ABSTRACT OF THE DISCLOSURE

A METHOD FOR USING A CU BEOL PROCESS TO FABRICATE AN INTEGRATED CIRCUIT (IC) ORIGINALLY HAVING AN AL DESIGN

[001] A semiconductor fabrication method or process is provided for fabricating an integrated circuit (IC) originally having an Al backend design using a Cu BEOL fabrication process. The method converts the Al backend design to a Cu backend design without redesigning the IC for Cu BEOL fabrication process, and uses the resultant Cu design to fabricate the IC using Cu BEOL fabrication process. The Al-Cu conversion first determines layer construction of the Al design, and then matches metal resistances of the Al design with metal resistances of a Cu design, matches intra-metal capacitances of the Al design with intra-metal capacitances of the Cu design, and matches inter-metal capacitance of the Al design with inter-metal capacitances of the Cu design.

Figure 1