METHOD OF FORMING HIGH-K DIELECTRIC STOP LAYER FOR CONTACT HOLE OPENING

ABSTRACT

A composite etch stop layer which comprises primary and secondary stop layers is used to form contacts in a dielectric layer to contact regions in a substrate. The secondary etch stop layer includes a high-k dielectric material to achieve high etch selectivity with the dielectric layer during contact formation. The secondary stop layer is removed to expose the contact regions. Removal of the secondary stop layer is achieved with high selectivity to the materials therebelow.

Figure 8