Conversions from DPD/GBCD to BCD without Table Lookup

Reconsidering the Combination Field Encoding

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Current Combination Field

Consider the 64-bit case. The goal is to encode 1 (leading) digit d_0 together with a biased exponent E.

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- Allow easy NaN initialization
- Exponent field and digit field non-contiguous
- Unordered

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11	E	d_0 mod 8

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- Easy initialization of NaN
- Contiguous exponent and digit fields
- Some ordering
- Allow exploitation of binary FP hardware