

Half Tone Alternating Phase Shift Masks

Abstract

A structure, a method of fabricating and a method of using a phase shift mask (PSM) having a first phase shifted section, a half tone section, and a second phase shifted section. The first phase shift section and the half tone section are shifted 180 degrees with the second phase shift region. Embodiments provide for (1) a half tone, single trench alternating phase shift mask and (2) a half tone, dual trench alternating phase shift mask. The half tone region provides advantages over conventional alternating phase shift masks.

FIGURE 8M