DASSAULT SYSTEMES

ENOVIA

COLLABORATION

ENOVIA Semiconductor Accelerator for Team Collaboration

When ENOVIA® Semiconductor Accelerator™ products are added to the deployment, semiconductor design data can be made available to product development processes such as project management, intellectual property (IP) management, design integration, and defect tracking.

ENOVIA® Semiconductor Accelerator™ for Team Collaboration (SCC) provides a collaborative and secure environment for resolving product development issues and defects amongst geographically dispersed development teams working on complex hierarchical designs. As design data contributed by individual teams is integrated into higher-level designs, the impact of a defect found in a given IP dataset can be widespread and difficult to track and manage.

Key Benefits

- Connect and manage your entire design chain with a unified system.
- Significantly boost design productivity for a rapid payback and strong return on investment (ROI).
- Maximize your ability to reuse existing designs and embedded software.
- Manage your design hierarchy as part of the design process.
- Reduce time-to-market by increasing collaboration efficiency.
- Win the first-to-market advantage.
- Manage complex data types from a variety of EDA tool vendors.

- Allow project members to associate defects directly to semiconductor design data for quicker resolution that avoids schedule delays and cost overruns.
- Provide accurate defect status to avoid uninformed management decisions.
- Track all key issue and defect management communications to avoid delays.
- Provide traceability between the design and defect management decisions by capturing on-line discussions that can be searched and audited.
- Provide non-engineering inputs to the issue and defect management process in order to more quickly reach a resolution and avoid project interruptions.
- Ensure a standard repeatable issue and defect management process is implemented to obtain input from all cross-functional stakeholders and drive continuous improvement.
- Provide data access controls that avoid financial and legal risks.

Product Overview

Modeling product Hierarchy

IP blocks or libraries are mapped to products within ENOVIA, and product hierarchies are modeled using hierarchical relationships. An exact analogy exists withmodules and module hierarchies managed in the ENOVIA Synchronicity DesignSync Data Manager, and a tight integration allows design data information managed in distributed DesignSync servers to be imported into ENOVIA such that issue and defect tracking can be managed at the enterprise level using a single system. IP blocks and libraries which are managed in Design Data Management (DDM) systems other than DesignSync can be included at the leaf level in a DesignSync module hierarchy using external hierarchical relationships (hrefs). Or, external IP or libraries, and the hierarchical relationships representing their use in designs can be modeled manually in ENOVIA Semiconductor Accelerator for Team Collaboration, providing a DDM-agnostic solution. This is important because existing IP may be managed in many different DDM systems making design integration a major challenge. While ENOVIA® Synchronicity® DesignSync® is a DDM system which is optimized to automate the integration of complex designs, ENOVIA Semiconductor Accelerator for Team Collaboration has been designed to support manual integration methodologies as well.

Impact Analysis

Once products and hierarchical relationships between products have been captured in ENOVIA Semiconductor Accelerator for Team Collaboration, the infrastructure exists whereby a defect can be associated with the revision of a product in which it was found, or "Reported Against". Any existing newer version of the same product would be presumed to contain the same defect. Should the opportunity to do due diligence exist, it might be possible to determine in which previous version the defect was actually "Introduced In". Any parent product, or parent's parent on up through a product hierarchy, which includes a version of the product with a revision equal to or greater than that in which the defect was "Introduced" would also include the defect. A "Where Used" capability provides a report of all the products which are affected by the defect. A "roll up" capability propagates defects from the bottom to the top of any product hierarchy in which the defect is present.

Tracking Defect Resolution Activity

It is also important to track activity associated with fixing, or resolving, a defect. Because once a defect exists in product revision, or revisions, it always exits. It is only possible to fix a defect in a new version of the product. Furthermore, a single defect may be fixed in different ways. It might be possible to fix a defect in software, hardware, or both. It might be necessary to fix a previously released version, which would require a branch. Or, a "workaround" might exist. For example, a defect might only manifest in a particular mode of operation, or temperature range, in which case a "Known Problems and Solutions Report" (KPS) is useful. "Defects" are associated with product revisions, and "Defect Actions" track activity associated with fixing the defect, so a single defect could result in multiple defect actions.

Separation of Customer Facing and Internal Defect Tracking

"Issues" may be used to track customer reported defects, and "Defects" may be associated with "Issues", such that a separation exists between communication associated with the customer, and internal activity associated with fixing or resolving defects.

Product Highlights

Key features and capabilities include:

Cross-functional Enterprise Collaboration

When ENOVIA Semiconductor Accelerator products are added to the deployment, semiconductor design data can be made available to product development processes such as requirements management, project management, intellectual property (IP) management, design integration, and defect tracking.

ENOVIA Semiconductor Accelerator for Team Collaboration exposes semiconductor design data to the extended enterprise so companies can cross-functionally collaborate to resolve product development issues and defects. It leverages the following standard capabilities from the ENOVIA Collaboration Platform to offer a secure, structured, virtual semiconductor design workplace for geographically dispersed teams:

- **Collaborate Securely**
  Easily create secure collaborative workspaces that allow suppliers and partners to be involved with the DesignSync project team early and throughout the product development process; assign responsibilities with default and access rights to members and teams.

- **Define Virtual Teams**
  Add team members, assign roles and responsibilities, and provide default access online to assemble cross-functional teams in virtual workspaces quickly and easily.

- **Manage and Track Defects**
  Easily raise defects against design data or any other object in the enterprise system. Define change boards to sign-off on a defect's implementation review and control the approval of defect actions.

- **Management Reports**
  Track design defect workloads and trends using configurable graphical metrics-based reports with data summaries and roll ups. Crystal Reports can be leveraged for more advanced formatting options.

- **Create Discussion Threads**
  Create multi-threaded discussions for sharing ideas and reference documents. Subscribe and automatically receive ongoing communication to keep abreast of developments and final decisions. Easily sort discussions by workspace, folder or content, or search them to find exactly the information required to answer the question at hand.

- **Implement Company Best Practices**
  Institutionalize the company's best practices by creating routing templates and folders, add files and content to folders and generate routing paths, approval lists and actions using delegation rules, task escalation rules and additional route logic. Implement checks that enable the automation and enforcement of standard practices across the entire enterprise.

- **Decision/History Capture**
  Automatically capture the dialog that solved tough designs and discussions in order to retain team knowledge. All information is kept in a managed, easy to search and auditable system.

- **Cross Team Collaboration**
  Teams beyond engineering can easily add their own content to the overall product knowledge. This provides the ability to classify the non-engineering data in the same classification system alongside the engineering data, or in its own libraries using a bookshelf and document organization.

- **Automatic Notifications**
  Enable users to subscribe to standard notifications, content owners to send push notifications and administrators to customize system notifications by company.

- **Secure Access**
  Allow workspace leads to set default access definition for the workspace, including folders and subfolders. Assign granular access for specific content. Administrators can assign company specific vaults and file stores.

- **Defect Management**
  Users can define defects with attributes and characteristics targeted at semiconductor and software development processes, and associated to design data managed in ENOVIA® DesignSync® Data Manager. In addition, defects may be created from issues. This allows the separation of the customer facing discussion and the internal facing discussion about the implementation problem and its correction. This enables better definition of the problem and solution as well as isolation of proprietary internal concerns. An issue may be associated with multiple defects and a defect may be refined into multiple defect actions. Change boards are defined to create and sign-off on a defect's implementation review and control the approval of defect actions. Dashboards are provided to review defects, defect actions, and implementation reviews.

The Role of ENOVIA V6 and PLM 2.0

The ENOVIA Semiconductor Accelerator for Team Collaboration supports PLM 2.0, product lifecycle management online for everyone, and the ENOVIA V6 values, which are:

- Global collaborative innovation
- Single PLM platform for intellectual property (IP) management
- Online creation and collaboration
- Ready to use PLM business processes
- Lower cost of ownership

DASSAULT SYSTEMES

Delivering Best-in-Class Products

CATIA
Virtual Product

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GEOVIA
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SIMULIA
Realistic Simulation

NETVIBES
Dashboard Intelligence

DELMIA
Digital Manufacturing

3DSWYM
Social Innovation

ENOVIA
Collaborative Innovation

3DVIA
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