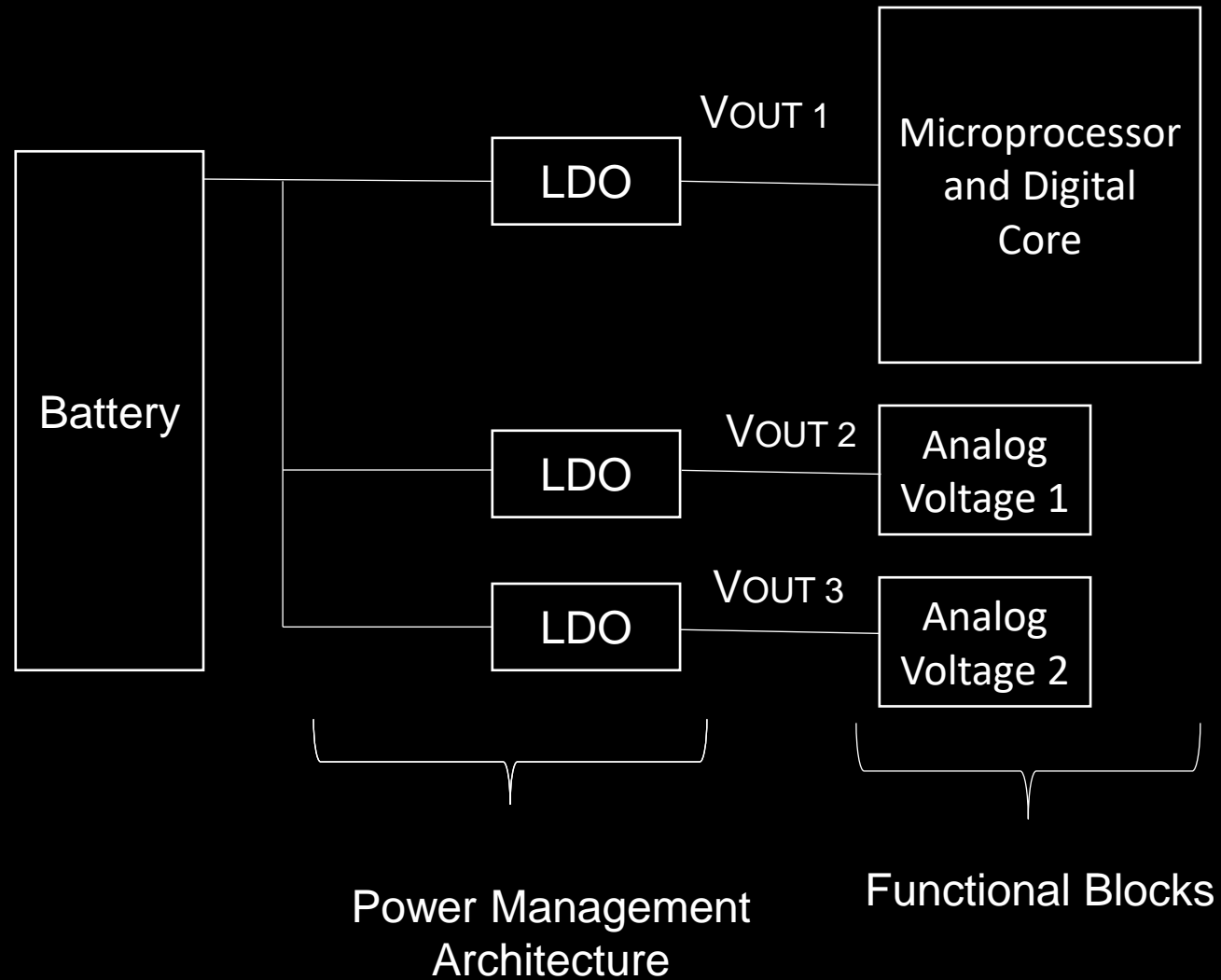


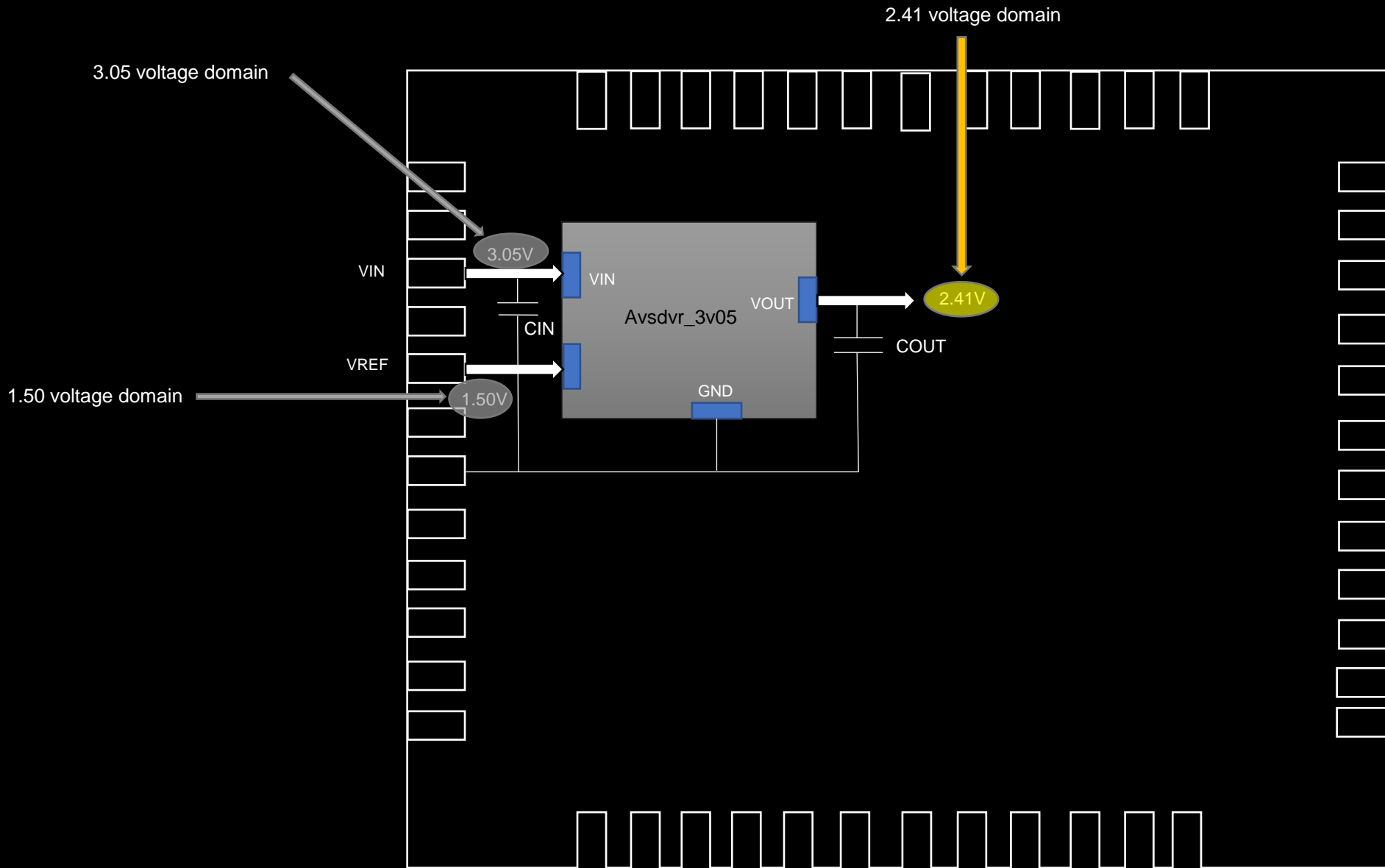
LDO Voltage regulator(avsdvr_3v05) spec sheet for 180nm tech node

- Specs released under APACHE LICENSE 2.0
- Please contact Soham at sohamsen25420001@gmail.com in case of any doubt

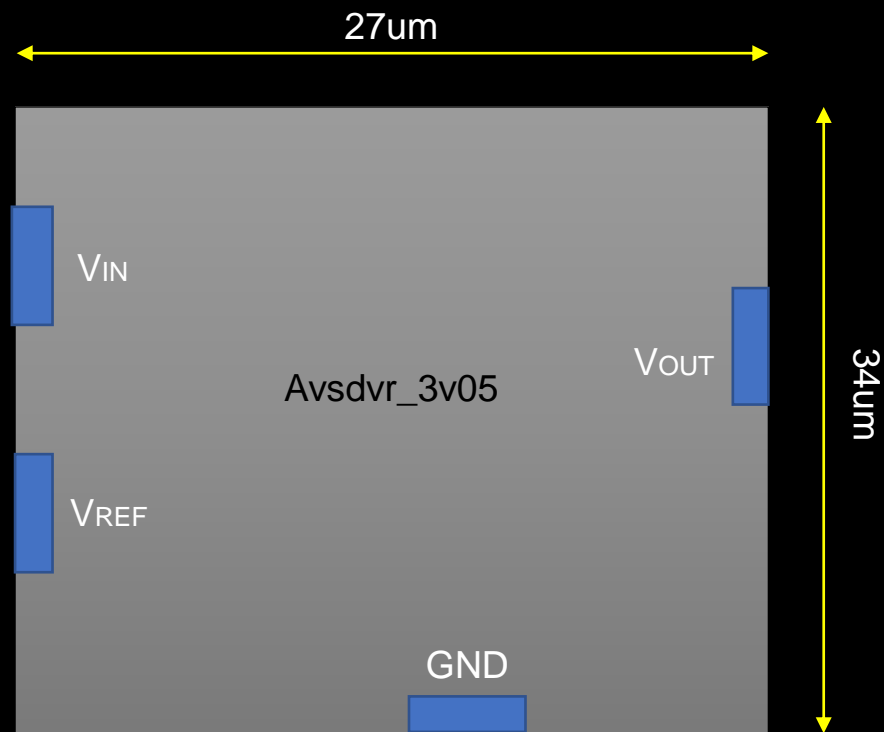
Application Note for LDO voltage regulator (avsdvr_3v05)



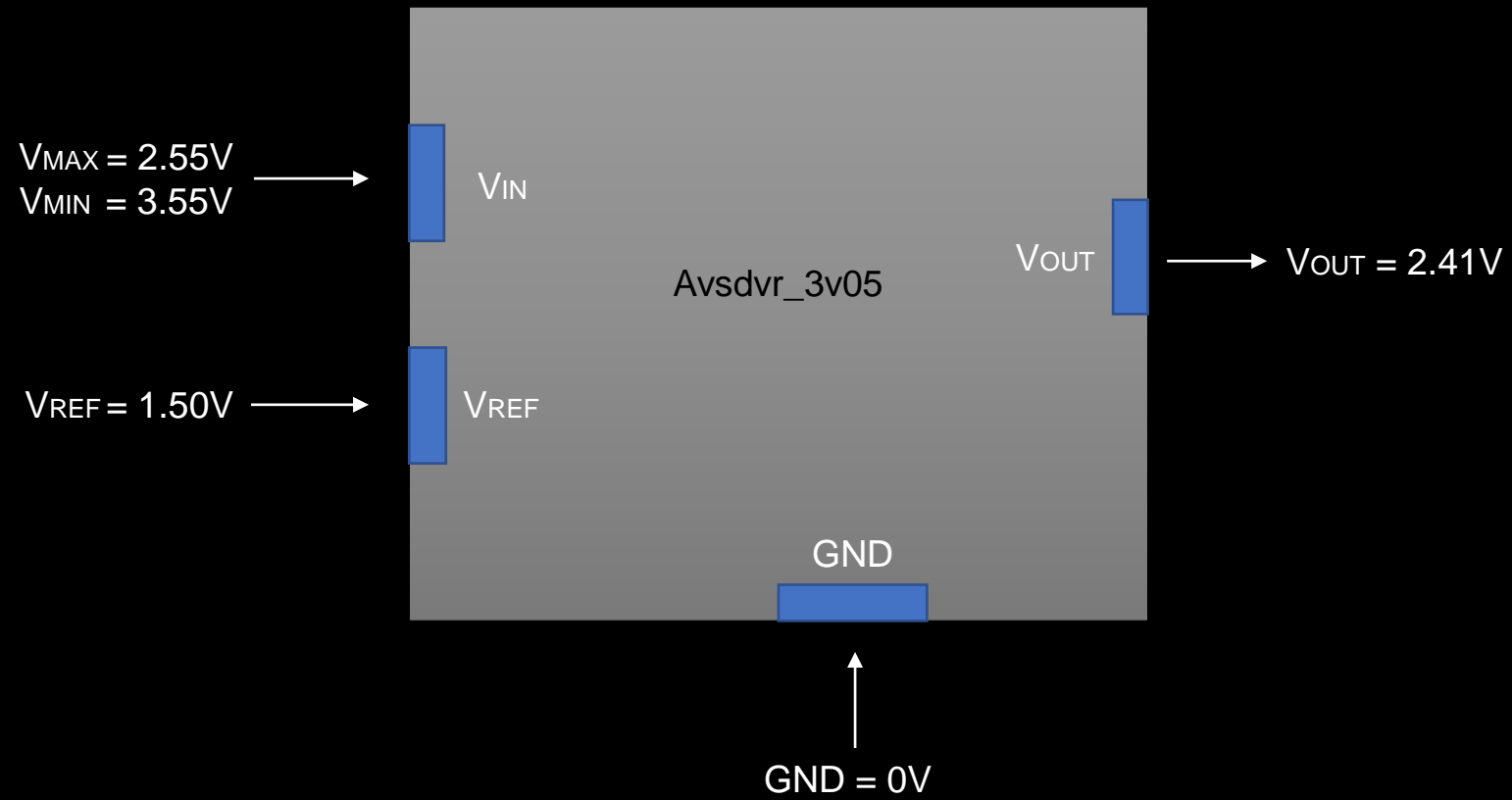
Application Note for LDO voltage regulator (avsdvr_3v05)



avsdvr_3v05 preferred dimensions , pin locations and metal layers

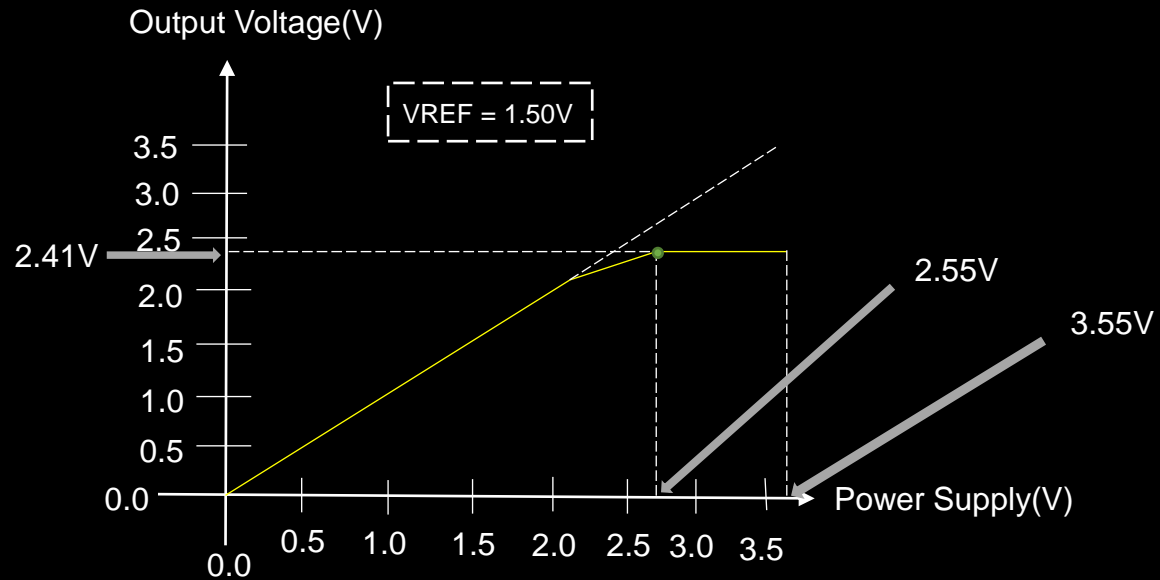


avsdvr_3v05 operating modes



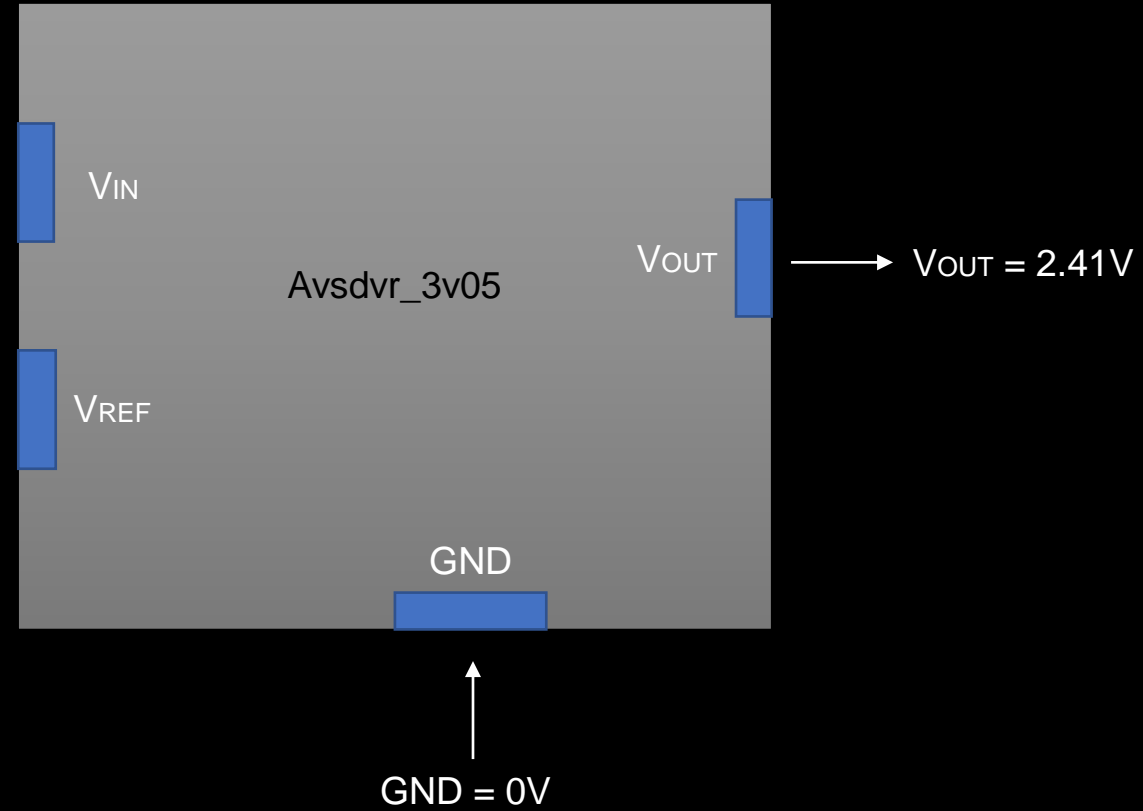
avsdvr_3v05 operating modes

Output Voltage versus Input Voltage requirement :



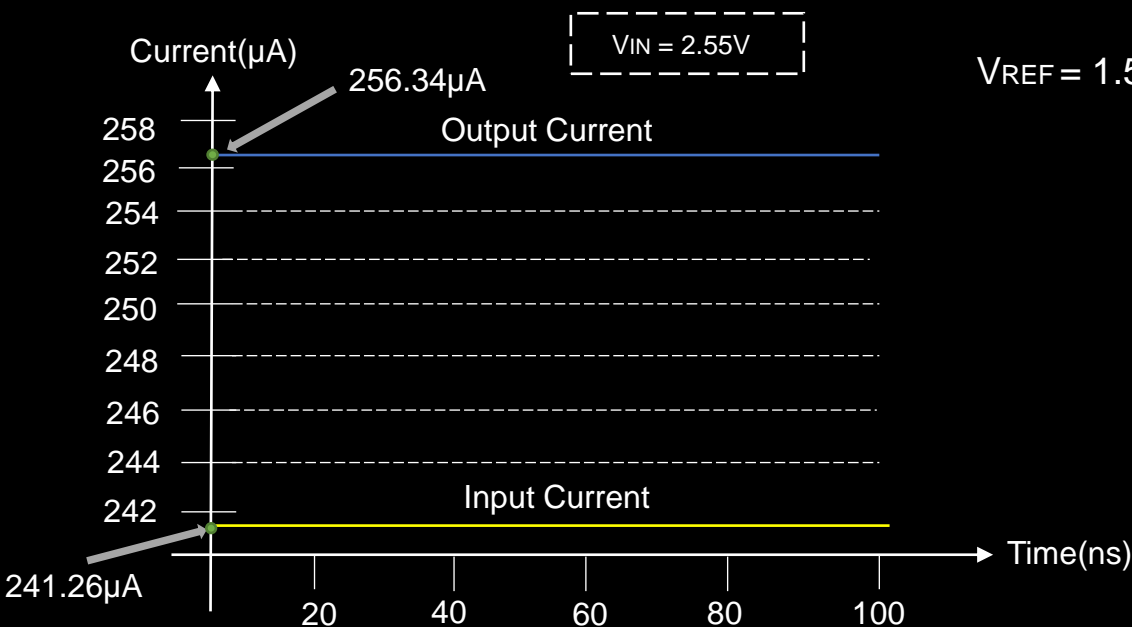
$V_{MAX} = 2.55V$
 $V_{MIN} = 3.55V$

$V_{REF} = 1.50V$



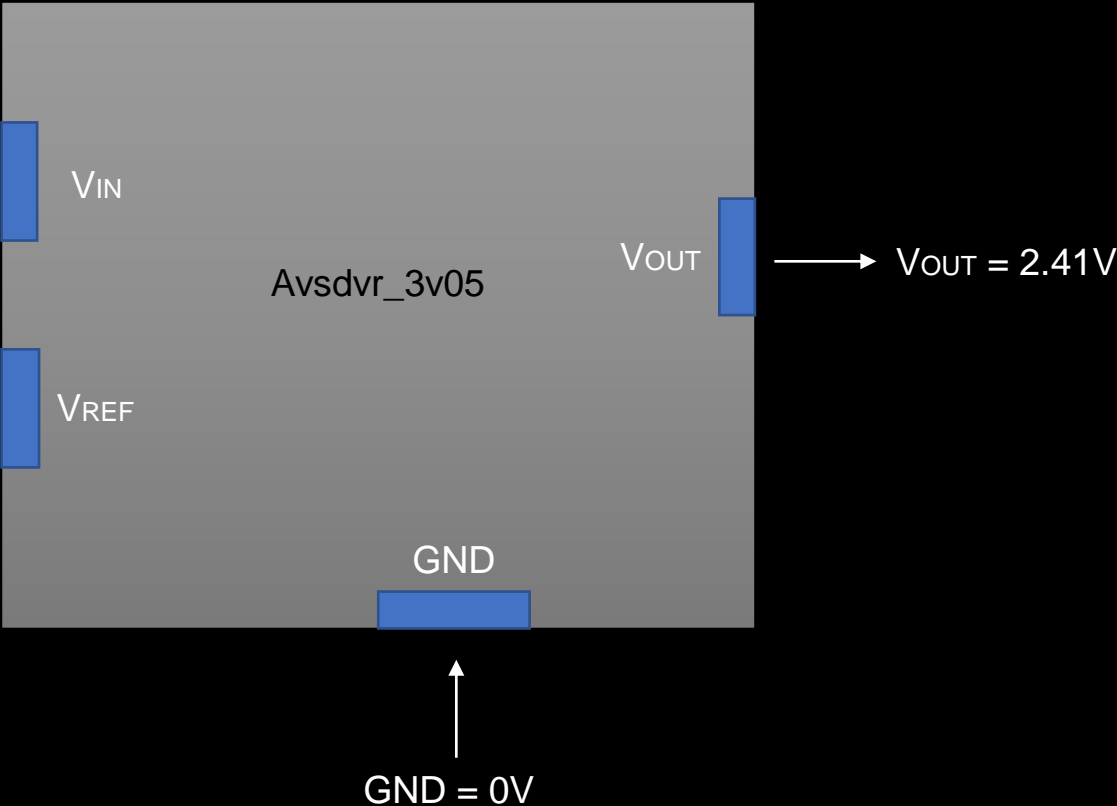
avsdvr_3v05 operating modes

Quiescent Current requirement :



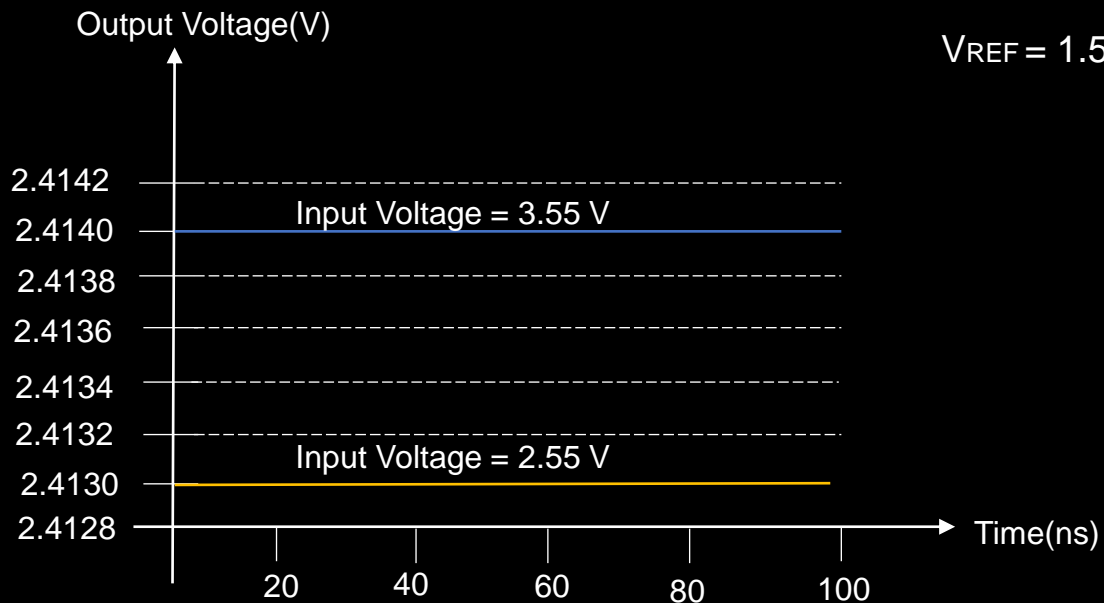
$V_{MAX} = 2.55V$
 $V_{MIN} = 3.55V$

$V_{REF} = 1.50V$



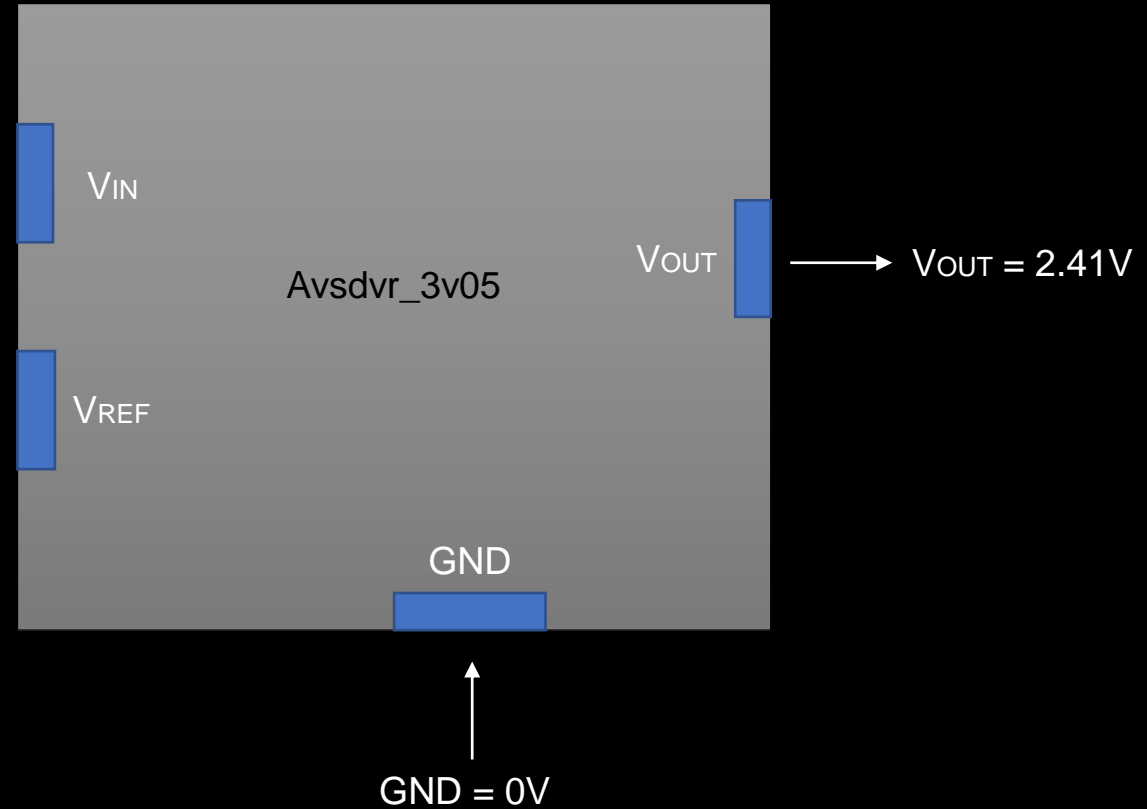
avsdvr_3v05 operating modes

Output Voltage requirement :



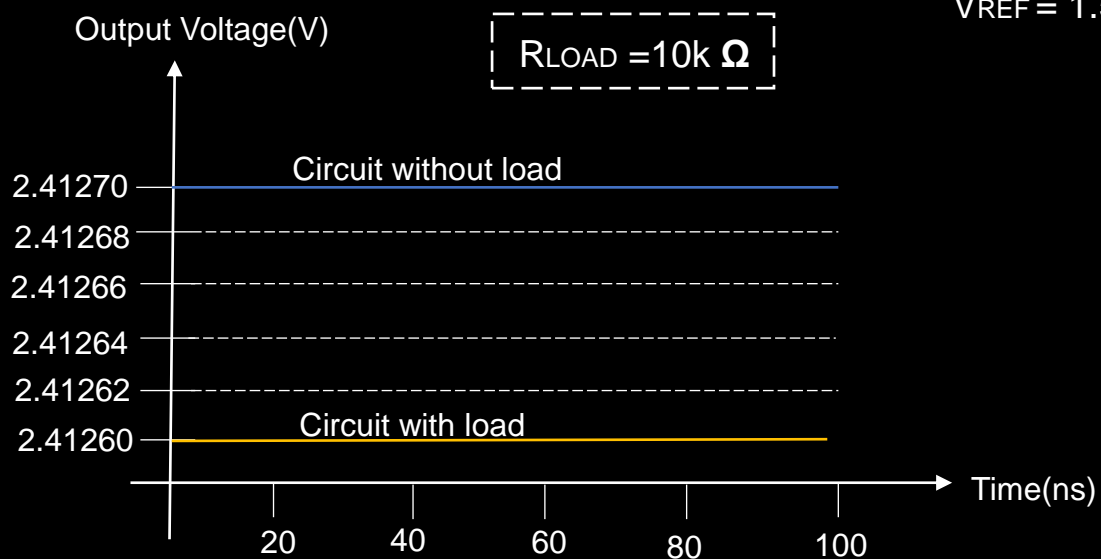
$V_{MAX} = 2.55V$
 $V_{MIN} = 3.55V$

$V_{REF} = 1.50V$



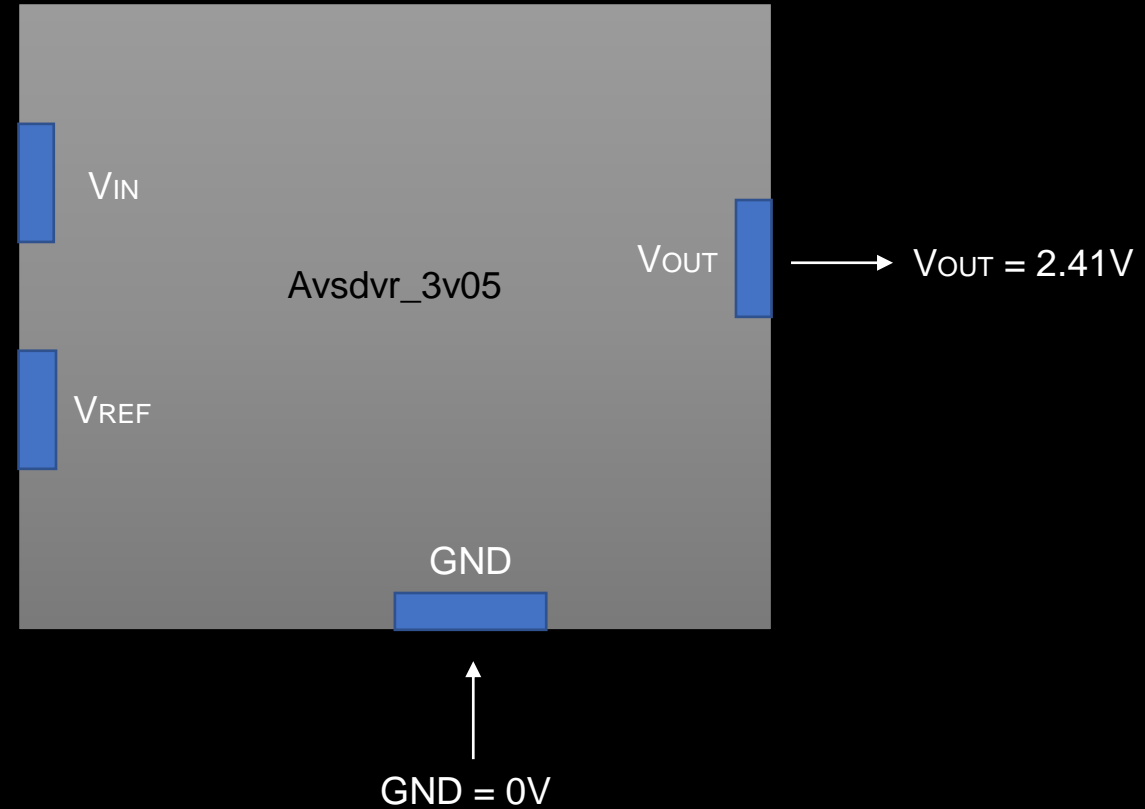
avsdvr_3v05 operating modes

Output Voltage with different load setting requirement :



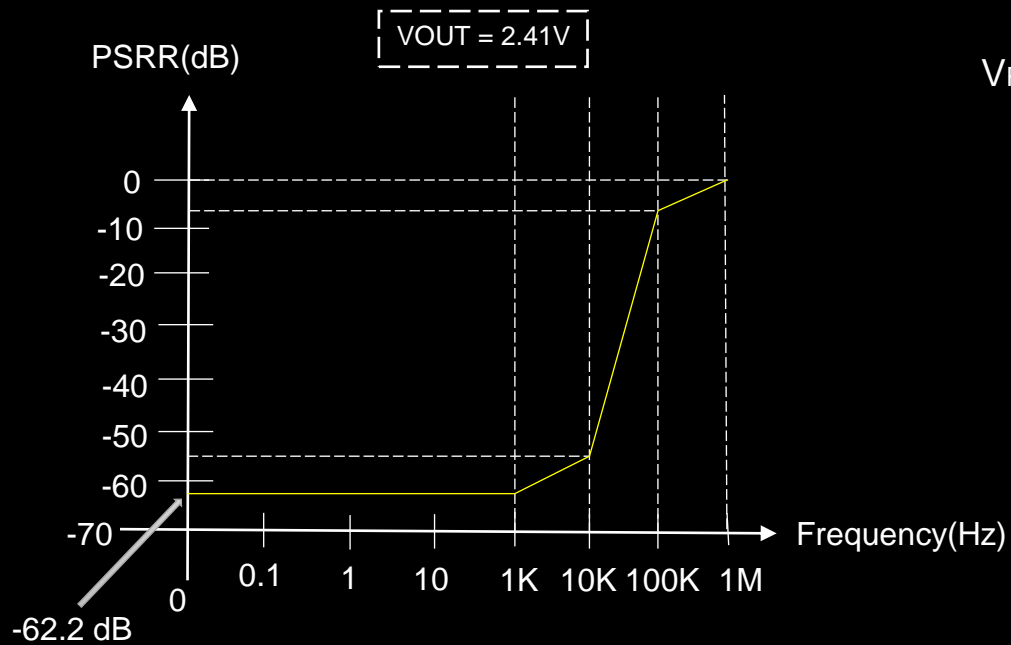
$V_{MAX} = 2.55V$
 $V_{MIN} = 3.55V$

$V_{REF} = 1.50V$



avsdvr_3v05 operating modes

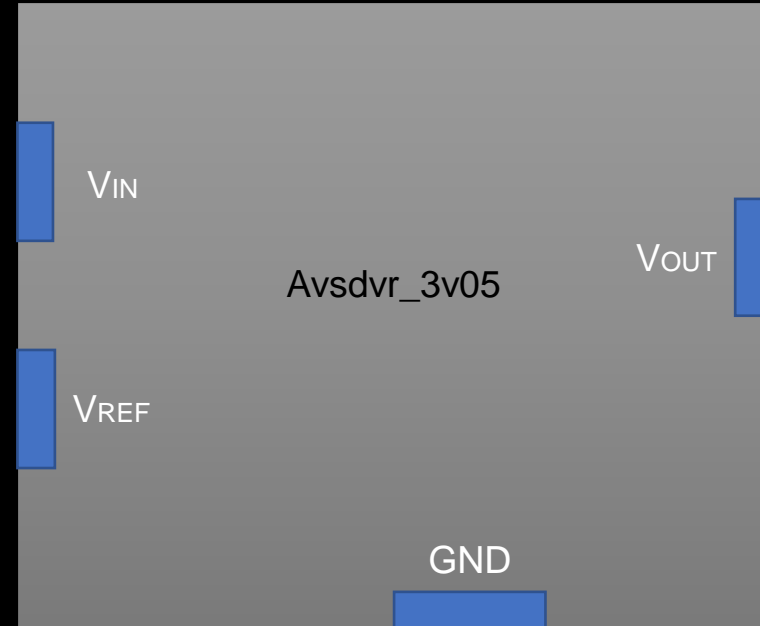
PSRR requirement :



$V_{MAX} = 2.55V$

$V_{MIN} = 3.55V$

$V_{REF} = 1.50V$



$V_{OUT} = 2.41V$

GND = 0V

avsdvr_3v05 plots and values needed

- 1) V_{OUT} vs V_{IN} (2.55V to 3.55V) at $V_{REF} = 1.50V$
- 2) Input Current and Output Current vs Time at $V_{IN} = 2.55V$
- 3) V_{OUT} vs Time at $V_{IN} = 2.55V, 3.55V$
- 4) V_{OUT} vs Time for circuit with load and circuit without load ($R_{LOAD} = 10k \Omega$)
- 5) PSRR vs Frequency at $V_{OUT} = 2.41V$