Abstract of the Disclosure

A process for manufacturing a semiconductor chip by dividing a semiconductor wafer having a plurality of streets formed in a lattice-like form on the front surface into individual semiconductor chips, and affixing an adhesive film for die bonding to the back surfaces of the individual semiconductor chips, comprising a dividing groove forming step for forming dividing grooves having a predetermined depth from the front surface of the semiconductor wafer along the streets; a protective member affixing step for affixing a protective member to the front surface having dividing grooves formed thereon of the semiconductor wafer; a dividing groove exposing step for exposing the dividing grooves to the back surface by grinding the back surface of the semiconductor wafer to divide the semiconductor wafer into individual semiconductor chips; an adhesive film affixing step for affixing the adhesive film to the back surfaces of the individually divided semiconductor chips; and an adhesive film cutting step for applying a laser beam to the adhesive film affixed on the back surfaces of the individually divided semiconductor chips from the front surface side of the adhesive film along the dividing grooves to cut the adhesive film along the dividing grooves.