

$$kind = \begin{cases} \pm zero, & \text{if } exp = 0 \text{ and } fraction = 0 \\ subnormal, & \text{if } exp = 0 \text{ and } fraction \neq 0 \\ \pm inf, & \text{if } exp = 1_{mask} \text{ and } fraction = 0 \\ nan, & \text{if } exp = 1_{mask} \text{ and } fraction \neq 0 \\ normal. & \text{otherwise} \end{cases}$$