

## Exploring CircuitMaker

Modified by Phil Loughhead on Jun 2, 2015

### Getting Started

[Driving a PCB Design through CircuitMaker](#)

[Project Management](#)

[Component Management](#)

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CircuitMaker is a design solution that is both easy to use and delivers a powerful set of design tools for developing electronic products, from concept to manufacture. Tailored to suit electronics makers, hobbyists, and members of academia, CircuitMaker offers a refined design environment and a comprehensive set of features for managing design content.

You can explore CircuitMaker's features and interface by simply experimenting with the software, by diving in to create a new design project, or better still, by first scanning through this documentation to give you a head start.

Aside from a valuable introduction to the CircuitMaker environment - the main focus of this page - the following additional articles are available in this section of the documentation, collectively providing a foundation with which to get you up and running with the software:

[Driving a PCB Design through CircuitMaker](#) - A step by step tutorial style guide to creating a PCB design in CircuitMaker

[Project Management](#) - An overview of managing design projects in CircuitMaker

[Component Management](#) - An overview of managing design components in CircuitMaker

[Variants in CircuitMaker](#) - A detailed article on how to define and manage design Variants in CircuitMaker

[Schematic Editing Strategies](#) - Learn the basics about working in the CircuitMaker Schematic editor

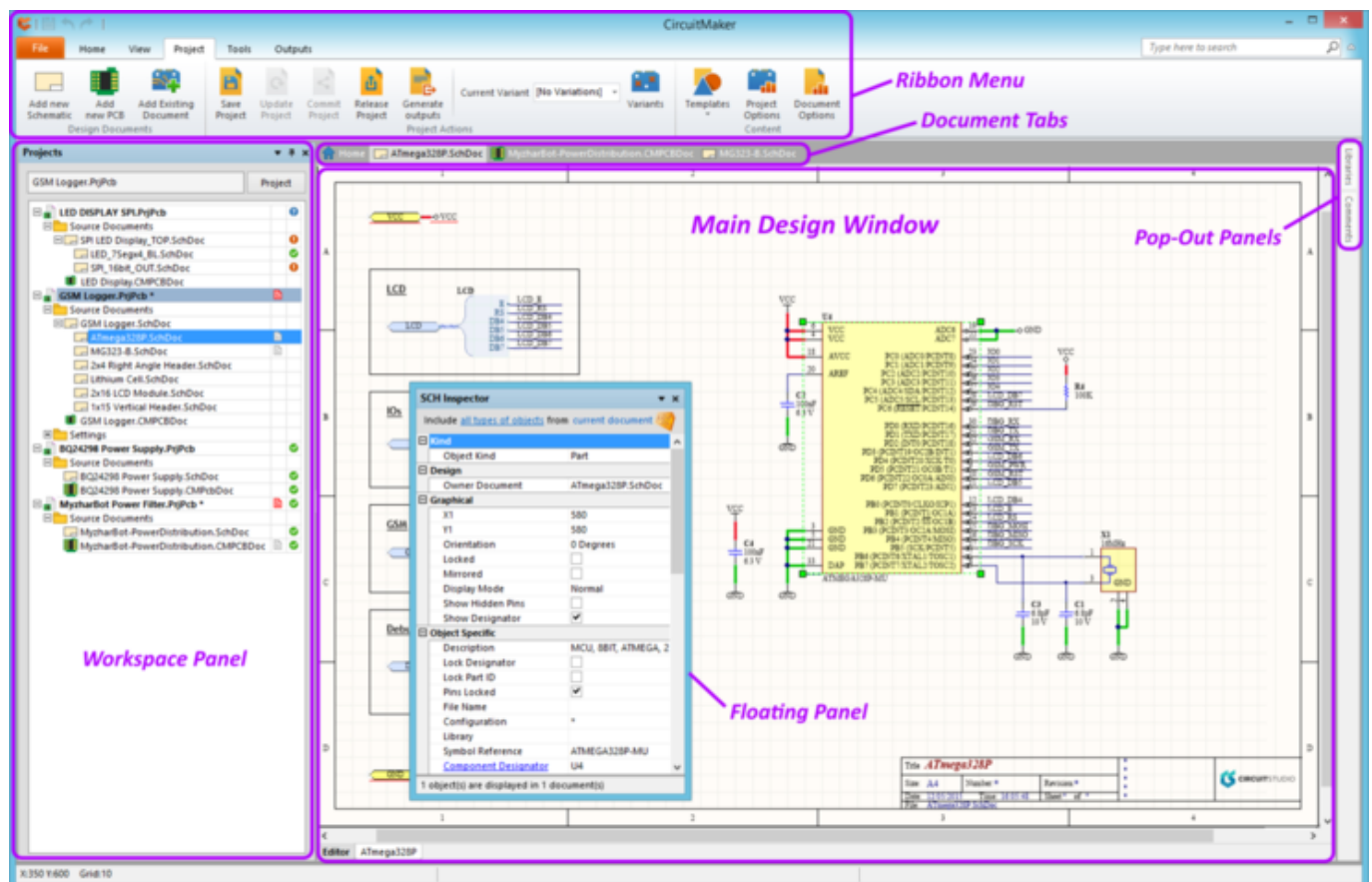
# The CircuitMaker Environment

CircuitMaker incorporates a full set of PCB design tools in a unified design environment that features a modern, easy to use design interface. User interface features that support a smooth and intuitive workflow, from schematic and PCB design through to the design release stage, include:

- A refined ribbon-style menu system
- Flexible, multi-tab design editor windows
- Dockable panels for working with design documents
- A full set of command shortcut keys
- Context-sensitive web-based Help reference
- User configuration preferences

As you move between tasks in the CircuitMaker design workflow, the system responds to the current requirements by opening the design editors, panels and ribbon menu set that you need for the task at hand. While maintaining a consistent look and feel, the design environment dynamically changes to present the appropriate tools and windows while you design.

The user interface elements are nevertheless consistent in style, positioning and function, and can be summarised as indicated below.



For information about what is currently under the cursor, press **F1**.

- Multiple documents can be opened for editing, each presenting with a separate Document Tab at the top of the workspace.
- As you switch from one document kind to another, for example from a schematic sheet to a PCB design, the ribbon menu and tool options automatically change.
- The commands available from the ribbon's **File** tab remain the same, regardless of the document kind. This menu provides access to file management operations and the system

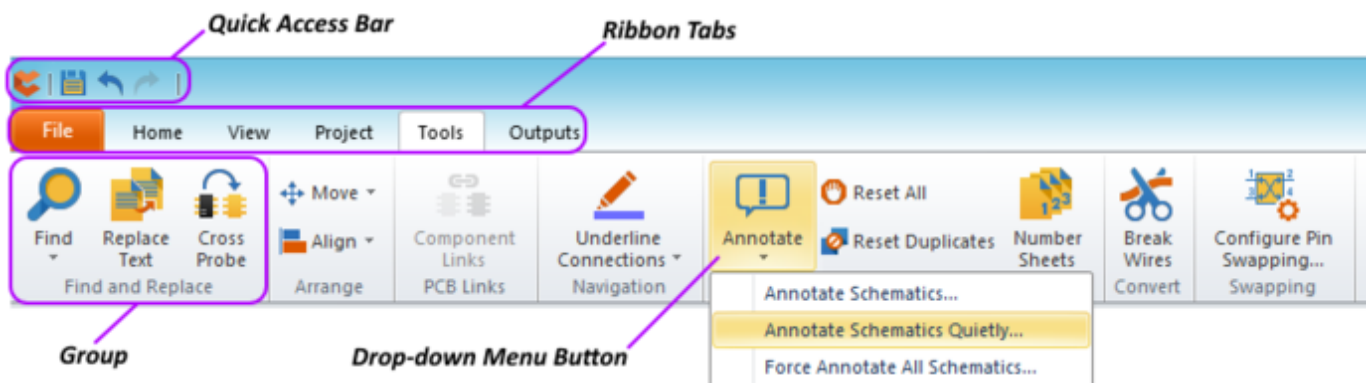
environment configuration preferences.

- Workspace panels can be docked along any edge of the workspace, or float on top of or beside the application.

## Ribbon Command System

CircuitMaker's ribbon-style menu provides a dynamic and highly-visual control system that allows you to find the commands you need quickly.

Commands and menu buttons are arranged in groups under a series of tabs that all change to suit the current task. The result is an efficient and easy to use command interface that makes the most use of the available screen space.



The ribbon style menu system offers the appropriate collection of command buttons for the task at hand.



Using the ribbon menu is as simple as selecting a suitable tab, or quickly flicking through them, to find a set of commands that suit your current need.

So when editing a schematic for example, the **Cross Probe** tool command is logically found within the **Find and Replace** group under the **Tools** tab. Where additional command options are available (such as **Annotate Schematics Quietly**, above) the button offers a drop-down menu.



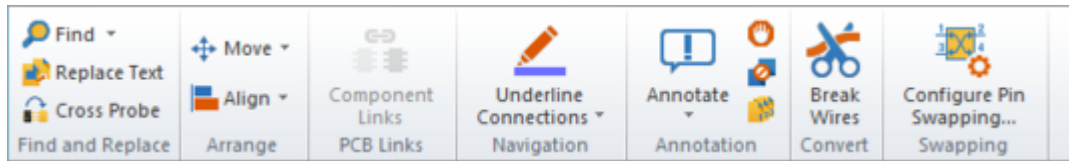
In the CircuitMaker documentation the nomenclature for ribbon command buttons is **Tab | Group | Button » Sub Menu Command**, where the final command refers to a button's drop-down menu selection (where available). So the two examples mentioned above would be referred to as:

- Schematic Cross Probe - **Tools | Find and Replace | Cross Probe**, or **Tools | Find and Replace |  Cross Probe**
- Annotate Schematics Quietly - **Tools | Annotation | Annotate » Annotate Schematics Quietly**, or **Tools | Annotation |  » Annotate Schematics Quietly**

Note also that the ribbon's leftmost  button (not a Tab as such) accesses a fixed menu for managing projects, document files and external systems (file import and online help). In the documentation these commands are referred in the standard drop-down menu manner, for example **File » Open Project** or **File » **.

The ribbon menu features dynamically scalable buttons that will adjust to make the most of


the available menu space, such as when using CircuitMaker on a small PC screen or at a reduced window size.



For easy access to common file and editing commands the ribbon menu features a *Quick Access Bar* area located above the ribbon tabs.



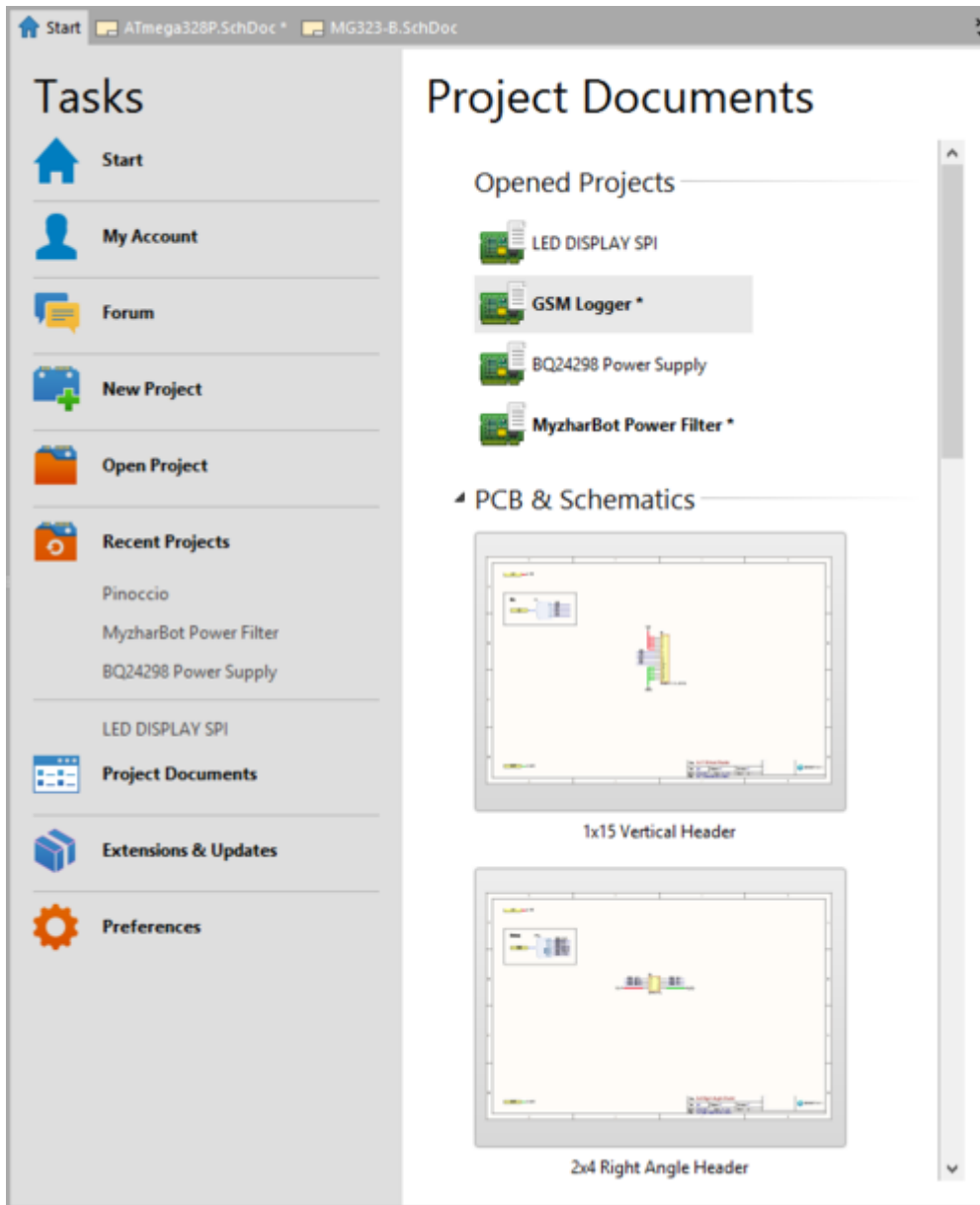
The Quick Access Bar provides direct commands buttons for basic file and editing tasks.

This offers buttons to directly save a document, and undo/redo buttons for the last edit change - hover the mouse cursor over each button to see its function hint text. The leftmost CircuitMaker icon button  provides standard window controls such as Maximize/Minimize, Close etc.

## Start page

The CircuitMaker **Start** page, opened when you first install the software, provides a central location from which to access many common system tasks and system configuration options. The page is designed to offer a simple and direct way to access routinely used areas of the software, such as the **My Account** page and design-based tasks (opening or creating a new project), as well as software configuration options through **Extension & Updates**, and the CircuitMaker Community **Forum**.

Access the **Start** page from the ribbon's **View** menu: **View | System | Start**.



Task links on the **Start** page provide single-click access to key actions and configuration features. The image above shows the result of clicking the **Project Documents** entry.

- Select **Start** to access the overview page for the CircuitMaker Community. This page provides quick access to projects that you've created, and versions of components that you have built. It also provides a search facility for looking up components across the entire Ciiva database. Access is provided to the wealth of projects created by the community, with most popular, new and watched projects listed here. Access to the Forum is also provided, with the latest forum threads listed here. Latest activity within the community is also presented. This includes recent activity related to projects, components, and the forum.

The full activity list can be viewed on the **Stream** page. This presents all activity, with filtering to view only unread notifications, or activity affecting the forum, projects, or components only. Access to the **Stream** page is made by clicking the **Show More** link, at the bottom of the **Latest Activity** section on the **Start** page. Alternatively, access can be made by clicking the **Inbox** control - at the top-right of the **Start, My Account, or Forum** pages.

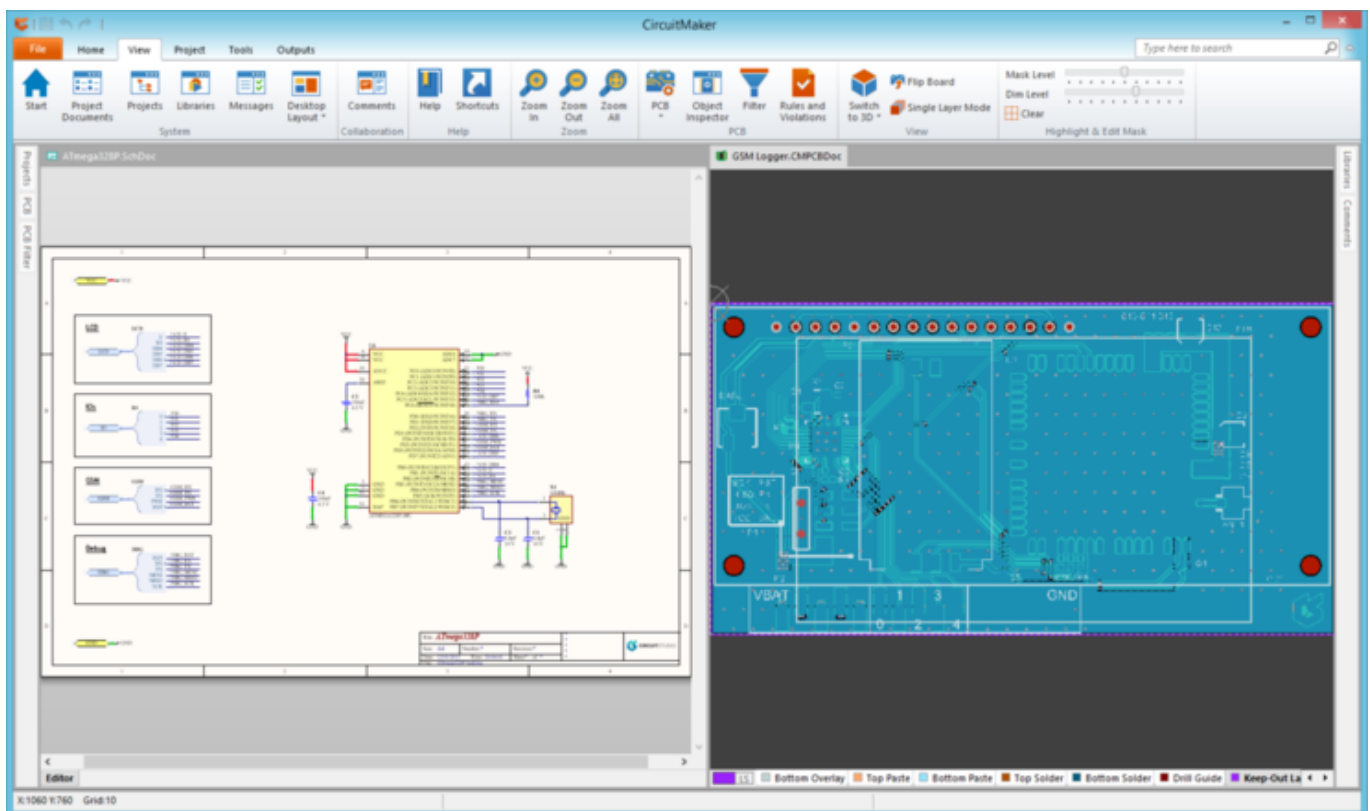
- Select **My Account** to manage your CircuitMaker Community profile, and to access the facility for changing your account password.

- Select **Forum** to access the CircuitMaker Community Forum.
- Select **New Project** to create a new blank project.
- Select **Open Project** to load an existing PCB design project from the Community Vault. You will be presented with the Projects area of the community, from where to browse for the specific project you wish to open and work on.
- Select a previously opened project from the **Recent Projects** shortcut list to open it in CircuitMaker.
- Select **Project Documents** to see a graphical preview of the documents in the currently active project. Double click a preview to open the document in CircuitMaker.
- Select **Extensions & Updates** to access pages from which to extend software functionality, where available, and to also update your installation to the next released version - directly from within the CircuitMaker environment.
- Select **Preferences** to access the *Preferences* dialog, in which to configure system-level options for various editors within the software.

## Document Windows

When you open a document, it becomes the active document in the associated editor in CircuitMaker's main design window. For example, a schematic document is opened and edited in a Schematic Editor window, a PCB document in the PCB Editor window, and so on.

Multiple documents can be opened simultaneously, where each has its own selection tab at the top of the design window. Documents can occupy the entire workspace, or the workspace can be shared between multiple open documents via the **Split** commands - available from the menu associated to a document's tab. Documents can then be dragged from one split region to another.



Design document windows can be stacked or configured in vertical or horizontal splits.

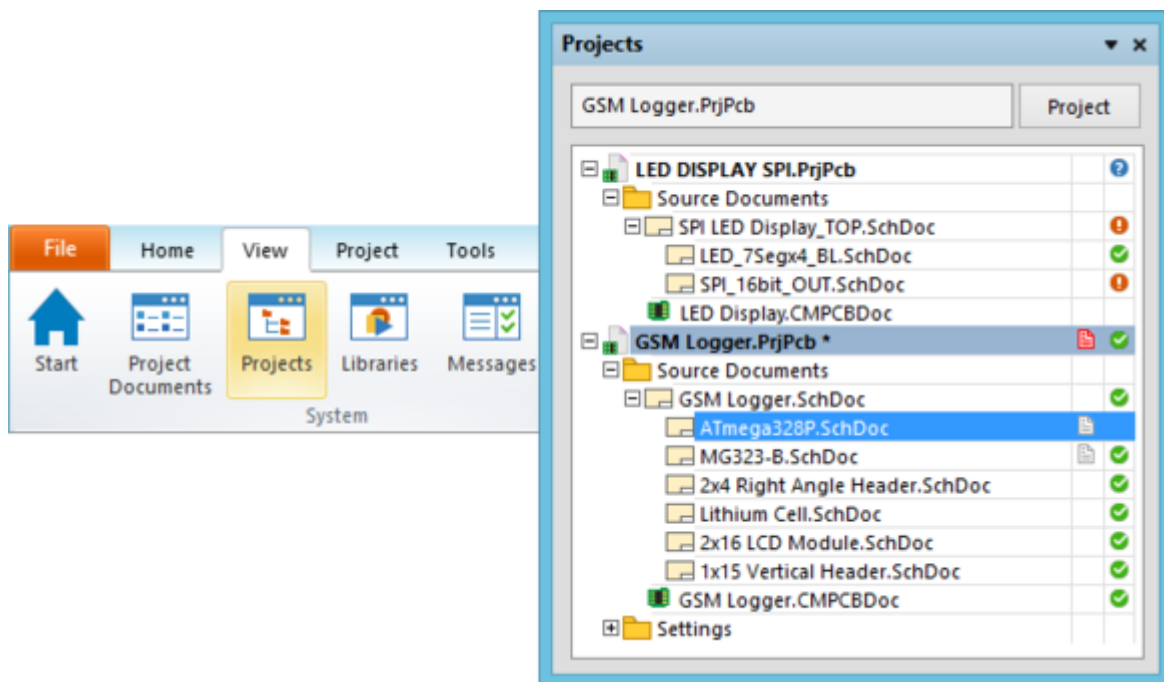
## Panels

*More information:* See the **Panel** references in this documentation, such as the [Schematic Panels](#) and the [PCB Panels](#) entries.

Documents store objects and entities, and are edited in the main workspace. Panels are used to give an alternate view of data in the current document, for example the *PCB* panel can be used to browse by Components or Nets.

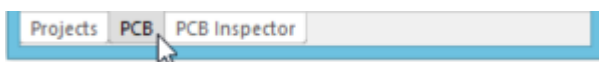
Panels are also used to work across the environment, for example the *Projects* panel is used to open any document in the project, as well as display the project hierarchy. Document-specific panels can only be displayed when that document-type is the active document.

All panels are accessible from the menu's **View** tab.



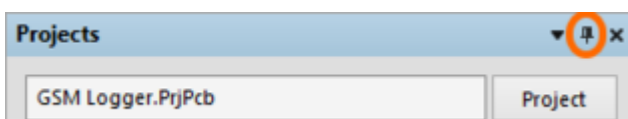
The main project panels are accessed from the **System** group under the **View** tab, while more document specific panels are available in their dedicated groups.

- Panels can float in the workspace, they can be docked along the edge of the CircuitMaker environment, or they can be set to pop-out from an edge.
- Switch between multiple grouped panels using the tabs at the bottom of the panel area.



Switching between grouped panels.

- Click and drag on the panel name to move just that panel, click and drag elsewhere on the panel caption bar to move a set of stacked panels.
- Right-click on the panel name to configure its docking behavior.
- Switch a panel from docked to pop-out via the pin button at the top of the panel.



Control whether the panel is pinned or popped-out.

## Finding Help

CircuitMaker provides multiple levels of help information, both locally in the software and through online documentation.

- At the immediate level, the system provides basic information via pop-up text as you hover over a control button, and most action dialogs include hints to help you configure its settings and options.
- The main in-depth help information can be accessed by simply pressing **F1** over an object, panel, menu entry, or button. This provides a direct link to the relevant part of CircuitMaker's online documentation.
- The menu **Help** button (**View | Help | Help**) will open the main page of the online documentation.

## Shortcuts

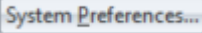
When you are comfortable with working with the CircuitMaker interface and design flow, a good way to streamline and speed up the process is through the use of keyboard shortcuts.

The system offers pop-up hints for shortcuts, and a context-sensitive list of shortcuts.

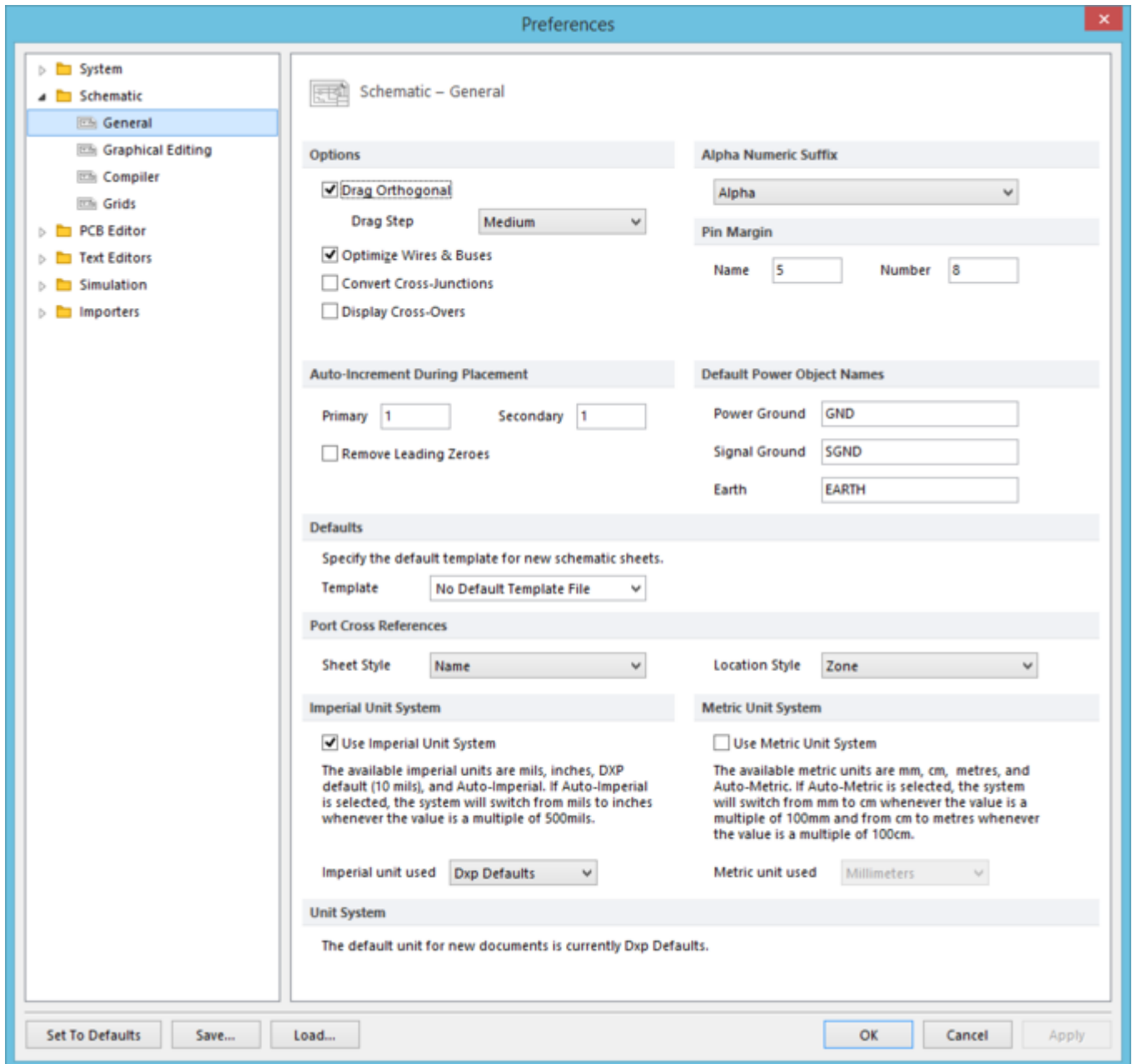
- To see shortcuts for the ribbon menu tabs, press the **Alt** key.
- Open the *Shortcuts* panel (**View | Help | Shortcuts**) to see a list of common keyboard shortcuts for the system and the active editor. For example, with the panel open, changing from the schematic to the PCB editor will re-populate the list with *PCB* shortcuts in place of *Schematic* shortcuts.

## System Preferences

CircuitMaker provides a centralized location for the setting of environment options across all document editors and systems - the *Preferences* dialog.

Access the *Preferences* dialog by selecting **File |**  (located at the bottom of the **File** menu).





The *Preferences* dialog is the central point for configuring CircuitMaker's system-wide user preference options.

This features a tree-like navigation structure that helps you quickly find and set system-wide preferences. The current preference settings will be retained by CircuitMaker, but can also be saved or loaded to/from a single compressed format file (DXPPreferences\*.DXPPrf) with the  and  buttons.

## Getting to know CircuitMaker

A good way to become familiar with CircuitMaker's interface, editors and command structure is to simply load a design from the community projects, and explore the system's functionality with a real PCB project. To do so, from the **Start** page (**View | System | Start**) click **Open Project** and then browse to a project of interest.

However the best way to understand the workflow and deeper features of CircuitMaker is by working through the documentation's *From Idea to Manufacture* design tutorial guide. This provides a step-by-step explanation of how to create a complete design in CircuitMaker, and covers all aspects of the process - literally from idea to manufacture.

See [From Idea to Manufacture - Driving a PCB Design through CircuitMaker](#)



Use the guide as a complete walk-through process for creating your own design (or the one presented), or access key parts of the guide as a reference when needed.

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**Source URL:** <http://documentation.circuitmaker.com/display/CMAK/Exploring+CircuitMaker>