

ABSTRACT

TWO LAYER MIRROR FOR LCD-ON-SILICON PRODUCTS AND METHOD OF FABRICATION THEREOF

A method of fabricating an LCD-on-silicon pixel device, comprising the following steps. A substrate having an upper layer of silicon is provided. A via is formed in the silicon layer. An opaque conducting layer is deposited over the silicon layer, filling the via. The opaque conducting layer is planarized a reflective layer is deposited over the opaque conducting layer. Alternatively, the via may be formed by a deposition and etch back process with one metal. An opaque conducting layer is then deposited and planarized before deposition of the reflective layer. An LCD-on-silicon pixel device, comprises a substrate having an upper silicon layer. The upper silicon layer has a plug therein comprised of an opaque conducting material. Over the upper silicon layer and the opaque conducting plug is a planar opaque conducting layer and a planar reflective layer is over the planar opaque conducting layer.

• (FIGURE 1 IS SUGGESTED FOR PUBLICATION)