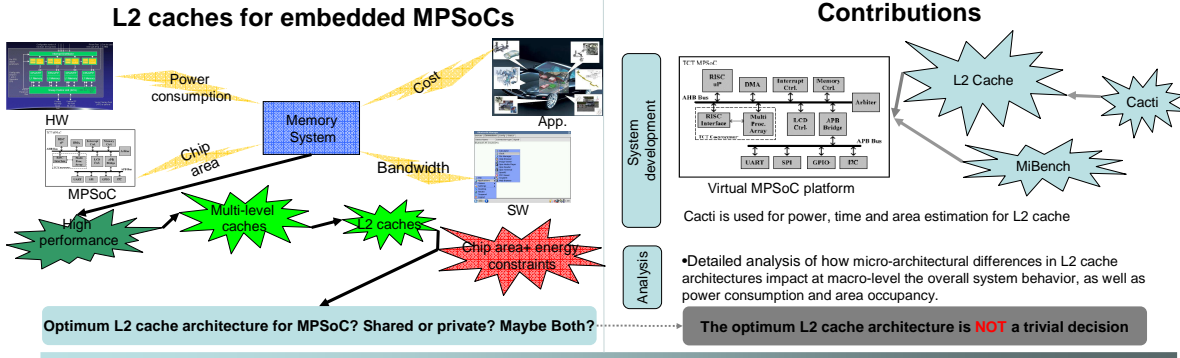
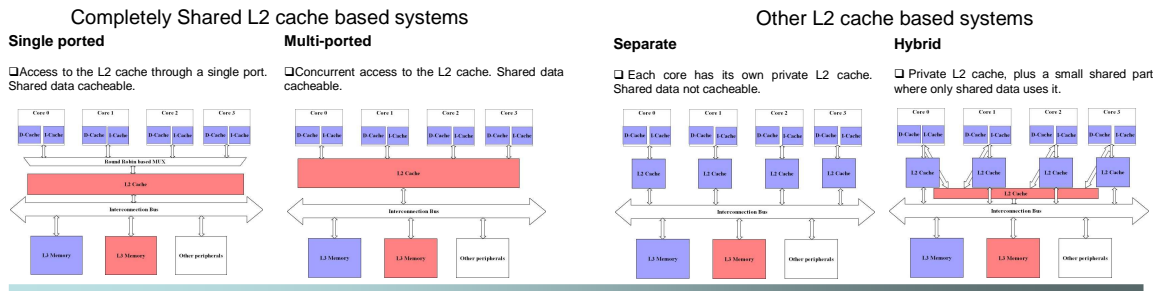


Trade-offs Analysis of L2 on-chip Cache Architectures for Embedded MPSoCs



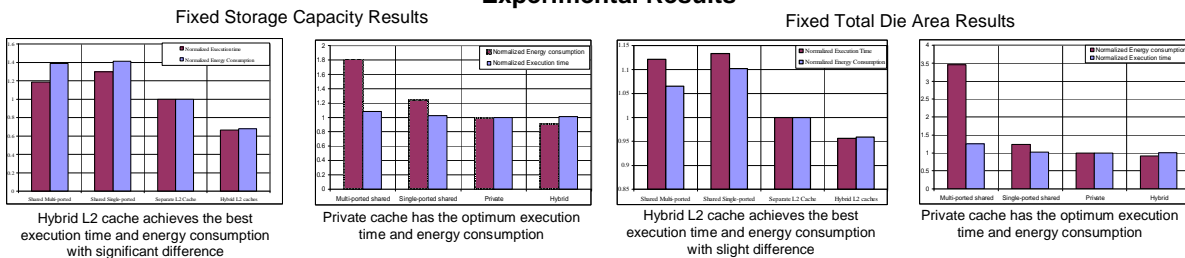
Explored system architectures



Design space exploration



Experimental Results



Conclusions

- Private L2 cache achieves much better overall performance than the shared one, regardless the applied workload (third column set in all figures).
- Hybrid cache achieves better results than the private cache in parallel workload, due to the small shared cache portion in the hybrid cache.
- Proposal of a special parameter named the shared-private ratio (**SP ratio**). This ratio shows the ratio between the amount of the shared data to the private data. By this ratio definition, the optimum cache architecture could be chosen for each specific application specific system.