

Jan.22 Emerging Company Guided Tour B

Tour Guide

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D2S

(Special Committee,

EDSFair2009Executive Committee)

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14:55~15:45

Visited Companies

■ **SOLIDO DESIGN AUTOMATION**

■ **EDXACT SA**

■ **Z Circuit Automation**

■ **Nangate**

■ **ALTOS DESIGN AUTOMATION**

Solido Design Automation

- Company Location
 - Saskatoon, Canada; San Jose, California
- Company Profile
 - Leading developer of process variation solutions for transistor-level design of analog/mixed-signal, custom digital and memory integrated circuits
- Product Names
 - Variation Designer
 - Statistical Variation Applications

Solido Design Automation

- Product Key Features
 - Variation Designer
 - Open, scalable process variation solution
 - Statistical Variation Applications
 - Identify and fix statistical variation design failures
- Key Benefits
 - Avoid over and under design
 - Reduce area and power
 - Improve yield and reduce re-spins

EDXACT

- Company Location
 - Grenoble, France
- Company Profile
 - EDXACT is an EDA leading provider of advanced technologies to analyse parasitics and accelerate circuit simulators
- Product Names
 - Jivaro : Model Order Reduction For parasitics
 - Comanche : Analysis of Parasitic Data

EDXACT

- Product Key Features
 - Jivaro
 - Reduces parasitics massively & selectively (R, RC, RCc, RLCK, controlled sources)
 - Comanche
 - R, C, SYZ parameters, Delays Calculation, etc ..
- Key Benefits
 - Accelerate verification time, gain productivity
 - Your verification is more accurate

Z Circuit Automation



- Company Location
 - Mountain View, California, USA
- Company Profile
 - A leading provider of cell library development and validation tools
- Product Names
 - ZChar - cell library characterization
 - Library Analyzer - cell library validation

Z Circuit Automation

- Product Key Features



- ZChar

- One-minute flip-flop characterization
 - General-purpose for std cell, memory and IO pad
 - Accurate models in leading technology
 - Easy to configure and use

- Library Analyzer

- Automated Library Validation
 - Interactive Library Analysis

Z Circuit Automation



- Product Key Benefits
 - ZChar
 - Characterize a new library
 - Re-characterize an existing library
 - Quickly build memory models
 - Library Analyzer
 - Find problems or debug a library
 - Map libraries

Nangate

- Profile

- Nangate offers a unique solution for advanced digital cell library development that provides better library tools for the library designer and improved design performance in terms of higher speed, lower power consumption, reduced die area, and faster time-to-market to the library user

- Products

- Nangate Library Creator™
 - Integrated and easy-to-use solution for digital cell library creation
- Nangate Library Characterizer™
 - Ultra fast and accurate cell library characterization and validation
- Nangate Design Optimizer™
 - Concurrent optimization of design and library



22nm regular structure sample cell

Nangate

- Key Features
 - Automated generation of Std. Cell Libraries
 - Fully integrated solution
 - Technology support ranging from 350nm to 22nm
- Key Benefits
 - Identify and build “missing” library cells, variants and other important library parameters to realize significant design improvements
 - Flexible migration to alternative process technologies without the penalties caused by suboptimal libraries
 - Early access to new process nodes with no royalties involved: you own the Library IP!

Altos Design Automation

- Founded in 2005, Headquarters in San Jose, CA, USA
- Solving the “40nm Characterization Crisis”
 - More corners, more cells, more complexity
- Products
 - Liberate : Std Cell and I/O characterization
 - Variety : Cell characterization for SSTA
 - Liberate MX : Memory characterization
 - Liberate LV : Cell library validation

Altos Design Automation

- Key advantages:
 - 5-10X faster, very easy to use (auto vectors)
 - Complex cells (retention flop, I/O, pulse latch etc.)
 - CCS/ECSM timing/noise/power & SSTA models
- Key benefits: Improved TAT, reduced cost (less hardware, less SPICE licenses)
 - Used by major IP providers (TSMC, Virage) and large semi companies (TI, ST, Renesas etc.)
 - Qualified by STARC (both STA and SSTA)
- Complete solution: Std cells, I/O's, Memory