

**Regina Hartfiel** 

8th European Workshop on Microelectronics Education 2010



VDE

#### CONTENTS OF THE PRESENTATION

- Idea and participation
- Workshop in Hannover
- Chip development
- My own chip idea
- The final phase of the contest

## IDEA AND PARTICIPATION

- Individuals or teams with up to 4 persons
- Adolescents of grade 8-13
- Answers to the questionnaire
- With or without a chip idea
- Selection of the 12 best answered questionnaires and chip ideas

# WORKSHOP IN HANNOVER

- Presentation of the integrated development environment and the procedure of chip design
- Discussion with our tutors and planning of the project
- Exchange with other teams



EWME 2010 - The Anti-Anbrenn-Chip by Regina Hartfiel

# CHIP DEVELOPMENT

- Realisation of the chip idea in four months Software: ModelSim und Xilinx ISE HDL: Verilog
- Exchange with our tutors through a forum
- Regular code review
- Documentation of the progress



## MY OWN CHIP IDEA

 "Anti-Anbrenn-Chip" prevents the burning of food during the cooking



- Analysis with a temperature sensor
- Digital output of measurements on a display
- Visual and acoustical alert

#### THE FINAL PHASE OF THE CONTEST

- Awards ceremony and presentation at the congress for Microsystems in Berlin
- Visit of the Fraunhofer-Institute



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### END OF THE PRESENTATION



THANK YOU FOR YOUR ATTENTION!