

# **Performance-monitoring counters for real-time multicore systems: analysis of the state of the art and initial proposal**

*Activity:*

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## Abstract:

In this activity we analyse the performance monitoring counter (PMC) of some current high-performance and real-time multicore processors. Our goal is determining whether current PMC architectures help providing information about the contention (inter-task interference) suffered by a task in the access to multicore hardware shared resources. This is of paramount importance when co-schedule several tasks in a multicore as a way to understand how task interact each other and hence open the door to software optimizations to reduce the impact of contention. In addition to this analysis we sketch several proposals of PMC to better capture the impact of contention on tasks execution time.