

ABSTRACT

A semiconductor device having improved performance and reliability. The semiconductor device may include a lower pattern extending in a first direction, and a plurality of sheet patterns spaced apart from the lower pattern in a second direction perpendicular to the first direction. A plurality of gate structures may be on the lower pattern and spaced apart in the first direction, and a source/drain pattern, which may include a semiconductor liner film and a semiconductor filling film on the semiconductor liner film. A liner recess that is defined by an inner surface of the semiconductor liner film may include a plurality of width extension regions, and a width of each width extension region in the first direction may increase and then decreases, as a distance increases in the second direction from an upper surface of the lower pattern.

FIG. 2