

Design Tools

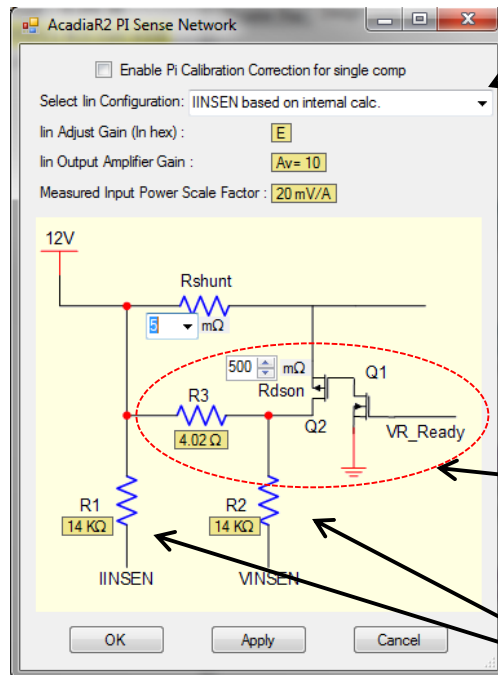
PI SENSE Network



10. PI SENSE Network

IINSENSE

This tool is used design a PI-network for input voltage and current sensing through a shunt with the IINSEN and VINSEN pins. This feature is very useful in memory rails to sense the current drawn from the 12V input supply by the NVDIMMs.



Selectable IINSEN configuration:

- No IINSENSE
- IINSEN with external amp
- IINSEN based on internal calc.
- IINSEN based on internal calc. + external comp
- IINSEN based on pi-network
- IINSEN based on internal calc. + pi-network

External calibration circuit for resistors R1 and R2 to achieve high accuracy for VIN and IIN reporting. R3 should be 4.02Ω and RDson of PMOS Q2 should be less than 500mΩ. The calibration circuit activate when VR_EN1 is asserted and deactivate when VRRDY1 is asserted.

Resistors **R1** and **R2** must be **14kΩ±0.1%** to meet Intel's tight accuracy requirements for input power.