

Title: Big Data in 89mm²

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Abstract

As SoC integration keeps scaling, the organizations and activities inside SoC become ever complicated. Therefore, rich information, the big data in silicon, obtained by observing the internal status has become crucial to SoC development, debugging, configuration, optimization and security, etc. This talk will first provides overview to some commercial and academic SoC infrastructures which access or manipulate the SoC big data. Then some typical applications of these big data are introduced, including optimizations in hardware/software/power/thermal. Finally, examples of using the big data for security analysis are provided.



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研究興趣:

- 探討微處理器(microprocessor)/微控器(microcontroller)在各種應用環境之下的最佳化設計, 及效能/成本之分析
- 探討相關軟、硬體設計之間的互動關係(hardware/software co-design)
- 相關電腦輔助設計工具之研發
- 著重與工業界之合作及技術交流