ABSTRACT OF THE DISCLOSURE

DEVICE WITH LOW-K DIELECTRIC IN CLOSE PROXIMITY THERETO AND ITS METHOD OF FABRICATION

A semiconductor device with a low-k material in close proximity thereto and its fabrication method. The device includes a gate electrode overlying a substrate. An electrically conductive plug is provided immediately adjacent to the gate electrode and making electrical contact to the device. A low-k dielectric material is disposed in the space between the gate electrode and the electrically conductive plug whereby reducing the parasitic capacitance. Thus, higher density of devices can be formed without decreasing operating speed.

(FIG. 1)