IC-EMC, a Software Demonstrator for predicting Electromagnetic Compatibility of Integrated Circuits

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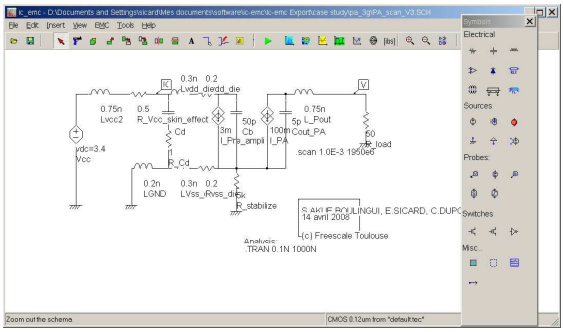
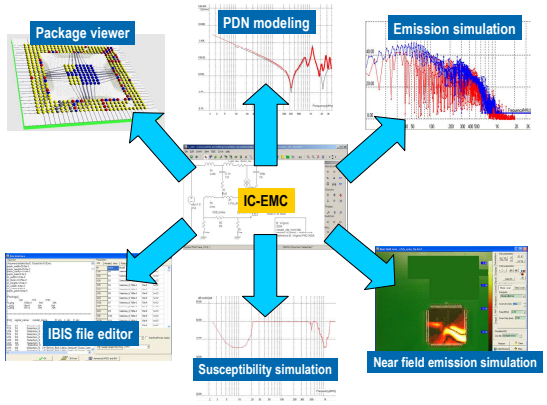
Abstract

The proposed computer demonstration concerns the freeware IC-EMC, a windows-based software demonstrator which aims at simulating parasitic emission and susceptibility of integrated circuits. IC-EMC is not only a tool dedicated to research about EMC of integrated circuits, but also a support for teaching EMC.



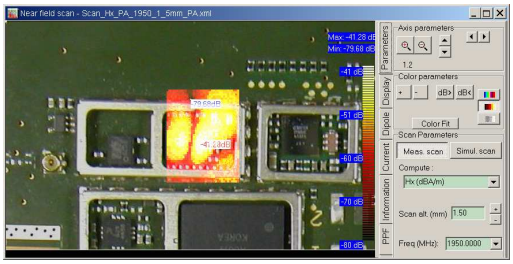
The tool IC-EMC includes a conventional schematic editor, an interface to WinSpice for analog simulation and a set of post-processors dedicated to simulation of:

- IC conducted and radiated emission
- Near field radiated by ICs
- IC conducted and radiated susceptibility
- Z and S parameters



IC-EMC includes also a library of common EMC elements, examples and tools dedicated to EMC model extraction as:

- IBIS file editor and I/O model display
- XML scan data viewer
- Package viewer and package parasitic extraction
- PCB Parasitic interconnect extraction
- ICEM model generator



References

[1] The latest version of the IC-EMC software may be downloaded from www.ic-emc.org.

[2] E. Sicard, A. Boyer "IC-EMC v2.0 User's Manual", INSA editor, July 2009, ISBN 978-2-87649-056-7, 310 pp

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