RELIABLE INTERCONNECT FOR SEMICONDUCTOR DEVICE

ABSTRACT

A method for forming a semiconductor device is presented. A substrate prepared with a dielectric layer formed thereon is provided. A sacrificial and a hard mask layer are formed on the dielectric layer. The dielectric, sacrificial and hard mask layers are patterned to form an interconnect opening. The interconnect opening is filled with a conductive material to form an interconnect. The conductive material is processed to produce a top surface of the conductive material that is substantially planar with a top surface of the sacrificial layer. The sacrificial layer is removed. The sacrificial layer protects the dielectric layer during processing of the conductive material.

Fig. 1