

The Hyper⁶⁴ Specification

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Increasing bit number 

Type encoding

00_{Binary} = 0_{Hex} = 0_{Dec} \Rightarrow Immediate value

01_{Binary} = 1_{Hex} = 1_{Dec} \Rightarrow Indirection bit

10_{Binary} = 2_{Hex} = 2_{Dec} \Rightarrow Reserved

11_{Binary} = 3_{Hex} = 3_{Dec} \Rightarrow Reserved

Length encoding

Length of operand = 2^{Length}

Example:

000000_{Binary} = 00_{Hex} = 0_{Dec} $\Rightarrow 2^0 \Rightarrow$ 1 Bit long

000001_{Binary} = 01_{Hex} = 1_{Dec} $\Rightarrow 2^1 \Rightarrow$ 2 Bits long

000010_{Binary} = 02_{Hex} = 2_{Dec} $\Rightarrow 2^2 \Rightarrow$ 4 Bits long

000011_{Binary} = 03_{Hex} = 3_{Dec} $\Rightarrow 2^3 \Rightarrow$ 8 Bits long

000100_{Binary} = 04_{Hex} = 4_{Dec} $\Rightarrow 2^4 \Rightarrow$ 16 Bits long

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111101_{Binary} = 3C_{Hex} = 61_{Dec} $\Rightarrow 2^{61} \Rightarrow$ 2.3058430092 Exabits long

111110_{Binary} = 3E_{Hex} = 62_{Dec} $\Rightarrow 2^{62} \Rightarrow$ 4.6116860184 Exabits long

111111_{Binary} = 3F_{Hex} = 63_{Dec} $\Rightarrow 2^{63} \Rightarrow$ 9.2233720369 Exabits long