

# *Intelligent software for a good productivity and a great Methodology*

To win the wasted of time in "unproductive" simulations, the bebcom's team created an active tool to control the good progress of the simulations (**Spectre**, SpectreRF, Hspice, HspiceRF, Eldo, ADS) in real time.

## Claudia MTFD® :

- **I**s a Software solutions to turn around better analog/RF faster and less risks
- **C**an test in real time the simulations, analyze the data and intervene on the simulator to interrupt or relaunch other simulations.
- **W**ill communicate the informations asked by the user as the results and the progress of simulations, comparisons between the simulations, comparisons between the simulations and a specifications.

## Claudia MTFD® is a strong tool which:

**G**ives more time for the designer      **B**ringing more methodology, quality and checks

**H**elps the project Managers/Designers to control the project and to take the good decisions

# 5 main tools to solve all the project problems

## Aladin

- ✓ Virtual verification agent
- ✓ Avoid costly mistakes such as saturation and breakdown voltage
- ✓ Helps you to cover all the specifications thanks

## Sherlock

- ✓ Smart real-time-controller
- ✓ Stop & Restart simulations
- ✓ Detect the errors, warnings and special key-words in the Log files to warn the designer

## Lighthouse

- ✓ Interactive environment to debug and fine-tune your schematics.
- ✓ Display curves and values
- ✓ Pinpoints the error in the Schematic so you can fine-tune the design

## Scribe

- ✓ Personal documentation that reports in an easy-to-read
- ✓ Automatic generation of datasheet and design documentation
- ✓ Final documentation (block pinout, variable Specifications, Results simulations history, final datasheet)

## Status Quo

- ✓ 24/7 assistant that reports the state of the overall project
- ✓ Estimated completion schedule based on the current coverage and simulation still needed
- ✓ Project automatic update with estimation of number/ duration of simulations to be completed



Radio Frequency



Beb-Box



Mems & Sensors



## Aladin

### Usefull simulators

- RTDC
- RTTRAN
- RTBDJunction
- RTCorner
- RTLOG
- Monte Carlo

### Design Management

Gestion of:

- Multi-Specifications
- Designers Team
- Multi-Netlists
- Multi-Outputs
- Scenarios/Variable sweep

## Status Quo

- Team Management
- Table of results
- Tables for specification coverage
- % of completion of the project

## Sherlock

- Real - time controler
- Conditions/Equations control
- Convergence controle
- Job/Progress monitoring
- % of success
- Specification Coverage

## Results DATA BASE

## Lighthouse

- Efficient highlight  
of the schematics

## Scribe

- PDF Documents
- HTML/Excel files
- E-mail
- IG of results

# Main types of simulations

## **RT DC :**

- Real Time Control of the DC operating point of transistors
- Real Time Control of the DC node voltage and current
- Control of designer's equations
- Notifications

## **RT Tran :**

- Real Time Control of the transient voltage or/and current signals
- Control of designer's equations
- Notifications

## **RT Corners :**

- Run all of sweep simulations (models, design variables, PVT ...)
- Generate Automatically the Table of specifications with worst and best case
- Represents the results in several forms: 2D curve, Table, statistical results ...
- Notifications

## **RT BD :**

- Real Time Control of the breakdown Junction
- Control of designer's equations
- Notifications

