

Method for Reducing Surface Electromigration Through Chemical Impurity Optimization

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Technology Summary

Many integrated circuit devices such as computer chips rely on interconnects made of copper to electrically join them to a power source and/or other devices. Surface electromigration in copper interconnects is the primary mode of failure in computer chip circuits. The present invention provides an optimal chemical method to mitigate and prevent surface electromigration on copper while preserving the bulk integrity and conductivity of the interconnect material. Thus, the present invention can significantly increase the reliability and extend the life of integrated circuit devices.

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