

Abstract

METHOD OF INTEGRATING TRIPLE GATE OXIDE THICKNESS

A method is disclosed for forming TGO structures. The method comprises providing a substrate containing regions of the first kind, second kind and third kind. Regions of the first kind contain devices with thin gate oxide are formed. Regions of the second kind contain devices with gate oxides of intermediate thickness are formed, and regions of the third kind contain devices with thick gate oxide are formed. An intermediate thickness gate oxide layer is formed over regions of the first kind, second kind and third kind, removed from regions of the first kind where a thin gate oxide layer is grown. A first conductive layer is deposited over the regions. The first conductive layer and intermediate thickness gate oxide layer are subsequently removed from regions of the third kind. A thick gate oxide layer is formed followed by deposition of a second conductive layer.

Fig. 7