Towards Robust and Cost-Effective Critical Real-Time Systems under Thermal-Aware Design



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Motivation



State-of-the-Art



Proposed Approach



Concluding Remarks

References

1. Need to revisit the task-to-core mapping strategies

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- available in the literature in order to take into account the thermal profile of each task.
- 2. Need to adopt a per-core analysis and build a unique "correct-by-construction" framework wherein we model both the temporal and thermal "on-core" and "un-core" activities for each processing element.
- 3. Need to derive an analysis that predicts the runtime behavior of the entire system without any need of a feedback loop.

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Co-financed by the European Union through the Clean Sky 2 Joint Undertaking, under the H2020 Framework Programme (H2020-CS2-CFP08-2018-01), grant agreement nr. 832011 (THERMAC):



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