Dear Editors,

Our paper submission is an extension of our recent IOLTS 2021 publication below:

F. Bas et al., "SafeDE: a flexible Diversity Enforcement hardware module for light-lockstepping," 2021 IEEE 27th International Symposium on On-Line Testing and Robust System Design (IOLTS), 2021, pp. 1-7, doi: 10.1109/IOLTS52814.2021.9486715.

We have carefully reviewed the material published in the conference, and have made explanations more concise in many places, and added a number of additional contributions increasing the overall contents largely above 30%. In particular, the new contributions are as follows:

1. Extending SafeDE to N-modular redundancy. Our original IOLTS publication only considered 2-modular redundancy schemes, but our current submission extends this to arbitrary levels of redundancy (new section III.C).
2. Extending SafeDE integration aspects to include software-integration aspects. Our original IOLTS publication only considered aspects related to integrating SafeDE at the hardware level but provided no insight on how to configure and use it at the software level. Our current submission covers software integration both, at bare metal and on top of Linux (new section III.E).
3. Added detailed fault-injection campaign. Our original IOLTS publication only evaluated aspects related to performance and area but included no fault evaluation at all. Our current submission provides a detailed fault injection campaign targeting so-called common cause failures (CCFs), which are the target of our work. Our fault injection occurs in different core locations, with different fault models, and with different fault durations (new section IV.B).

Overall, these technical contributions account for more than 30% of extra material. As a quantitative proxy, technical sections (III and IV) account for 2.75 pages of contents already presented in the conference (we exclude introduction, background, related work, conclusion, and references in this count), and 2.25 pages of new material, hence representing 80% extra technical material.

Kind regards,