SEMICONDUCTOR DEVICE

ABSTRACT OF THE INVENTION

A semiconductor device includes a semiconductor substrate having a diffusion region. A transistor is formed within the diffusion region. A power rail is disposed outside the diffusion region. A contact layer is disposed above the substrate and below the power rail. A via is disposed between the contact layer and the power rail to electrically connect the contact layer to the power rail. The contact layer includes a first length disposed outside the diffusion region and a second length extending from the first length into the diffusion region and electrically connected to the transistor.

Fig. 3