Summary

A Bezier curve is a non-electrical drawing primitive. It is a free-form curved line that can be placed on a schematic sheet. The curve is defined by a series of vertex points that 'pull' the line into a curved shape.

Availability

Beziers are available for placement in both Schematic and Schematic Library Editors:

- **Schematic Editor** - the following commands are available:
  - Choose **Place » Drawing Tools » Bezier** from the main menus.
  - Click the Bezier button (ImageViewer) in the graphic objects drop-down on the **Active Bar** located at the top of the workspace. Click and hold an **Active Bar** button to access other related commands. Once a command has been used, it will become the top-most item on that section of the **Active Bar**.
  - Right-click in the workspace then choose **Place » Drawing Tools » Bezier** from the context menu.

- **Schematic Library Editor** - the following commands are available:
  - Choose **Place » Bezier** from the main menus.
  - Click the Bezier button (ImageViewer) in the graphic objects drop-down on the **Active Bar** located at the top of the workspace. Click and hold an **Active Bar** button to access other related commands. Once a command has been used, it will become the top-most item on that section of the **Active Bar**.
  - Right-click in the workspace then choose **Place » Bezier** from the context menu.

Placement

After launching the command, the cursor will change to a cross-hair and you will enter Bezier
placement mode. Placement is made by performing the following sequence of actions:

1. Click or press **Enter** to anchor the starting point for the curve.
2. Move the cursor and click or press **Enter** to place a series of vertex points to define the curve. As you move the cursor, the curve will be continually redrawn to indicate how it would look if you placed a vertex at the cursor position.
3. After placing the final vertex point, right-click or press **Esc** to complete placement of the curve.
4. Continue placing further Bezier curves or right-click or press **Esc** to exit placement mode.

The minimum number of vertices required to define a Bezier curve is four points. After four clicks, the Bezier no longer appears attached to the cursor, however, if you continue to click, the last vertex on the just-defined Bezier will be used as the first vertex on the next Bezier. If you right-click once after finishing the first four-point Bezier, you will terminate the current Bezier placement and remain in Bezier placement mode ready to start a new one.

Additional actions that can be performed during placement while the Bezier is still floating on the cursor are:

- Press the **Tab** key to pause the placement and access the **Bezier** mode of the **Properties** panel from where its properties can be changed on-the-fly. Click the workspace pause button overlay ( ) to resume placement.
- Press the **Alt** key to constrain the direction of movement to the horizontal or vertical axis depending on the initial direction of movement.

While attributes can be modified during placement (**Tab** to access the **Properties** panel), keep in mind that these will become the default settings for further placement unless the **Permanent** option on the **Schematic – Defaults** page of the **Preferences** dialog is enabled. When this option is enabled, changes made will affect only the object being placed and subsequent objects placed during the same placement session.

### Graphical Editing

This method of editing allows you to select a placed Bezier object directly in the workspace and change its size and/or shape graphically.

When a Bezier object is selected, the following editing handles are available:
Click and drag an editing handle to "bend" the curve.
Click anywhere on the Bezier away from editing handles and drag to reposition it. While dragging, the Bezier can be rotated (Spacebar/Shift+Spacebar) or mirrored (X or Y keys to mirror along the X-axis or Y-axis).

If attempting to graphically modify an object that has its Locked property enabled, a dialog will appear asking for confirmation to proceed with the edit. If the Protect Locked Objects option is enabled on the Schematic - Graphical Editing page of the Preferences dialog, and the Locked option for that design object is enabled as well, then that object cannot be selected or graphically edited. Click the locked object to select it then disable the Locked property in the List panel or disable the Protect Locked Objects option to graphically edit the object.

Non-Graphical Editing

The following methods of non-graphical editing are available:

Via the Properties Panel

Properties page: Bezier Properties

This method of editing uses the associated Properties panel mode to modify the properties of a Bezier object.

During placement, the Bezier mode of the Properties panel can be accessed by pressing the Tab key.

After placement, the Bezier mode of the Properties panel can be accessed in one of the following ways:

- Double-click on the placed Bezier.
- Place the cursor over the Bezier, right-click then choose Properties from the context menu.
- If the Properties panel is already active, select the Bezier object.
A List panel allows you to display design objects from one or more documents in tabular format, enabling quick inspection and modification of object attributes. Used in conjunction with appropriate filtering - by using the applicable Filter panel, or the Find Similar Objects dialog - it enables the display of just those objects falling under the scope of the active filter allowing you to target and edit multiple design objects with greater accuracy and efficiency.