

DUAL DAMASCENE PROCESS

ABSTRACT OF THE DISCLOSURE

A dual damascene process for forming a dual damascene structure is provided. At first, a dielectric layer, a reversed trench organic anti-reflective coating (ARC) layer, and a mask layer are sequentially formed on a substrate. The mask layer has a thinner portion corresponding to a position of a to-be-formed trench in the dielectric layer and a thicker portion, and an opening with a via-pattern is formed on the thinner portion. During a single etching step with different etching conditions by selectively using the thinner portion or the thicker portion of the mask layer as etching masks, a trench and a via hole are then formed in the dielectric layer.

(Fig. 5A)