

; file: my\_rect\_pcell.il

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; 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
```