SCMOS-Like Design Rules for Sky130 on a 0.05-µm Snapping Grid

Polysilicon (poly):

min width 3 min spacing 5

N Diffusion (ndiff):

min width 3 min spacing 6 min spacing to poly 2 min spacing to psd 6 min spacing to nwell 7 min extension of poly 3

P Substrate Diffusion (psd):

min width 3 min spacing 6 min area 28 min spacing to nwell 3

P Diffusion (pdiff):

min width 3 min spacing 6 min spacing to poly 2 min spacing to nsd 6 min surround by nwell 4 min extension of poly 3

N Substrate Diffusion (nsd):

min width 3 min spacing 6 min area 28 min surround by nwell 4

Poly Contact (pc):

min size 4x4 min surround by poly 2 min surround by li 2

N Diffusion Contact (ndc):

min size 4x4 min surround by ndiff 3 min surround by li 2

P Substrate Contact (psc):

min size 4x4 min surround by psd 3 min surround by li 2

P Diffusion Contact (pdc):

min size 4x4 min surround by psd 3 min surround by li 2

N Substrate Contact (nsc):

min size 4x4 min surround by nsd 3 min surround by li 2

Local Interconnect (li):

min width 4 min spacing 4 min area 23

Metal Contact (mcon):

min size 4x4 min surround by li 2 min surround by m1 2

Metal1 (m1):

min width 3 min spacing 3 min area 34

Via (via):

min size 6x6 min surround by m1 1 min surround by m2 1

Metal2 (m2):

min width 3 min spacing 3 min area 28

Via2 (via2):

min size 6x6 min surround by m2 1 min surround by m3 1

Metal3 (m3):

min width 6 min spacing 6 min area 96

Via3 (via3):

min size 8x8 min surround by m3 1 min surround by m4 1

Metal4 (m4):

min width 6 min spacing 6 min area 96

Via4 (via4):

min size 24x24 min surround by m4 1 min surround by m5 3

Metal5 (m5):

min width 32 min spacing 32 min area 1600