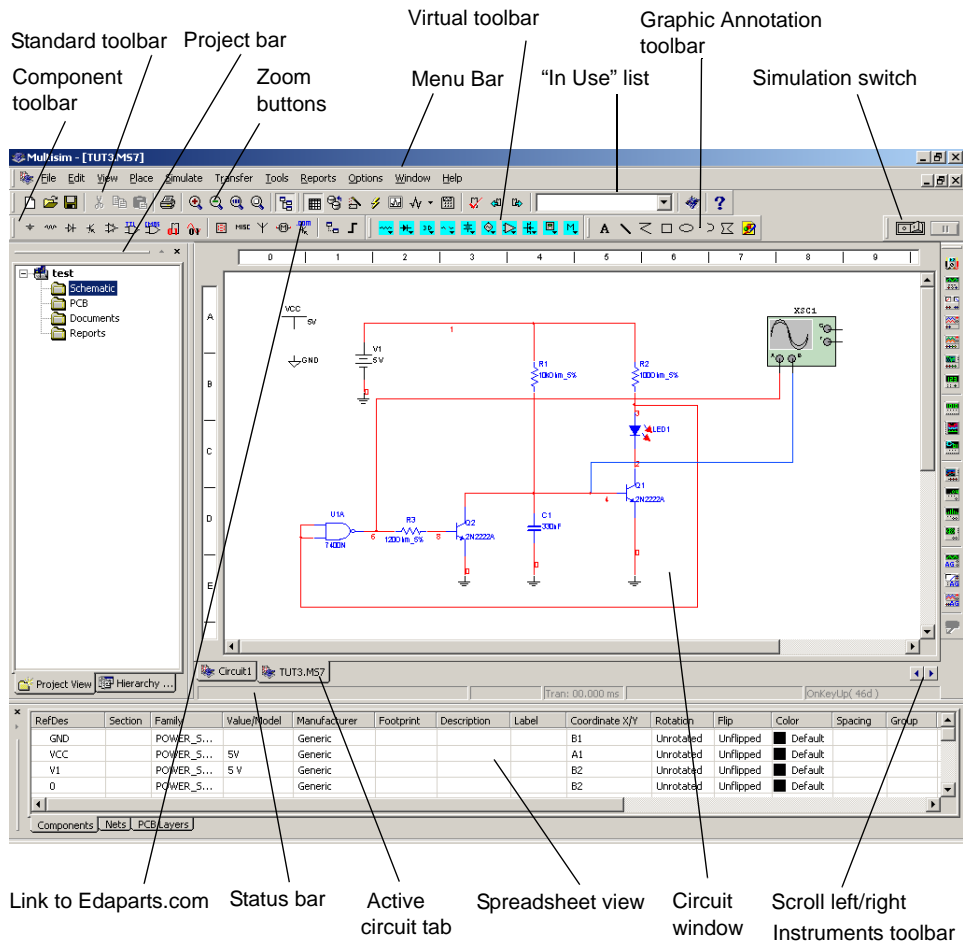


2.1 Introduction to the Multisim Interface

Multisim's user interface consists of the following basic elements:



Menus are where you find commands for all functions. For details, see “2.3 Menus and Commands” on page 2-13.

The **Standard Toolbar** contains buttons for commonly-performed functions, as described in “2.2.1 Standard Toolbar” on page 2-5. Included in this toolbar are the standard Windows-type buttons and the key buttons used to control Multisim 7.

The **Instruments Toolbar** contains buttons for each instrument, as described in “8.1 Introduction to the Multisim Instruments” on page 8-3.

The **Component Toolbar** contains buttons that let you select components from the Multisim libraries for placement in your schematic. See “2.2.2 Component Toolbar” on page 2-7. This toolbar includes a link to **EDAparts.com**, which launches your web browser and directs you to the Electronics Workbench EDAparts.com website. You can then navigate the site to download parts, as described in “5.3 Using EDAparts.com” on page 5-6.

The **Virtual Toolbar** contains buttons that let you place virtual components. For details, see “2.2.3 Virtual Toolbar” on page 2-9.

The **Circuit Window** (or workspace) is where you build your circuit designs.

The **Status Bar** displays useful information about the current operation and a description of the item the cursor is currently pointing to.

The **Project Bar** lets you navigate through the different types of files in a project (schematics, PCBs, reports) or to view a schematic hierarchy. For details, see “4.9 Project Management” on page 4-52.

The **Spreadsheet View** allows fast advanced viewing and editing of parameters including component details such as footprints, RefDes, attributes and design constraints. Users can change parameters for some or all components in one step and perform a number of other functions. For details, see “4.3 The Spreadsheet View” on page 4-15.

2.2 Toolbars

The following toolbars are available in Multisim:












- Standard Toolbar
- Component Toolbar
- Virtual Toolbar
- Graphic Annotation Toolbar
- Instruments Toolbar










2.2.1 Standard Toolbar




The **Standard** toolbar contains buttons for commonly-performed functions.



The buttons in the **Standard** toolbar are described below:

Button	Description
	New button. Creates a new circuit file.
	Open button. Opens an existing circuit file.
	Save button. Saves the active circuit.
	Cut button. Removes the selected elements and places them on the Windows clipboard.
	Copy button. Copies the selected elements and places them on the Windows clipboard.
	Paste button. Inserts the contents of the Windows clipboard at the cursor location.
	Print Circuit button. Prints the active circuit.
	Increase Zoom button. Magnifies the active circuit.
	Decrease Zoom button. Decreases the magnification of the active circuit.
	Zoom 100% button. Shows the circuit in the workspace at its normal size.
	Fit to Page button. Displays the entire active circuit in the workspace.
	Toggle Project Bar button. Switches the Project Bar on and off. For details, see “4.9 Project Management” on page 4-52. This function is hidden when the simplified version option is selected. For details, see “14.4.1.2 Simplified Version” on page 14-9.







Button	Description
	Toggle Spreadsheet View button. Switches the Spreadsheet View on and off. For details, see “4.3 The Spreadsheet View” on page 4-15. This feature is not available in all versions of Multisim. This function is hidden when the simplified version option is selected. For details, see “14.4.1.2 Simplified Version” on page 14-9.
	Database Management button. Launches the Database Management dialog box. For details, see “6.3 Editing Components” on page 6-11. This function is hidden when the simplified version option is selected. For details, see “14.4.1.2 Simplified Version” on page 14-9.
	Create Component button. Launches the Create Component Wizard . For details, see “6.2 Adding Components with the Create Component Wizard” on page 6-3. This function is hidden when the simplified version option is selected. For details, see “14.4.1.2 Simplified Version” on page 14-9.
	Run/stop Simulation button. Starts/stops simulation of the active circuit. For details, see “7.2.2 Start/Stop/Pause Simulation” on page 7-5. This function is hidden when the simplified version option is selected. For details, see “14.4.1.2 Simplified Version” on page 14-9.
	Show grapher button. Displays the grapher. For details, see “9.2 Viewing the Analysis Results: Grapher” on page 9-4. This function is hidden when the simplified version option is selected. For details, see “14.4.1.2 Simplified Version” on page 14-9.
	Analyses button. Displays a list of available analyses. For details, see “9.3 Working with Analyses” on page 9-19. This function is hidden when the simplified version option is selected. For details, see “14.4.1.2 Simplified Version” on page 14-9.
	Postprocessor button. Displays the Postprocessor dialog box. For details, see “10.2 Using the Postprocessor” on page 10-2. This function is hidden when the simplified version option is selected. For details, see “14.4.1.2 Simplified Version” on page 14-9.
	Electrical Rules Checking button. Checks that the electrical rules established for the wiring of the circuit have been followed. For details, see “4.8 Electrical Rules Checking” on page 4-50. This function is hidden when the simplified version option is selected. For details, see “14.4.1.2 Simplified Version” on page 14-9.
	Back Annotate from Ultiboard button. For details, see “11.4 Back Annotation” on page 11-4. This function is hidden when the simplified version option is selected. For details, see “14.4.1.2 Simplified Version” on page 14-9.












Button	Description
	Forward Annotate button. For details, see “11.3 Forward Annotation” on page 11-4. This function is hidden when the simplified version option is selected. For details, see “14.4.1.2 Simplified Version” on page 14-9.
	In Use List. Click on the arrow to display a list of the active circuit’s components. For details, see “3.5.3 Using the In Use List” on page 3-14.
	Help button. Launches the help file.

2.2.2 Component Toolbar



The buttons in the **Component** toolbar are described below. Each button will launch the place component browser (**Select a Component** browser) with the group specified on the button pre-selected. For details, see “3.5.1 Using the place component browser” on page 3-7.

Button	Description
	Source button. Selects the Source components group in the browser.
	Basic button. Selects the Basic components group in the browser.
	Diode button. Selects the Diode components group in the browser.
	Transistor button. Selects the Transistor components group in the browser.
	Analog button. Selects the Analog components group in the browser.
	TTL button. Selects the TTL components group in the browser.









Button	Description
	CMOS button. Selects the CMOS component group in the browser.
	Miscellaneous Digital button. Selects the Miscellaneous Digital component group in the browser.
	Mixed button. Selects the Mixed component group in the browser.
	Indicator button. Selects the Indicator component group in the browser.
	Miscellaneous button. Selects the Miscellaneous component group in the browser.
	RF button. Selects the RF component group in the browser.
	Electromechanical button. Selects the Electromechanical component group in the browser.
	Education Resources button. Launches your internet browser and takes you to Electronic Workbench's Education website. This function is hidden when the simplified version option is selected. For details, see "14.4.1.2 Simplified Version" on page 14-9.
	EDAparts.com button. Launches the eda.parts.com website. For details, see "5.3 Using EDAparts.com" on page 5-6. This function is hidden when the simplified version option is selected. For details, see "14.4.1.2 Simplified Version" on page 14-9.
	Place Hierarchical Block button. Opens a file to be embedded as a hierarchical block. For details, see "4.11.2 Setting up and Using Hierarchical Design" on page 4-61. This function is hidden when the simplified version option is selected. For details, see "14.4.1.2 Simplified Version" on page 14-9.
	Place Bus button. For details, see "4.5 Placing a Bus" on page 4-42. This function is hidden when the simplified version option is selected. For details, see "14.4.1.2 Simplified Version" on page 14-9.



2.2.3 Virtual Toolbar

Use the **Virtual Toolbar** to place virtual components on your workspace.

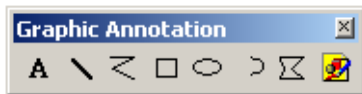


The buttons in the **Virtual** toolbar are described below. For details on their use, see “3.5.2 Placing Virtual Components” on page 3-10.








Button	Description
	Show Basic Components Bar button. Displays the Basic Components toolbar, which contains buttons that let you place different virtual Basic components.
	Show Diodes Components Bar button. Displays the Diodes Components toolbar, which contains buttons that let you place different virtual diodes.
	Show 3D Components Bar button. Displays the 3D Components toolbar, which contains buttons that let you place different virtual 3D components. These components function normally when the circuit is simulated, but appear like the real component on the circuit schematic.
	Show Rated Virtual Components Bar button. Displays the Rated Virtual Components toolbar, which contains buttons that let you place different virtual components that are found in the Rated Virtual component group. This component group contains a number of virtual components that can be rated to "blow" if pre-set tolerance(s) are exceeded when the circuit is simulated. These tolerances are set in the Values tab of each component's properties window.
	Show Power Source Components Bar button. Displays the Power Source Components toolbar, which contains buttons that let you place different virtual Power Source components.
	Show Signal Source Components Bar button. Displays the Signal Source Components toolbar, which contains buttons that let you place different virtual Signal Source components.
	Show Analog Components Bar button. Displays the Analog Components toolbar, which contains buttons that let you place different virtual Analog components.
	Show FET Components Bar button. Displays the FET Components toolbar, which contains buttons that let you place different virtual FETs.


Button	Description
	Show Measurement Components Bar button. Displays the Measurement Components toolbar, which contains buttons that let you place different virtual Measurement components.
	Show Miscellaneous Components Bar button. Displays the Miscellaneous Components toolbar, which contains buttons that let you place miscellaneous virtual components.

2.2.4 Graphic Annotation Toolbar



The buttons in the **Graphic Annotation** toolbar are described below. For details on their use, see “3.10.6 Graphic Annotation” on page 3-34.

Button	Description
	Place Text button. Places a text frame on your workspace into which you can enter miscellaneous text. For details, see “3.10.4 Adding Miscellaneous Text” on page 3-32.
	Line button. Click on this button to draw a line.
	Multiline button. Click on this button to draw a multiline.
	Rectangle button. Click on this button to draw a rectangle.
	Ellipse button. Click on this button to draw an ellipse.
	Arc button. Click on this button to draw an arc.
	Polygon button. Click on this button to draw a polygon.








Button	Description
	Picture button. Click on this button to place a picture on the workspace.












2.2.5 Instruments Toolbar



The buttons in the **Instruments** toolbar are described below. In each case, the button places a specific instrument on the workspace.

Some versions of Multisim do not include all of the instruments noted below. Refer to the detailed description of each instrument referred to below.

Button	Description
	Multimeter button. Places a multimeter on the workspace. For details, see “8.4 Multimeter” on page 8-9.
	Function Generator button. Places a function generator on the workspace. For details, see “8.5 Function Generator” on page 8-14.
	Wattmeter button. Places a wattmeter on the workspace. For details, see “8.6 Wattmeter” on page 8-16.
	Oscilloscope button. Places an oscilloscope on the workspace. For details, see “8.7 Oscilloscope” on page 8-17.
	Four Channel Oscilloscope button. Places a four-channel oscilloscope on the workspace. For details, see “8.16 Four-channel Oscilloscope” on page 8-43.
	Bode Plotter button. Places a bode plotter on the workspace. For details, see “8.8 Bode Plotter” on page 8-22.
	Frequency Counter button. Places a frequency counter on the workspace. For details, see “8.17 Frequency Counter” on page 8-53. This instrument is hidden when the simplified version option is selected. For details, see “14.4.1.2 Simplified Version” on page 14-9.

Button	Description
	Word Generator button. Places a word generator on the workspace. For details, see “8.9 Word Generator” on page 8-27.
	Logic Analyzer button. Places a logic analyzer on the workspace. For details, see “8.10 Logic Analyzer” on page 8-30.
	Logic Converter button. Places a logic converter on the workspace. For details, see “8.11 Logic Converter” on page 8-35.
	IV-Analysis button. Places an IV Analyser on the workspace. For details, see “8.18 IV Analyzer” on page 8-56.
	Distortion Analyzer button. Places a distortion analyzer on the workspace. For details, see “8.12 Distortion Analyzer” on page 8-38. This instrument is hidden when the simplified version option is selected. For details, see “14.4.1.2 Simplified Version” on page 14-9.
	Spectrum Analyzer button. Places a spectrum analyzer on the workspace. For details, see “8.13 Spectrum Analyzer” on page 8-39. This instrument is hidden when the simplified version option is selected. For details, see “14.4.1.2 Simplified Version” on page 14-9.
	Network Analyzer button. Places a network analyzer on the workspace. For details, see “8.14 Network Analyzer” on page 8-40. This instrument is hidden when the simplified version option is selected. For details, see “14.4.1.2 Simplified Version” on page 14-9.
	Agilent Function Generator button. Places an Agilent function generator on the workspace. For details, see “8.19.1 Agilent Simulated Function Generator” on page 8-67.
	Agilent Multimeter button. Places an Agilent multimeter on the workspace. For details, see “8.19.2 Agilent Simulated Multimeter” on page 8-70.
	Agilent Oscilloscope button. Places an Agilent oscilloscope on the workspace. For details, see “8.19.3 Agilent Simulated Oscilloscope” on page 8-73.
	Dynamic Measurement Probe button. Attaches a probe to the mouse pointer that measures voltage and frequency on any wire on your schematic. This function is only active during simulation. For details, see “8.15 Dynamic Measurement Probe” on page 8-40.