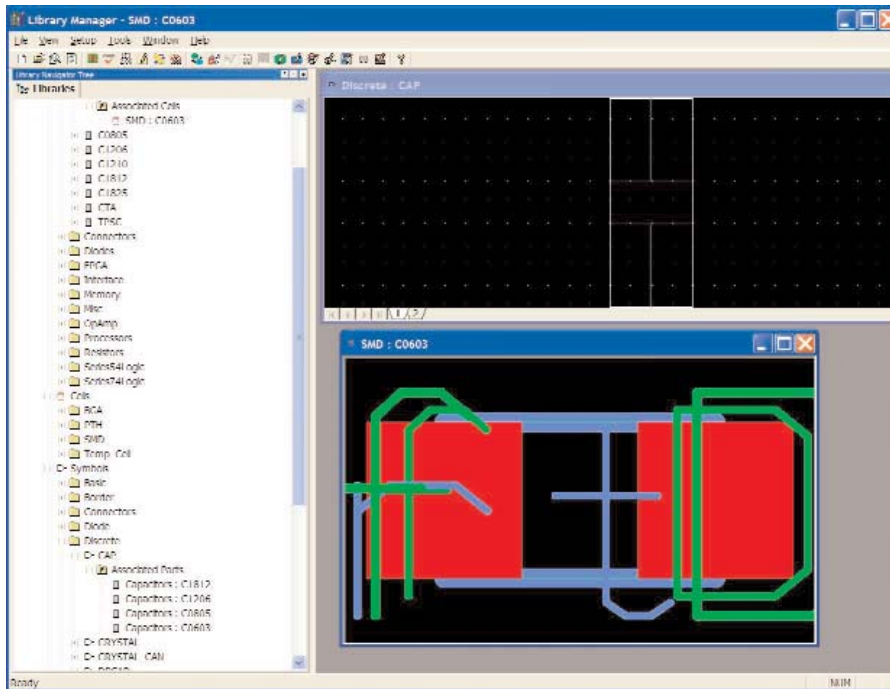


# Library Manager

*The cockpit for managing PCB part data*

## System Design

D A T A S H E E T



*Library Manager's Part Preview window.*

### Major product benefits:

- Centralize the management of library objects and launch editors to create symbols, cells and padstacks from a single cockpit
- Define and manage library partitions, which allows grouping of like parts.
- View part relationships using a tree view
- Create custom search schemes for partitions based on user defined criteria
- Create and manage re-usable blocks of verified circuitry, both logical and logical/physical
- Define and modify properties common to various library objects, including user defined properties
- Import and export parts, symbols, cells and padstacks
- Move objects between partitions and libraries
- Create and store standard layout templates with board outline, routing layers, via size, etc.

## Overview

The key to any successful printed circuit board (PCB) design is ensuring that the physical design data matches the logical intent of the design. Managing this relationship ensures the design is correct by construction. Library Manager provides a common interface to the various elements that make up the library objects including, symbols, cells and padstacks, and creates and maintains the relationships between these objects. Library Manager provides a consistent user interface to library data in a DxDesigner-Expedition flow and a Design Capture-Expedition flow.

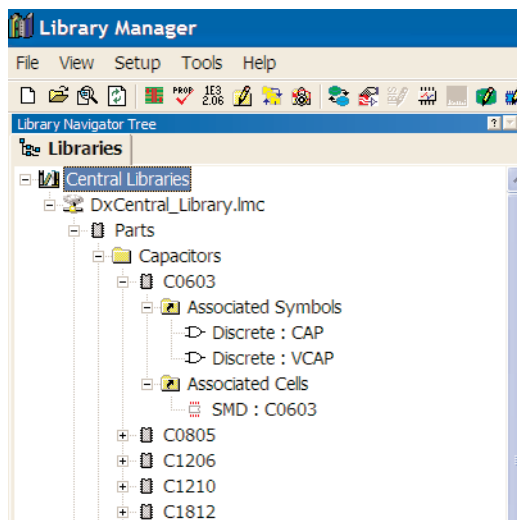
Library Manager integrates the editors required to create symbols, cells and padstacks into a single cockpit. Mapping the relationship between the logical representation (symbol) and the physical footprint (cell) is handled by the integrated Part Editor. Library Manager also provides an integrated editor to manage properties required by the symbols, parts and cells. Referred to as "Common Properties", this user extensible list of properties provides object/context awareness in the various editors used in the design process.

Objects managed by Library Manager form a central library where the objects within the library may be partitioned into related groups as specified by the user. Library Manager handles the relationship between objects such that changes to one object affecting another object are propagated automatically. For example, if a padstack is modified, all cells that use the padstack get automatically updated. Data checking is built in to ensure the relationships between objects are valid and that objects cannot be deleted if used by other objects.

## The Central Library

A central library is a collection of inter-related libraries and library objects. Libraries consist of subfolders, one for each library object type (symbols, cells, parts, padstacks). Each library can be decomposed to a collection of partitions to group related objects. It contains a library management and control file that maintains an inventory of the contents in the central library. Built-in data integrity and consistency checking ensures that library objects and their relationships are valid. Once a part has been defined and validated in the central library it is guaranteed to package when used in a design.

Partitions are searchable using partition search schemes defined in Library Manager. These search schemes are user definable and enable the control of libraries viewable and usable per design. Librarians can manage work in progress by defining which search scheme a particular partition is used by and excluding those partitions where data is incomplete. Using library services or commands in the tree view, parts can be moved from WIP (work in progress) to a searchable partition.



Library part relationships in the Tree View.

## Visit our website at [www.mentor.com](http://www.mentor.com)

Copyright © 2006 Mentor Graphics Corporation. Mentor Graphics is a registered trademark and Library Manager and DMS are Trademarks of Mentor Graphics Corporation. All other trademarks mentioned in this document are trademarks of their respective owners.

**Corporate Headquarters**  
Mentor Graphics Corporation  
8005 SW Boeckman Road  
Wilsonville, OR 97070-7777  
Phone: 503.685.7000  
Fax: 503.685.1204

**Sales and Product Information**  
Phone: 800.547.3000

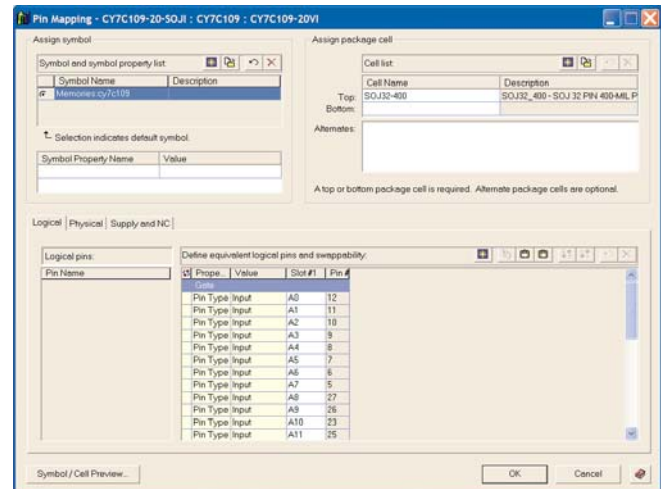
**Silicon Valley**  
Mentor Graphics Corporation  
1001 Ridder Park Drive  
San Jose, California 95131 USA  
Phone: 408.436.1500  
Fax: 408.436.1501

**North American Support Center**  
Phone: 800.547.4303

**Europe**  
Mentor Graphics  
Deutschland GmbH  
Arnulfstrasse 201  
80634 Munich  
Germany  
Phone: +49.89.57096.0  
Fax: +49.89.57096.40

## Extending Library Manager to the Enterprise

By integrating with Mentor's Data Management System (DMS) tool suites via DMS Librarian, users can further enhance the capabilities of the tool flow to provide automatic configuration of production libraries. DMS Librarian is a superset of Library Manager.



Logical to Physical pin mapping in Part editor.

## Hardware Platforms

- PC
- Sun SPARCstation
- HP 9000/700

## Operating Systems

- Windows 2000, XP
- Solaris 8 or later
- HP-UX 11 or later
- RedHat Enterprise Linux 3.0 or later

## License Configuration

- Floating: Windows 2000, XP, Solaris, HP-UX, Linux
- FlexLM protected

**Corporate Headquarters**  
Mentor Graphics Corporation  
8005 SW Boeckman Road  
Wilsonville, OR 97070-7777  
Phone: 503.685.7000  
Fax: 503.685.1204

**Silicon Valley**  
Mentor Graphics Corporation  
1001 Ridder Park Drive  
San Jose, California 95131 USA  
Phone: 408.436.1500  
Fax: 408.436.1501

**Europe**  
Mentor Graphics  
Deutschland GmbH  
Arnulfstrasse 201  
80634 Munich  
Germany  
Phone: +49.89.57096.0  
Fax: +49.89.57096.40

**Pacific Rim**  
Mentor Graphics (Taiwan)  
Room 1603, 16F  
International Trade Building  
No. 333, Section 1, Keelung Road  
Taipei, Taiwan, ROC  
Phone: 886.2.87252000  
Fax: 886.2.27576027

**Japan**  
Mentor Graphics Japan Co., Ltd.  
Golenyama Hills  
7-35, Kita-Shinagawa 4-chome  
Shinagawa-Ku, Tokyo 140  
Japan  
Phone: 81.3.5488.3033  
Fax: 81.3.5488.3021

**Mentor Graphics**

Printed on Recycled Paper

05-06-JC

1024790-w