



When Should We Adopt Open Access?



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Outline

- What is OpenAccess?
 - How can it help **you**?
 - The forces behind OpenAccess
- Should **you** consider adopting OpenAccess?
- What materials are available **now**?
 - Strings attached?
 - How new and stable is OpenAccess?
- Expected developments in the near future

What is OpenAccess?

- "The Next Big Thing in EDA"™
 - 1,484 downloads from 125+ companies (by Jan 25, 2002)
- It's an API with a database that implements it
 - + implicit data model
- It's the Cadence Genesis database
 - Distributed in source code, for free, with utilities and docs (at least, that's the idea 😊)
 - Maintained and **actively developed** by SI² (independent non-profit organization)
 - Developers are affiliated with a number of EDA companies
- **Goals: simplify EDA tool R&D and improve interoperability**

How Can OpenAccess Help You?

- **An opportunity to outsource development**
 - Modern open-source high-performance VLSI database
 - Apparently, high-quality code + fast application development
 - New versions (should) appear regularly; you can contribute
- **A common standard** (compatible with LEF/DEF)
 - Some new hires may already know it
 - No fear of losing people with critical knowledge
- **Improved interoperability with other EDA groups**
 - If company Z offers a good tool, you can try /use it easily
 - This should help everyone except for “whole flow” companies

Should You Consider Adopting OA?

- **Yes**, if your own VLSI database is
 - Inadequate in terms of functionalities, capacity, robustness, API or data model
 - Insufficiently supported due to lack of human resources
- **Yes**, if your tools do not talk to each other (see above)
- **Yes**, if your customers want it
- **Yes**, if your EDA vendor is adopting it
- Otherwise, **maybe**
 - if you just do not want to miss the boat

The Forces Behind OpenAccess

The Cadence logo, featuring the word "cadence" in a lowercase, sans-serif font, enclosed within a rectangular border. A small red mark is visible above the letter 'a'.

- IBM, HP, TI, Motorola, LSI Logic, etc.
 - see affiliations of contributors to OpenAccess documents
- In theory, one should watch out for
 - politics / power struggle
 - ...or at least some controversy
- But none can be deduced from Web pages so far
 - Observation: Cadence is the only sponsor of the OA conf.

What Materials Are Available Now?

- Main download site: <http://www.openeda.org>
- Specs and documentation
 - **OpenAccess Specification V1.2.01**
 - **OpenAccess Utilities V1.2.02**
- Binary packages for HP-UX 11 and Solaris 2.7
 - **OpenAccess 1.2**
- Examples
- Source code (OpenAccess 1.2)

Strings Attached?

- Open Access Internal Use License
 - Currently, version 1 dated February 4, 2002
 - Different from the OpenEDA license
- You can use, copy and modify the OA software for free
 - For internal purposes (no academic restrictions)
- You **cannot redistribute** the OA software
 - Instead, must contribute your changes to SI² (in source and binary) and lose all rights to them
 - SI² may not include your contributions into releases

How New and Stable Is OpenAccess?

- First public release of C-API specifications and API headers **June 18, 2001**
- First binaries released on **Oct 12, 2001**
- First implementation code released on **Feb 4, 2002**
- Source code roadmap announced on **Feb 8, 2002**
- Big development in April: OpenAccess version 2
 - “the official version backed by the OpenAccess Coalition”
 - fundamental changes in data model, modularity, coding standards
 - **source code will not be available until the fourth quarter of 2002**

Expected Developments

- The OpenAccess Conference, April 22-23 in SJ
 - "get the OpenAccess version 2 specification FIRST"
(a banner ad talking about the API reference document)
- OpenAccess version 2
 - Unlike version 1, was originally developed for public use
 - Will integrate digital and analog circuits
 - **First public release of binaries and source code planned in "early first quarter of 2003"**

Discussion

- Does anyone have additional information on OA?
- Has anyone in the audience downloaded OA?
- Are people going to?
- What do you think of OA so far?