SEMICONDUCTOR DEVICE SUBSTRATE WITH EMBEDDED CAPACITOR

ABSTRACT

0028 A method for forming a semiconductor device including a DRAM cell structure comprising a silicon on insulator (SOI) substrate with an embedded capacitor structure including providing a substrate comprising an overlying first electrically insulating layer; forming a first electrically conductive layer on the first electrically insulating layer to form a first electrode; forming a capacitor dielectric layer on the first electrode; forming a second electrically conductive layer on the capacitor dielectric layer to form a second electrode; forming a second electrically insulating layer on the second electrode; and, forming a monocrystalline silicon layer over the second electrode to form an SOI substrate comprising a first capacitor structure.

Figure 2A