854,775,809

...

1. 1111111111111111111111111111111111111111111111111111111111111111111110 x2^63 = 18,446,744,073,709,551,614

1. 1111111111111111111111111111111111111111111111111111111111111111111111 x2^63 = 18,446,744,073,709,551,615

1. 000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000 x2^64 = 18,446,744,073,709,551,616

1. 0000000000000000000000000000000000000000000000000000000000000001 x2^64 = 18,446,744,073,709,551,618

...

1. 11111111111111111111111111111111111111111111111111111111111111001 x2^65 = 73,786,976,294,838,206,456

1. 1111111111111111111111111111111111111111111111111111111111111111111111 x2^65 = 73,786,976,294,838,206,460

1. 000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000 x2^66 = 73,786,976,294,838,206,464

1. 0000000000000000000000000000000000000000000000000000000000000001 x2^66 = 73,786,976,294,838,206,472

1. 0000000000000000000000000000000000000000000000000000000000000010 x2^66 = 73,786,976,294,838,206,480

1. 0000000000000000000000000000000000000000000000000000000000000011 x2^66 = 73,786,976,294,838,206,488

1. 0000000000000000000000000000000000000000000000000000000000000100 x2^66 = 73,786,976,294,838,206,496

...

1. 01011010111100011101011110001011010110001100001111111111111111100 x2^66 = 99,999,999,999,999,999,968

1. 0101101011110001110101111000101101011000110000111111111111111101 x2^66 = 99,999,999,999,999,999,976

1. 0101101011110001110101111000101101011000110000111111111111111110 x2^66 = 99,999,999,999,999,999,984

1. 0101101011110001110101111000101101011000110000111111111111111111 x2^66 = 99,999,999,999,999,999,992

1. 0101101011110001110101111000101101011000110001000000000000000000 x2^66 = 100,000,000,000,000,000,000