

Metal Contact Structure and Method of Manufacture

ABSTRACT OF THE DISCLOSURE

A semiconductor device having a metal contact is provided. In the preferred embodiment, a metal contact is provided through an interlayer dielectric and is in electrical contact with a metal structure, such as a metal gate electrode of a transistor. A conductive layer is provided between the metal contact and the metal structure. The conductive layer provides one or more of a barrier layer, an adhesion layer, or an etch stop layer. The conductive layer is preferably an elemental metal, metal alloy, metal nitride, metal oxide, or a combination thereof. In an alternative embodiment, the conductive layer is formed of polysilicon.

(Fig. 1d)