

$$\begin{array}{ccccccc} 0 \times \text{FFFFFFFF} & + & 0 \times 00000001 & = & 0 \times 10000000 \\ \xleftrightarrow{32\text{-bits}} & & \xleftrightarrow{32\text{-bits}} & & \xleftrightarrow{32\text{-bits}} \end{array}$$

A diagram illustrating a 32-bit addition operation. It shows the hexadecimal value 0xFFFFFFFF (all 32 bits set to 1) added to the hexadecimal value 0x00000001 (only the least significant bit set to 1). The result is 0x10000000, where the 33rd bit (the carry) is 1 and the remaining 32 bits are 0. A vertical dashed line separates the carry bit from the 32-bit result. Below each hexadecimal value is a double-headed arrow labeled "32-bits", indicating the width of the operands and the result.