METHOD OF FABRICATING DUAL DAMASCENE STRUCTURE

ABSTRACT OF THE DISCLOSURE

A method of fabricating a dual damascene structure is described. A dielectric layer and a metal hard mask layer are sequentially formed on a substrate having thereon a conductive layer and a liner layer. The metal hard mask layer and the dielectric layer are patterned to form a via hole exposing a portion of the liner layer. A gap-filling layer is filled in the via hole, having a height of 1/4 to 1/2 of the depth of the via hole. A trench is formed in the metal hard mask layer and the dielectric layer. The gap-filling layer is removed to expose the portion of the liner layer, which is then removed. A metal layer is formed filling in the via hole and the trench, and then the metal hard mask layer is removed.

(FIG. 3A)