

- PRESS RELEASE -

## CST Previews Major Product Release at EuMW 2010

**Paris, France, September 28<sup>th</sup> 2010, Computer Simulation Technology (CST) previews the upcoming version CST STUDIO SUITE™ 2011 including CST's flagship high frequency simulation software CST MICROWAVE STUDIO, at EuMW, booth # 66.**

Engineers who are confronted with electromagnetic problems will benefit from CST's latest software release, CST STUDIO SUITE™ version 2011, and its multitude of powerful new features and functionality. The material property descriptions have been enhanced across the entire palette of available solvers. High performance computing options are now also available for the frequency domain and the integral equation solver.

Automatic optimization and sensitivity analysis are key requirements in a highly efficient design flow. Both of the general purpose electromagnetic solvers – time and frequency domain - of CST MICROWAVE STUDIO can provide sensitivity information for an arbitrary number of parameters in just one simulation run. The newly implemented trust region framework in CST STUDIO SUITE 2011 can employ the sensitivity information to cut down optimization time dramatically. Yield analysis for complex three dimensional models is becoming available at virtually no additional computational cost.

The multiphysics flow inside CST STUDIO SUITE 2011 has been further enhanced. Based on one single simulation model the simulation task concept makes optimization, considering electromagnetic, thermal and mechanical aspect feasible. The temperature calculated from the electromagnetic losses can be used to change the material parameters for a consecutive electromagnetic field simulation. CST MPHYSICS STUDIO now also features a thermal solver on tetrahedral grids.

*“Our complete technology approach is not limited to provide efficient solutions on component level.”* stated Dr. Bernhard Wagner, Managing Director, Sales and Marketing, CST. *“CST is continuously integrating optimal solver technology into a streamlined workflow in order to enable highly complex electromagnetic systems design.”*

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## Highlights of CST STUDIO SUITE 2011

- CST MWS transient solver
  - Sensitivity analysis
  - Dispersive surface impedance models and ohmic sheets.
  - Coated materials
  - Temperature dependent electrical material properties
  - Integration of CST MICROSTRIPES
- CST MWS frequency domain solvers
  - Arbitrary order curved elements
  - Domain decomposition and cluster computing
  - Eigenmode and fast resonant solver on tetrahedral grids
- CST MWS integral equation solver
  - Domain decomposition and cluster computing for MLFMM
  - Multiple farfield sources for installed antenna performance simulation
- CST MWS asymptotic solver
  - Multiple farfield sources for installed antenna performance simulation
  - Coated materials
  - Ohmic sheets
- Integration of CST MWS into the Cadence® SiP design flow

### **Availability**

CST STUDIO SUITE™ 2011 is due for release in January 2011.

**About CST**

CST develops and markets high performance software for the simulation of electromagnetic fields in all frequency bands. Its success is based on the implementation of unique, leading edge technology in a user-friendly interface. CST's customers operate in industries as diverse as Telecommunications, Defense, Automotive, Electronics, and Medical Equipment, and include market leaders such as IBM, Intel, Mitsubishi, Samsung, and Siemens. With 180 employees worldwide and a network of qualified distributors, over 220 people are dedicated to the development and support of its EM products in more than 30 countries. CST's flagship product, CST MICROWAVE STUDIO® (CST MWS) is the market leader in Time Domain simulation. It enables the fast and accurate analysis of high frequency (HF) devices such as antennas, filters, couplers, planar and multi-layer structures and SI and EMC effects. CST MWS can offer considerable product to market advantages such as shorter development cycles, virtual prototyping before physical trials, and optimization instead of experimentation.

Further information about CST is available on the web at <http://www.cst.com>.

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**Graphics**

PR graphics can be downloaded from the news section of CST's website at:

[http://www.cst.com/Content/News/Documents/news\\_item\\_159/1009\\_CSTS2\\_2010\\_PR.zip](http://www.cst.com/Content/News/Documents/news_item_159/1009_CSTS2_2010_PR.zip)

*"The CST STUDIO SUITE graphical user interface. 3D EM simulation of cancer treatment by RF thermoablation: a catheter is used to apply a 40 W signal at 375 MHz to a tumor in the liver. The bioheat equation solver is used for the realistic simulation of the resulting temperature distribution."*