

EM EMISSIONS OF ICs IMPLEMENTED IN FPGA – INFLUENCE OF FLOOR PLAN AND ELECTRIC FUNCTION

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ABSTRACT

In the paper some investigations are presented aiming to check the influence of IC floor plan and the circuit function on its electromagnetic emissions. As the test vehicle Xilinx FPGA XCV800 type was used, in which two types of multipliers were implemented. To compare the effects, high frequency currents in supply and ground pins of the circuits as well as near field disturbances were measured over the circuits.