

# IPL Standard 1.0 Release Notes

February 23, 2010

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## 1 IPL Standard 1.0

### 1.1 Initial release

#### 1.1.1 IPL 1.0 90nm reference iPDK download package - available for public download at [www.iplnow.com](http://www.iplnow.com)

- iPDK developer's guide
- Generic 90nm interoperable OpenAccess-based process design kit (iPDK) including source code
- Generic 90nm OpenAccess-based reference design
- User guide

##### 1.1.1.1 License requirements for IPL 1.0 90nm reference iPDK download package

- Click-through IPL Alliance License Agreement
- Click-through Ciranova End User License Agreement
- Si2 OpenAccess license is not required for end users
- Si2 and/or OpenAccess coalition membership and various related licenses are required for developers of OpenAccess tools please see [www.si2.org](http://www.si2.org) for details

#### 1.1.2 IPL 1.0 standard documents - available for IPL Alliance members

- iCDF standard
- Tcl callback standard

##### 1.1.2.1 License requirements for IPL Alliance members

- IPL Alliance Membership agreement

### 1.1.3 Software requirements

- EDA software tools based on OpenAccess
- IPL public download
- Download PyCell Studio™ at:  
<http://www.ciranova.com/registration/index.php?section=downloads>  
**NOTE:** The PyCells™ in the reference PDK and design require the PyCell Studio API

## 2 Supported Platforms

### 2.1 This reference kit was developed and validated using:

#### 2.1.1 Synopsys® Galaxy Custom Designer™

- Custom Designer: D-2009.12-3
- PyCell Studio: 4.3.3, 4.3.4
- OpenAccess: 22.04.47
- Platform: amd64 RHEL 4.0 U6

#### 2.1.2 SpringSoft Laker™ Custom Layout System

- Laker Version: OA2010.02
- PyCell Studio: 4.3.3
- OpenAccess : 22.04.54
- Platform: intel RHEL5.2

#### 2.1.3 Ciranova Helix™ Custom and Analog Floorplanner/Placer

- Ciranova Helix Version: 1.8.6
- PyCell Studio: 4.3.4
- OpenAccess : 22.04..28
- Platform: RHEL 3 Linux32 and Linux64

## 3 Installation & Setup

### 3.1 Synopsys® Galaxy Custom Designer™

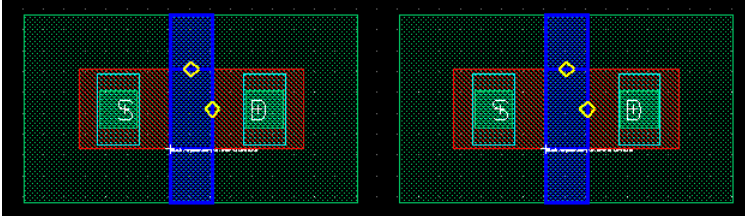
- 1) Install Custom Designer. Follow the instructions outlined in the Synopsys installation guide.
- 2) Download and install Ciranova PyCell Studio™.
- 3) Follow the installation instructions provided in the PyCell Studio package.
- 4) Source the PyCell Studio setup file.
  - a. **Important:** PyCell Studio supports multiple platforms. Make sure to source the correct version. Custom Designer runs in 64bit mode by default.
  - b. `source $CNI_ROOT/quickstart/tcshrc`
- 5) Unzip and untar the reference kit.
  - a. `gunzip iplRefKit_v1_<date>.tar.gz`
  - b. `tar xf iplRefKit_v1_<date>.tar`
- 6) Change into the reference kit directory and start Custom Designer.
  - a. `cd iplRefKit_v1_<date>`
  - b. `cdesigner &`

## 3.2 Springsoft Laker

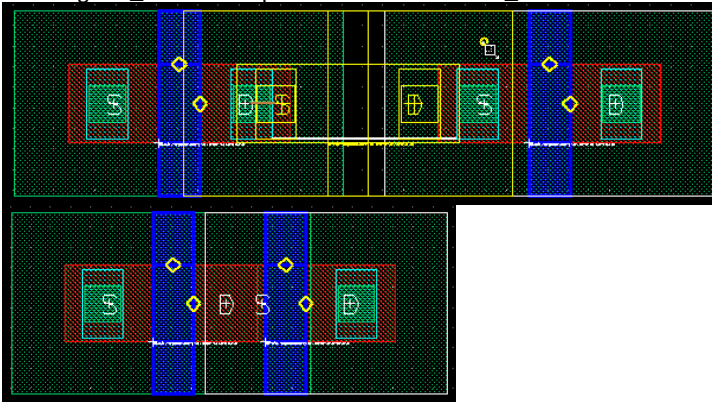
- 1) Launch Laker OpenAccess
- 2) % laker

Verify the IPL PyCell Stretch Handle and Abutment and callback support

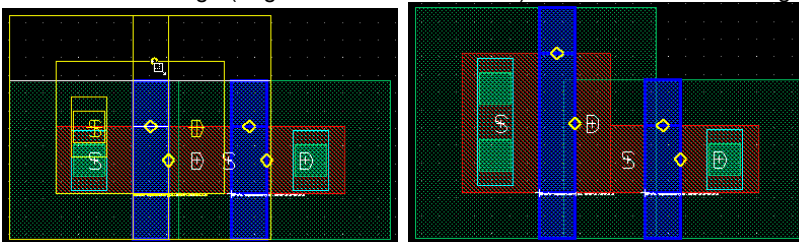
- 3) Instantiate PyCell: n\_45 twice from library: reference90RF



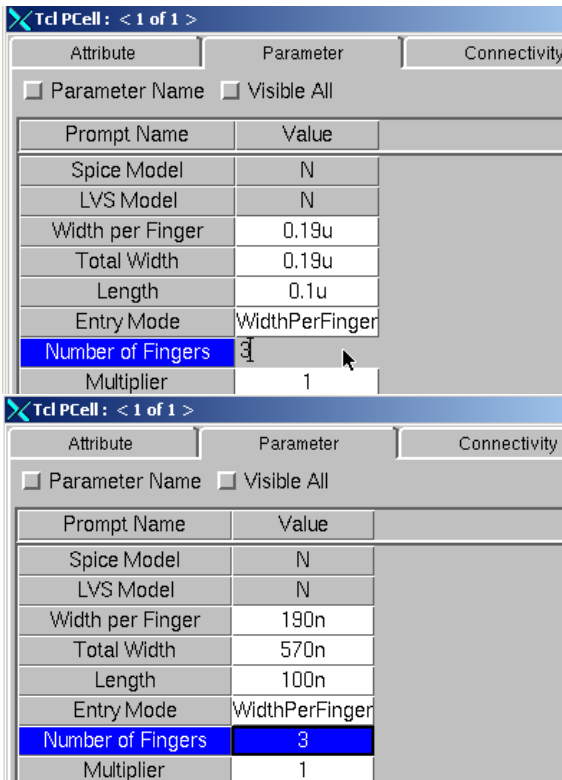
- 4) Assign net name: n1 on D of left n\_4t and S of right n\_4t
- 5) Check Abutment
- 6) Move right n\_4t to overlap terminal: S with left n\_4t terminal: D



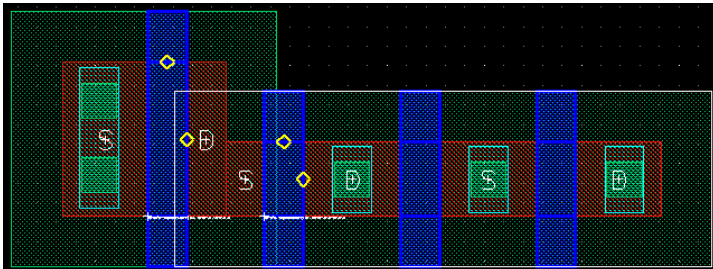
- 7) Check Stretch Handle
- 8) Deselect all object (hot key: Ctrl+d ) and go to Stretch mode (hot key: s)
- 9) Click on stretch edge (edge with diamond marker) and move to stretch edge



- 10) Check Callback
- 11) Select right n\_4t and go to Attribute command (hot key: q)
- 12) Change **Number of Fingers** to 3 and see **Total Width** value change



13) Click button OK from attribute form to confirm the parameter change and re-evaluate n\_4t



## 4 Known Problems and Limitations

### 4.1 Cadence Design Systems has not joined the IPL Alliance.

- Reference kit has not been tested on Virtuoso® versions higher than 6.1.3
- Your experiences and tips for running the iPDK in Virtuoso are solicited for comment on the IPL web site forum at [www.iplnow.com/forums](http://www.iplnow.com/forums). Your entries will be anonymous unless you choose to give your name or affiliation

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