

This month marked the start of the EC-funded parMERASA Project

The objective of parMERASA is to dramatically improve the performance of legacy applications in avionics, automotive and construction machinery domains by parallelizing these applications to reduce the Worst Case Execution Time (known as WCET) in comparison with their original sequential versions. The project will culminate in the release of the parMERASA multi-core execution platform which will provide temporal and spatial isolation between tasks and scale up to 64-cores.

BSC contributions to parMERASA include designing a time predictable multi-core processor architecture that effectively exploits the TLP of industrial hard real-time applications as well as providing a TinyIMA and developing novel thread/task mapping techniques that fulfill the requirements of hard real-time parallel applications.

parMERASA is a three-year project comprised of 8 partners from 5 different countries that has strong participation from key industry partners BAUER Maschinen GmbH, DENSO AUTOMOTIVE Deutschland GmbH and Honeywell International s.r.o. It is Funded by the European Commission and has a total budget of 4.58MM Euro.

For more information, go to www.parmerasa.eu.