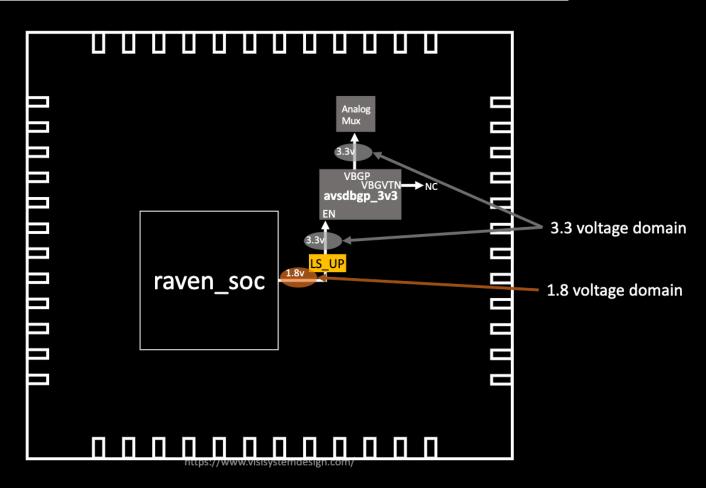
Bandgap (avsdbgp_3v3) spec sheet for 180nm tech node

- Specs released under APACHE LICENSE 2.0
- Please contact Kunal at <u>kunalpghosh@gmail.com</u> in case of any doubts

Application Note for band-gap (avsdbgp_3v3)



avsdbgp_3v3 preferred dimensions, pin locations and metal layers

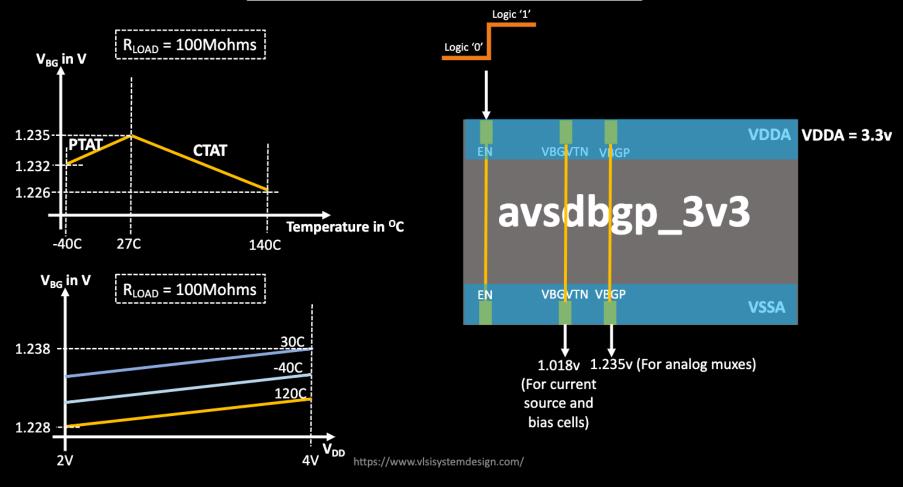


Signal pins – metal2 (0.38um x 0.8um)

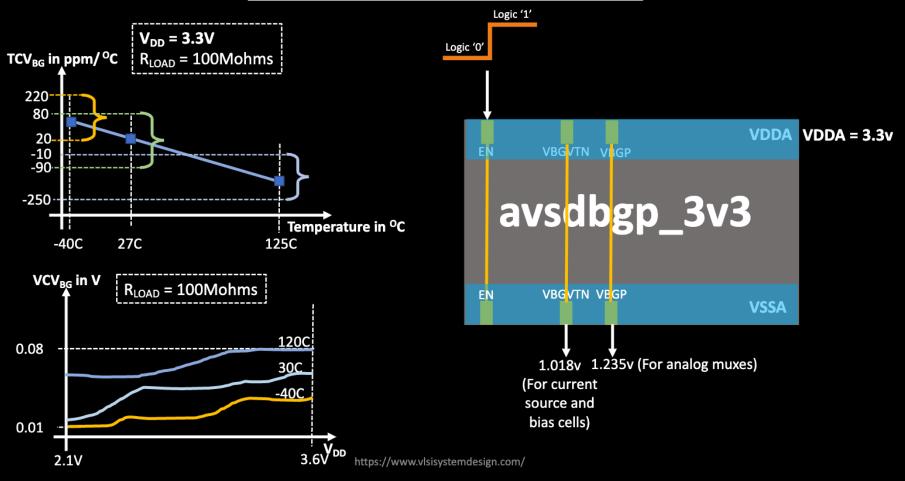
VDDA pins on metal3 (291.04um x 3um)
VSSA pins on metal1 (291.04um x 5um)

https://www.vlsisystemdesign.com/

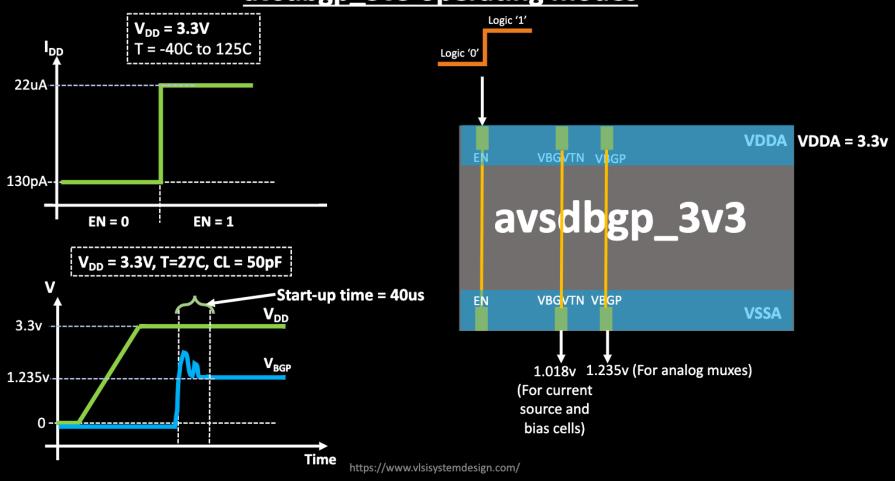
avsdbgp_3v3 operating modes



avsdbgp_3v3 operating modes



avsdbgp_3v3 operating modes



avsdbgp_3v3 plots and values needed

- 1) V_{BGP} vs Temperature (-40C to 140C) at R_{LOAD} = 100Mohms
- 2) V_{BGP} vs V_{DD} (2V to 4V) at R_{LOAD} = 100Mohms
- 3) Temperature Co-efficient of V_{BGP} vs Temperature (-40C to 140C) at $R_{LOAD} = 100Mohms$
- 4) Voltage Co-efficient of V_{BGP} vs V_{DD} (2V to 4V) at R_{LOAD} = 100Mohms
- 5) Report noise at VBGP terminal (expected 25uV rms)