

$$(-1)^S \times 1.m \times 2^{(e-127)}$$

$$100101.10001$$

↓ NORM.

$$1.0010110001 \times 2^5$$

5 bit

$$S = 0 \quad (1 \text{ bit})$$

$$(M) M = 0010110001 \dots 0 \quad (23 \text{ bit})$$

$$E = 5 + 127 = 132 \Rightarrow 10000100 \quad (8 \text{ bit})$$

(132<sub>10</sub>)

$$e \cdot 2^N$$

↓

$$e \cdot 2^N$$

$$\longrightarrow (e + b) \cdot 2^N$$

$$10110.0101$$

↓ NORM

$$1.01100101 \times 2^4$$

4 bit

$$S = 0 \quad (1 \text{ bit})$$

$$(M) M = 01100101 \dots 0 \quad (23 \text{ bit})$$

$$E = 4 + 127 = 131 \Rightarrow 1000011 \quad (8 \text{ bit})$$

(131<sub>10</sub>)

$$b \cdot 2^{N-1}$$

↓

$$0.6 \times 2^N$$

$$\begin{aligned} 30 \times 10^0 \\ 30 \times 10^1 \\ 3 \times 10^2 \end{aligned}$$

$$\begin{aligned} 3.3 \times 10^3 \\ 0.03 \times 10^4 \end{aligned}$$