

EE105 Formal Report Grading (total 10 pts)

Abstract including results and comments (0.5 pt)

Theory (3.5 pts)

Schematics of resistor's layouts (0.5 pt)

Discussion of resistance equations (0.5 pt)

Calculation of number of squares (0.5 pt)

Discussion of parasitic capacitances (1 pt)

P-base resistance theory discussion (1 pt)

Experimental Results (3 pts)

Measurement of poly resistances (0.5 pt)

Measurement of contact resistances (0.5 pt)

Measurement of P-base resistances (1 pt)

Measurement of parasitic capacitances (1 pt)

Analysis and Conclusion (3 pts)

Mobility and sheet resistances of poly-Si from different approaches (0.5 pt)

Sheet resistance of metal layer (0.5 pt)

Contact resistance calculation (0.5 pt)

Explanation for the results of contact resistance and sheet resistances (0.5 pt)

Explanation for the results of P-base resistance (0.5 pt)

Explanation for the result of parasitic capacitances (0.5 pt)