A STRUCTURE AND METHOD OF LINER AIR GAP FORMATION

Abstract

A structure and method of a semiconductor device with liner air gaps next to interconnects and dielectric layers. A dielectric layer is formed over a lower dielectric layer and a lower interconnect over a substrate. We form an interconnect opening in the dielectric layer. The opening has sidewalls of the dielectric layer. A sacrificial liner is formed over the sidewalls of the interconnect opening. An upper interconnect is formed that fills the opening.We remove the sacrificial liner/spacers to form (air) liner gaps.

FIGURE 1K