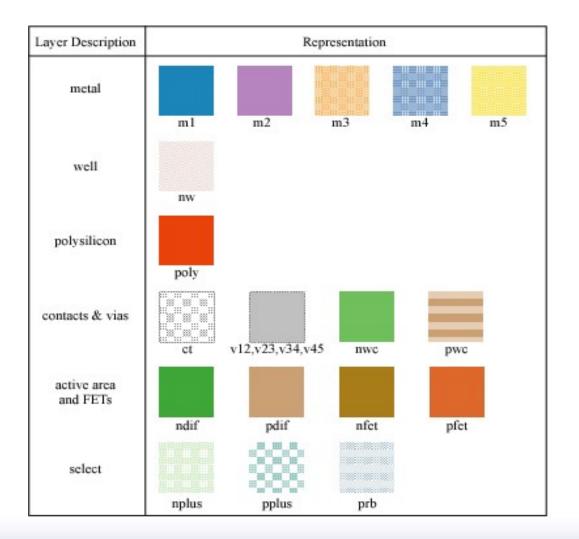# *Design Rules*

3D Perspective

Manufacturing

Design Rules

❑ Interface between designer and process engineer

❑ Guidelines for constructing process masks

❑ Unit dimension: Minimum line width
  - scalable design rules: lambda parameter
  - absolute dimensions (micron rules)

CMOS Process Layers

Layer	Color	Representation
Well (p,n)	Yellow	▭ (yellow outline)
Active Area (n+,p+)	Green	▮ (green filled)
Select (p+,n+)	Green	▭ (green dashed)
Polysilicon	Red	▮ (red filled)
Metal1	Blue	▮ (blue filled)
Metal2	Magenta	▮ (magenta filled)
Contact To Poly	Black	▮ (black filled)
Contact To Diffusion	Black	▮ (black filled)
Via	Black	▮ (black filled)

Layers in 0.25 μm CMOS process