

**Proposal for C23
WG14 N2882**

Title: Clarification for max exponent macros
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Proposal category: Editorials
Reference: N2843, N2596

This document updates N2843 which was approved at the November 2021 WG 14. The suggested change below backs out the change in N2843 (which was to replace “representable” with “normalized”) and instead qualifies the formula e_{\max} with words similar to the specification for the **FLT_MAX** macros. This clarifies that double-double implementations, which have finite values with exponent greater than e_{\max} , are not required to define the macros to have the value e_{\max} .

Suggested changes (change marks relative to N2596):

In 5.2.4.2.2 #18, change:

- maximum integer such that **FLT_RADIX** raised to one less than that power is a representable finite-floating-point number; **if that representable finite floating-point number is normalized, the value of the macro is e_{\max}**

FLT_MAX_EXP

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