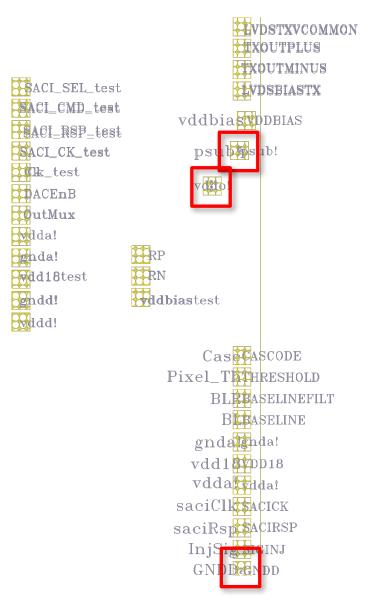
CHESS2 substrate leakage current

BUFFER_RX_OU



Pad probed

On the bottom array only.

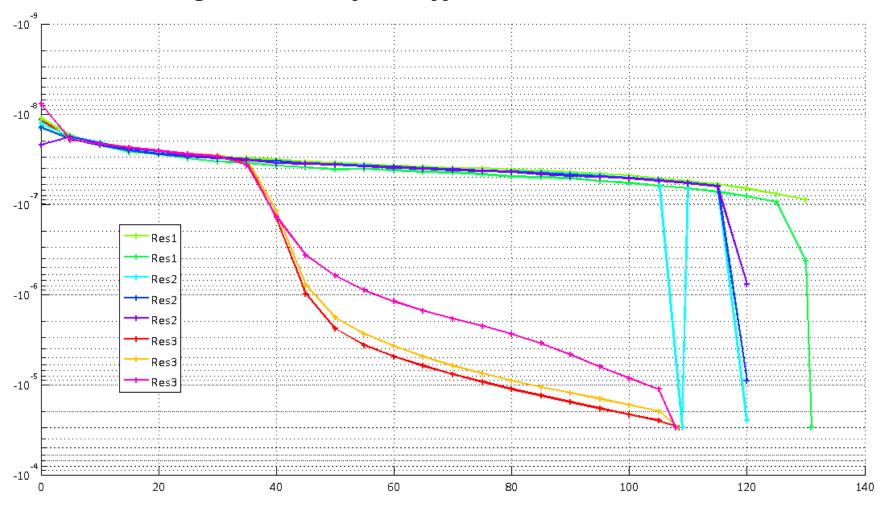
psub! -120V

vddo! 3.3V

gndd! 0V



Leakage current for different subs resitivities



Conclusion

Set the compliance on vddo! high – few mA (raise if it bothers you).

- Resistivity 1. Breakdown starting around 130V.
- Resistivity 2. Breakdown starting around 120V.
- Resistivity 3. Soft breakdown happening around 35V.

All 3 resistivities are ok. Leakage will increase by x2 order of mag after irradiation.

Test done and not shown here breakdown early on Resistivity 4

Leakage current for different vddo! voltages

