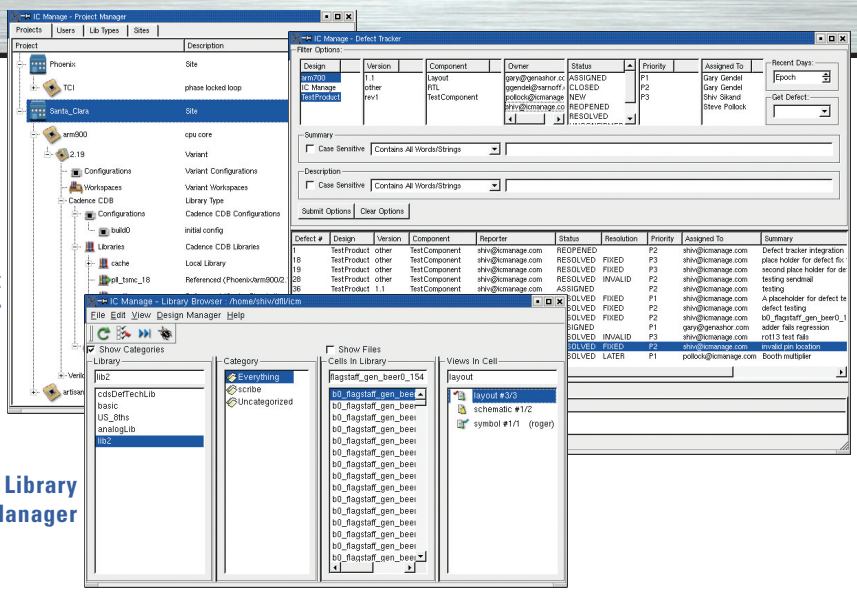
IC manage

Industrial Strength Design Management

KEY FEATURES

- **Corporate-Wide Reuse**
- **True Variant Management**
- **Cross-Coupled Defect Tracking**
- **Maximum Network Performance**
- **Highest Reliability**
- **Easy To Use**
- **Simple Installation**



With increasing chip sizes, distributed design teams, and the incorporation of third party elements, organizations are finding that their chip design environments are now more complex than ever. The ability to effectively assemble and manage the different design components can help an organization achieve higher productivity and faster time to market.

IC Manage is a next generation design management system that delivers the performance necessary to handle today's complex chip designs. It easily manages, tracks, and configures an entire enterprise's design data during all phases of the design process. With its database architecture and streaming network implementation, IC Manage is up to 100 times faster than conventional systems.

Corporate-wide Reuse

Faster time to market with reuse

Making an organization's intellectual property available for reuse by all its design teams is critical for competitiveness. When one design team reuses objects from another team or a previous design, both time and money are saved.

IC Manage delivers corporate-wide reuse across multiple locations. With IC Manage, designers have real-time access to design data for inclusion and modification. Designers can easily view the design data history, select appropriate components, and create designs from any of the enterprise's assets.

True Variant Management

Managing multiple designs in parallel

Reusing design objects is commonplace and there is always a desire to increase reuse. The more designers reuse, the less they have to re-invent. To reuse the appropriate object, designers need to know which blocks and variants are available, how the variants differ, and which version of the variant to use. Furthermore, designers may still have to modify the selected variant for their new design.

IC Manage records a full history of the differences between variants and their versions, as well as the changes between the variants. This makes it extremely easy for designers to select the appropriate blocks for reuse.

In addition, IC Manage easily propagates changes of an object through all the designs that utilize the object. This eliminates the manual operations needed to update all the locations where the object was reused. Designers no longer have to remember where a block is reused and manually update all the copies of the files.

Cross-Coupled Defect Tracking

Linking Defects to Design Changes

Knowing that a defect exists is the most important item, however, knowing what design configuration and design version was in use when it was discovered is crucial to recreating it and later verifying it is fixed. It is also important to know who fixed a defect and how it was fixed. All of these items provide for quicker tracking of issues and therefore quicker fixes.

IC Manage tracks all the important information: 1) the design configuration, 2) the design and file versions when the defect was discovered, 3) who fixed the defect, and 4) which files were changed to fix the defect. The cross-coupling of defects to the design changes is an important feature. It enables designers to easily synchronize the workspace to the problem configuration and version, resulting in faster and more efficient fixes.

Maximum Network Performance

Enabling operations to complete in seconds, not hours

Conventional solutions using NFS or HTTP protocols are no match for IC Manage's streaming solution. IC Manage is architected to securely support distributed IC design over a variety of network bandwidths and latencies. The architecture incorporates local caching and streaming to maximize system performance. Operations that can take hours on traditional systems will only take a few seconds with IC Manage. IC Manage can transfer at the full bandwidth of your network. There will no longer be designers circumventing the design management system because of frustrating wait times.

Superior Performance for Today's Large Designs

Up to 100 times faster than conventional systems

Unlike previous generation systems, IC Manage delivers the performance required to handle today's large chip designs. The IC Manage architecture provides raw bandwidth performance via its streaming architecture, but the IC Manage database architecture which tracks configurations, versions, and other information makes sure only the incremental data is transferred. These combined features deliver performance over 100 times faster than conventional "tag" based systems.

Highest Reliability for Data Integrity

Industrial strength database for storage

A design system must be highly reliable. Losing data is simply unacceptable because of schedule impacts, lost revenue, and the cost of fabricating faulty chips.

IC Manage's database uses MD5 signatures on all files and an industrial strength database for all important operations. All transactions are atomic so if any operation in a transaction fails, none of the files are updated.

With IC Manage, designers know that their data is always at their fingertips and that it is always correct.

Easy to Use

Designers can use with minimal training

It's important that organizations implement systems that are not only easy to install and maintain, but also easy to use for the end users. Minimizing the time and resources spent on tasks such as troubleshooting and training enables organizations to be more productive.

IC Manage delivers on this promise, providing an easy to use GUI and a powerful command line interface.

Simple Installation

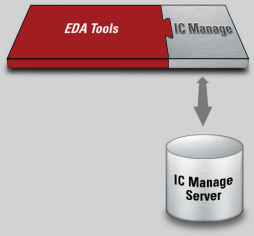
Easy client installation and network configuration

IC Manage does not require any complex networking changes or a complicated installation. No NFS mounts, no port openings, and no services are required.

IC Manage Server

IC Manage's optional pre-configured servers enable system administrators to quickly install IC Manage so designers can be immediately productive. There is no software to install, no OS to install, no problems and no lengthy configuration process. System administrators just simply plug it in.

Specifications

Storage Capacity	● Up to 2 TB/file ● Up to 6 TB/server
Performance	IC Manage is up to 100 times faster than conventional systems ● Checkout and Populate (20,000 files) – 14,500 files/minute ● Checkin Changed Files (20,000 files) – 4,800 files/minute
Integration with EDA Tools 	● Cadence DFII Environment ■ Component Data Bank (CDB) database format ■ Open Access (OA) database format ● Synopsys ■ Apollo/Astro ■ Milkyway ● Others
OS Compatibility	● Linux x86 ● Sun Solaris Sparc

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IC Manage, 101 Church Street, Los Gatos, CA 95030, USA • Tel: (408) 399-5401 • Fax: (408) 399-5403
www.icmanage.com • icm_info@icmanage.com

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