

ABSTRACT OF THE DISCLOSURE

This invention provides an improved process latitude mask for forming contact or via hole openings in a photoresist masking layer in the fabrication of semiconductor integrated circuits. The invention also provides a method of forming contact or via hole openings in a photoresist masking layer using an improved process latitude mask. The improved process latitude mask, called a dot mask, uses an opaque blocking area formed in the center of the primary opening in a projection mask for forming contact or via hole openings in a photoresist layer. The opaque blocking area is equal to or less than the area of the primary opening divided by nine. The opaque blocking area is small enough so that it will not form an image in the photoresist layer. The opaque blocking area modifies the light intensity profile at the photoresist layer in a manner which improves process latitude.

