

; file: my_rect_pcell.il

```
; Minimal ROD-based rectangle with stretch handles + pin
; Assumes tech layers "DIFF" and "MET1"; adapt to your PDK.
; Load once to (re)define the PCell:
; load("my_rect_pcell.il")

pcDefinePCell(
  list(ddGetObj("MY_LIB") "rect_pcell" "layout")
  ( (w float 2.0) ; width (X)
    (h float 1.0) ; height (Y)
    (pinName string "P") ; a single metal pin
  )

  let( (rect rodR met net tfId minMetalW minMetalExt pinR)

    ;-- tech lookups (guard against nils in older PDKs)
    tfId = techGetTechFile(pcCellView~>lib)
    minMetalW = max(0.06 car(techGetSpacingRule(tfId "minWidth" "MET1")||list(0.06)))
    minMetalExt = max(0.06 car(techGetSpacingRule(tfId "minExtension"
"MET1")||list(0.06)))

    ;-- main rectangle on DIFF
    rect = rodCreateRect(
      ?cvId pcCellView
      ?layer "DIFF"
      ?bbox list( 0:0 w:h )
      ?name "body"
    )

    ;-- expose stretch handles bound to parameters
    rodAssignHandleToParameter(
      ?parameter "w"
      ?rodObj rect
      ?handleName list("centerRight" "centerLeft")
      ?displayName "w" ?stretchDir "x" ?stretchType "relative" ?moveOrigin t
    )
    rodAssignHandleToParameter(
      ?parameter "h"
      ?rodObj rect
      ?handleName list("upperCenter" "lowerCenter")
      ?displayName "h" ?stretchDir "y" ?stretchType "relative" ?moveOrigin t
    )

    ;-- simple pin on MET1 centered at top edge (respect min widths)
    rodR = rodCreateRect(
      ?cvId pcCellView ?layer "MET1"
      ?bbox list( (w/2 - minMetalW/2) : (h - minMetalExt)
        (w/2 + minMetalW/2) : (h + minMetalExt) )
      ?name "pinMetal"
    )
    pinR = dbCreatePin(
```

```
pcCellView pinName "MET1"  
list( rodR~>bBox ) "terminal"  
)  
  
;-- label for the pin  
dbCreateLabel(pcCellView "MET1" list(w/2 : (h + minMetalExt))  
pinName "centerLeft" "stick" 0.12)  
  
t  
) ; let  
) ; pcDefinePCell
```