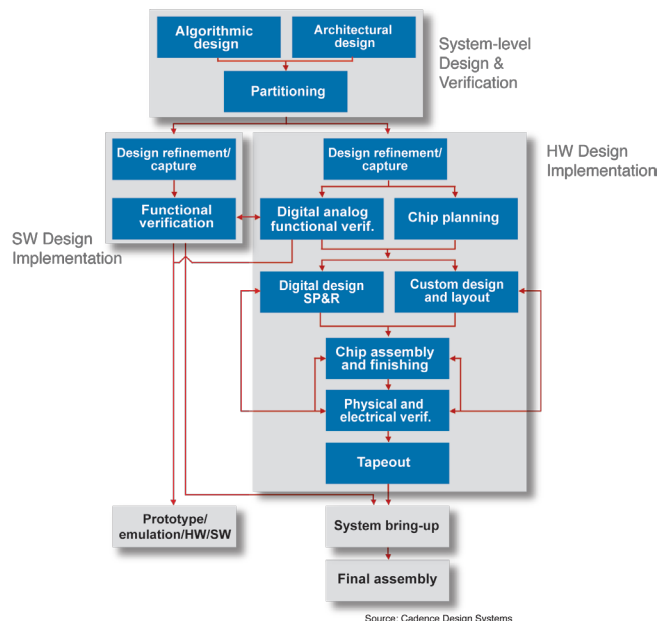


ENOVIA Synchronicity™
DesignSync® DFII™

Your design team used to be in a single department — today it's often global. Yelling down the hallway once sufficed for collaboration, but now communication must cross borders, languages and time zones. At one time you could survive with little or no design management in the final stages of chip development — not any more.

As the complexity facing design teams has grown, so has their need for collaboration and management for the back-end of the design process. ENOVIA provides that solution with the DesignSync DFII, which adds Cadence data recognition and processing to the standard DesignSync Design Data Management (DDM) solution, and an integration into the Cadence graphical design environment.

DesignSync DFII is an integration into the Cadence Custom IC tool user interface and is aware of the unique file system behaviors of the Cadence software.



Source: Cadence Design Systems

DesignSync can manage the immense amounts of information generated from large design teams with hundreds of users. It has special features, such as data caching and mirroring, to maintain performance across multiple sites, while ensuring security with LDAP access control and SSL encryption. Detailed information on the base platform is included in the DesignSync datasheet.

ENOVIA's DesignSync DFII supports the full Cadence design flow:

- Integrated into the user interface of key Cadence tools
- Aware of unique file behaviors
- Manages Cadence data and more importantly the hand-offs from concept to tape-out



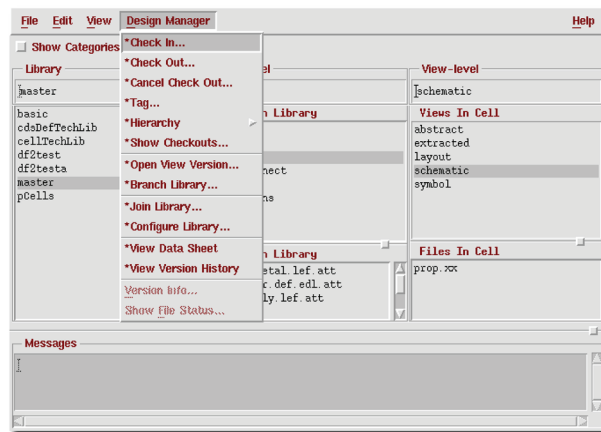
Feature Capabilities

A Strong Foundation

DesignSync DFII is based on the industry tested and broadly deployed Synchronicity DDM tool.

Integrated with the Cadence Custom IC Tools

DesignSync DFII is directly integrated with the Cadence custom IC toolset, providing the user with expanded functionality and the freedom to choose how they operate on their data and what they operate on. More specifically, DesignSync DFII is built into the graphical user interfaces such as the Command Interpreter Window (CIW), Graphic Editor Window and and Library Manager tools like Virtuoso and Virtuoso XL.



Choose How You Work

Users can drive our design management tool through the Cadence user interface, the DesignSync GUI or the commandline. This flexibility supports many different use models.

Choose What You Operate On

Design management can be done at many levels: at the file, cell, library or even the block level. DDM operations can also be performed on categories and design hierarchies. In addition, objects can be selected using wildcard operations. These options greatly reduce the time involved in common operations such as checking in data or applying process tags.

Modules Support

Modules support is added to the ENOVIA Synchronicity DesignSync Add-On for DFII in this release. Support for ENOVIA Synchronicity DesignSync module-based data storage provides benefits above and beyond those provided the industry standard file-based integration with Cadence DFII.

Performance Improvement

Storage of data in module format provides substantial performance improvements due to underlying change-set processing during workspace updates.

Distribute a single library across multiple data repositories

The unique ability provided by ENOVIA Synchronicity DesignSync to overlay data stored in multiple modules in the same workspace allows Cadence libraries to be distributed across multiple data repositories. This is important because large design projects require the collaborative efforts of geographically dispersed design teams. Schematic capture might occur at one location, while layout is performed at another. Though there is no technical reason why schematics cannot be located in one library, and layouts in another, many design tools expect to find all the views of a cell in a single library. This constraint has traditionally forced libraries to be managed in a single data repository so that data transfer efficiency (checkout/checkin) is only optimized for those located on the same LAN (Local Area Network) as the repository, while all other data transfers must traverse the WAN (Wide Area Network).

Using a modular approach to data storage, a single Cadence library may be partitioned across multiple data repositories. When a workspace is created, or updated, modules containing data from each design center are overlaid into a single library directory. This automatic construction occurs because of the ability of ENOVIA Synchronicity DesignSync to manage relationships between modules, and to keep track of which module each design object belongs.

The module based architecture supports different partitioning approaches. For example, library and cell level files such as property bags may be managed in one module, while other modules hosted at each site manage cell views contributed by designers at that location. Note that in such a partitioning, it is not necessary to partition by view type, so any view may be managed in any module.

Data hierarchy is managed using hierarchical references (hrefs) which provide the capability for automatically fetching one, or more, modules as a result of fetching another. Thus a relationship can be established such that if the module containing library and cell level data files is fetched, all of the geographically dispersed modules containing cell view data are fetched as well. Configuration Management (CM), or the management of the changing sets of module versions which are fetched as a single consistent library over time, is handled automatically, and without the use of file version "tags".

By distributing library data across multiple repositories, local efficiencies are maximized while the risk of a single point of failure scenarios is mitigated. Using a modular approach to design management, productivity at each design center is improved, as is overall project productivity

Customizable to Your Needs

Several options are available for customizing DesignSync DFII, such as an overlay to manage design libraries. Advanced customizations to support your unique process flow or team setup can be done through the SKILL programming language interface.

Supported Platforms

DesignSync DFII is available on all major OS platforms for the Cadence custom IC software and is compatible with their versions 5.1.41 and above.



For additional information, contact us at: Dassault Systèmes ENOVIA Corp. 900 Chelmsford Street, Lowell, MA 01851
978 442 2500 • ENOVIA.com • 3DS.com