Command Line Invocation

ic - Invoke the Pyxis Layout Editor directly

Pyxis File Structure

The Pyxis environment is structured as follows:

Project — design project containing layout, schematics, and required libraries

Library — design library containing IC data

— Category — container to organize library design data

Cell — custom design cell

■ Symbol — symbol for the cell (cellview)

Schematic — schematic for the cell

_ 🚌 Layout — layout for the cell

Technology Library — process design kit (PDK) library

Technology Category — organizes the design kit

Component Set — a virtual grouping of cells

Technology Configuration — process database, design kit options, GDS map files, and SDL rules

Logic Library— reference library containing logic data

External Library— reference library containing IC data

Set Layout Editing Environment

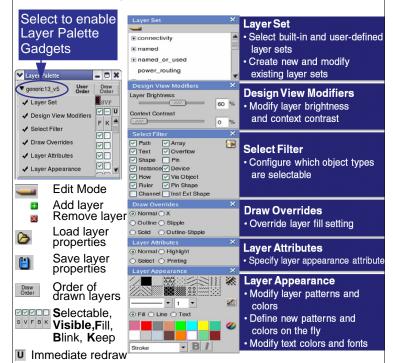
The editing environment can be changed between the **Default** or **Compatibility editing** modes. From Pyxis Layout, select **MGC** > **Setup** and adjust your settings to match the table below.

Note: Default hotkeys are operative when Selection-based editing is active, otherwise Compatibility keys are operative.

Setup	Option	Function	Default	Compatibility
Editing	Selection- based editing	\$set_classic_mode()	@true	@false
	Auto select	\$set_autoselect()	@true	@false
	Split MOS devices on move	\$set_split_on_move()	@on	@off
	Target Object	\$set_target_mode()	@off	@on
Behavior	Start commands at cursor (in-fix)	\$set_start_ cmd_at_cursor_ mode()	@false	@true
	Repeat last command	\$set_repeat_last_ cmd_mode()	@false	@true
	Popup menu (RMB)	\$set_rmb_action()	@true	@false
	Automatically resync data when peeking	\$set_resync_on_ peek()	@false	@true
Display	Text origin	\$set_text_origin_ display()	@off	@on
Selection	Point inside/outside	\$set_point_select_ mode()	@out_ closest "Point outside"	@in_ closest "Point inside"
AMPLE	Not shown	\$set_unselect_ empty()	@off	@on

Layer Palette Gadgets

Use the Layer Palette to set appearance and selection options. You may add or remove columns by right-clicking in the column title area and selecting which items to view in the pop-up menu.



Pyxis Mouse Operations

Mouse	Definition
Left Click	Select object
Right Click	Open context menu [Compatibility: Specify Zoom]
Double Click	Complete object creation
Middle Click	Center screen on cursor
Middle Click + Hold	Draw stroke command
Ctrl + Scroll	Horizontal pan
Shift + Scroll	Vertical pan
Scroll Up	Zoom in on pointer
Scroll Down	Zoom out on pointer
Left Click+Hold	Create selection rectangle
Shift+Left Click	[Compatibility: Select Additional Objects]
Ctrl + Left Click	[Compatibility: Deselect Additional Objects]

Pyxis Layout Command Prompt

At any point during a Pyxis Layout session, you can tap the **Spacebar** key and enter a command or function call in the prompt bar. If required, the **Tab** key opens the Command Completion List dialog box.



Commands do not have to be completely typed out. If the command consists of multiple keywords, enter the command in a 3-2-1 pattern as follows: **FIR**st **SE**cond **Third** (fir se t)

Pyxis Layout Keybindings

T

Add text label

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These are the **Default** and **Compatibility** editing hotkeys for Pyxis Layout. To view a complete list, select **Report > Hotkeys.** Hotkeys are context-sensitive and change

Réport > Hotkeys. Hotkeys are context-sensitive and change when different areas and functions of the Pyxis Layout tool are used.

Default Hotkey	Definition	Compatibility Hotkey				
General / Display						
	Save	Ctrl + S				
	Check and Save	Shift + X				
F, Shift + F8	View all (zoom to fit)	F				
-	Zoom Out	Shift + Z				
+	Zoom In	Z				
Up / Down	Scroll Up / Down	Up / Down				
Left / Right	Scroll Left / Right	Left / Right				
	Select					
Α	Selection rectangle	Shift + A				
Shift + A	Unselection rectangle	Shift + D				
	Select All	Ctrl + A				
Shift + U, F2	Unselect all	Ctrl + D				
	Unselect edge	D				
Hierarchy						
E	Descend edit (Open down)	Shift + X				
Crtl + F4	Set context up	Shift + B				
F6	Show hierarchy (peek)	Shift + F				
Shift + F6	Hide hierarchy (unpeek)	Crtl + F				
	Edit					
Esc	Cancel current command	Esc				
С	Сору	С				
Shift + F3	Paste	Shift + Y				
Del, D	Delete selected object(s)	Del				
F	Flip horizontal					
Shift + F	Flip vertical					
U	Undo	U				
	Merge	Shift + M				
Q	Modify properties	Q				
М	Move	M				
R	Rotate 90 degrees (selected)	Shift + O				
S	Stretch object	S				
Ctrl + F	Setup Options	E				
	Set Drawing Layer	Т				
Create						
F5	Add cell	F5				
I	Add instance	1				
N	Add notch	Shift + R				
Р	Add path	Р				
	Add polygon	Shift + P				
	Add rectangle	R				
	Add ruler	K				

V Strokes are built	Add via Pyxis Strokes (Default)	0				
Strokes are built	Pyxis Strokes (Default)					
Strokes are built						
Strokes are built-in mouse movements that perform layout commands.						
Perform stroke commands by drawing these shapes (starting at the circle) with the middle mouse button depressed.						
	Help on Strokes Displays the Quick Help on Pyxis Layout Strokes dialog box.					
· · · · · ·	Zoom In Zooms in using a factor of 2.					
	Zoom Out Zooms out using a factor of 2.					
Υ	Set Context Sets the active context to the st point.	roke starting				
	Set Context Up Sets the active context to the pacurrent context.	arent cell of the				
	Move Using the current basepoint, moobjects to stroke starting point.	oves selected				
	Delete Deletes the selected objects.					
	Copy Using the current basepoint, co objects to the stroke start point.					
	Paste Displays a dynamic image of th contents. Drag the image to the location and click the Select bu	desired				
	Unselect All Unselects all objects. The selecused.	ct filter is not				
	Undo Undoes the last undoable actio	n.				
	Flip Displays the \$flip() prompt bar. prompts.	Follow the				
	Rotate -90 Rotates the selected objects 90 clockwise around the current ba					
	Stretch Displays the \$stretch() prompt I prompts.	oar. Follow the				

