



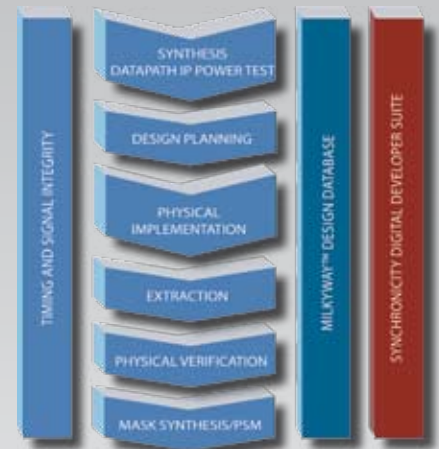
ENOVIA MatrixOne's DesignSync Milkyway

Not too long ago a relatively small team could complete a significant digital design, but now teams are larger and often multi-site. Worse, as the industry moves to nanometer features and gigahertz clocks, physical design iterations are happening more often and earlier in the design flow. The ad-hoc, shareware tools that used to suffice when small teams dealt with only a few limited text files can no longer manage all the data and interactions of a larger full flow team.

As the complexity facing digital ASIC design teams has grown, so has their need for collaboration and management across the entire development process. Synchronicity provides that solution with the Digital Developer Suite, which supports the full Synopsys design flow by adding both a Milkyway database integration and block-based hierarchical management capabilities to their standard Developer Suite.

The standard Developer Suite bundles ProjectSync®, which raises design predictability with project tracking and communications, and DesignSync®, which makes design data available to the entire project team in a safe, efficient, managed manner, no matter where they are located. The Digital Developer Suite adds DesignSync MW™, which enables design collaboration and management by using the Milkyway C-API to directly access and manage Milkyway data used by such Synopsys tools as Astro™ and JupiterXT™. This new suite understands the specific data structure of the Synopsys design tools and the behaviors required to reliably and efficiently manage them in a team environment. It also takes full advantage of the high performance and rich functionality in the recent Developer Suite version 4.0.

Design information from both tools in the Digital Developer Suite can flow directly to and from the Synchronicity Publisher Suite™ design reuse, IP distribution and support system—creating a complete, integrated solution to connect and manage your design chain. The Developer Suite can manage the immense amount of information generated from large design teams with hundreds of users. It has special features, such as as data caches and mirrors to maintain performance across multiple sites, while ensuring enterprise security with fine grain access controls, SSL encryption and LDAP authentication.



ENOVIA MatrixOne's DesignSync Milkyway raises engineering productivity by providing secure, multi-site design collaboration and management across the full Synopsys Galaxy design platform.

ENOVIA MatrixOne PLM Environment



Support Predictable and Repeatable Best Practices

To further raise productivity, the Digital Developer Suite includes flows, forms, templates and use models to guide effective ASIC design. It can also be easily modified and extended to support more custom methodologies.

Span Synopsys Galaxy Implementation Platform

With the Milkyway database under design management, proactive notification of engineering changes now encompasses all design data, from front to back. Not only is the place-and-route engineer notified when new RTL code is available, but the RTL designers can also be notified when post-layout timing data is available. Managers see the iterations and progress in real-time.

Manage and Track Handoffs

With more iterations between more dispersed team members, it is becoming increasingly important to manage and track the handoffs between front- and back-end engineers, or among the block designers and chip-level integrators.

Operate On Any Level

Digital engineers often use a top-down approach and Synchronicity's Hierarchical Configuration Manager™ (HCM) enables them to manage and execute the project in

the hierarchical manner in which they think about it. With HCM, a design is composed of blocks, a.k.a. modules, and blocks can contain blocks. HCM enables release management operations at every level of the design hierarchy: file, cell, library or block. When engineers need to adjust pin placement or block size, they can do so without disrupting the full chip. Of special note for managers, HCM also rolls up design status and bug tracking for all sub-blocks, even if they reside outside the project workspace in a central Synchronicity Publisher Suite™ design reuse system.

Boost Multi-Site Performance and Minimize Storage with Caches

HCM's related caching technology, Mcache™ (for Module cache), provides unique data sharing and collaboration capabilities for such block-based designs. Mcache greatly reduces a project's storage requirements while maintaining fast local data access, even across multiple sites. These capabilities enable companies to efficiently develop larger and more complex systems than they have done in the past and allow them to be more competitive in today's aggressive economic climate.

Safety Net for OpenMilkyway

Every engineer has stories of bad files overwriting good, and of the taped-out configuration being lost during the test run. By taking snapshots of known good configurations, a capability offered by the Digital Developer Suite, users can be safe guarded against such occurrences.

A Strong Foundation

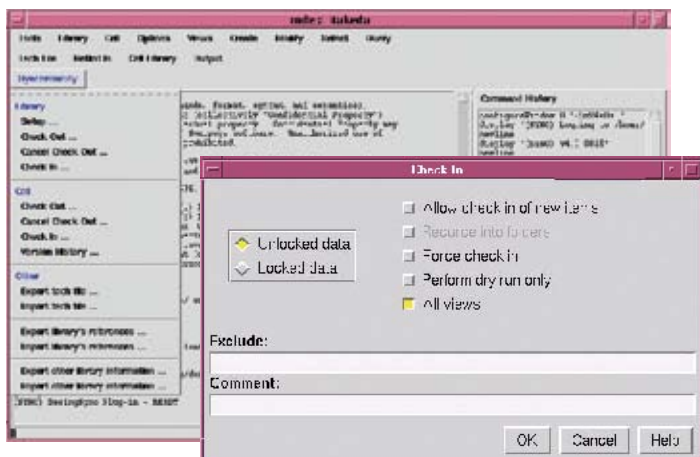
The Digital Developer Suite is an extension of the industry-tested and broadly deployed Synchronicity Developer Suite, with over 25,000 copies in use at over 120 of the world's top semiconductor design companies.

Choose How You Work

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

Supported Platforms

The Digital Developer Suite is available on popular versions of Solaris, HP-UX, and Linux, and is widely compatible with Synopsys tools that use recent versions of the Milkyway Database.



The Digital Developer Suite has been integrated into the user interfaces of key Synopsys Galaxy tools like Astro.