WAFER LEVEL PACKAGE STRUCTURE AND PRODUCTION METHOD THEREFOR

ABSTRACT

A wafer level package structure, in which a plurality of compact sensor devices with small variations in sensor characteristics are formed, and a method of producing the same are provided. This package structure has a semiconductor wafer having plural sensor units, and a package wafer bonded to the semiconductor wafer. The semiconductor wafer has a first metal layer formed with respect to each of the sensor units. The package wafer has a bonding metal layer at a position facing the first metal layer. Since a bonding portion between the semiconductor wafer and the package wafer is formed at room temperature by a direct bonding between activated surfaces of the first metal layer and the bonding metal layer, it is possible to prevent that variations in sensor characteristics occur due to residual stress at the bonding portion.

(Figs. 2A & 2B)