

Review of: "Fast Addition for Multiple Inputs with Applications for a Simple and Linear Fast Adder/Multiplier And Data Structures"

Emiliano Morini

Potential competing interests: No potential competing interests to declare.

This paper contains an elegant mathematical formalisation of addition and multiplication but the current formulation might be hard to follow by the readers who don't have an algebraic background.

From my current understanding, the suggested implementations closely resemble the standard ways to reduce hardware addition/multiplication arrays. If it is not the case, I would recommend to emphasise why this approach is new.

I would also recommend to distinguish if this paper is for an audience of mathematicians or of hardware engineers. In the first case, it would be useful to focus on the modelling aspect, making sure all the notations are properly defined, trying to simplify the exposition as much as possible while reducing the stress on the implementation. In the second case, I would suggest to reduce the algebraic details and to introduce comparisons with existent hardware implementations, in order to clarify the potential new contribution to the field.