ABSTRACT

SEMICONDUCTOR DEVICES INCLUDING PERIPHERALLY LOCATED BOND PADS, INTERMEDIATES THEREOF, ASSEMBLIES, AND PACKAGES INCLUDING THE SEMICONDUCTOR DEVICES, AND SUPPORT ELEMENTS FOR THE SEMICONDUCTOR DEVICES

A semiconductor device package is disclosed which is substantially die-sized with respect to each of the X, Y and Z axes. The package includes outer connectors that are located along at least one peripheral edge thereof and that extend substantially across the height of the peripheral edge. Each outer connector is formed by severing a conductive via that extends substantially through a substrate blank, such as a silicon wafer, at a street located adjacent to an outer periphery of the semiconductor device of the package. The outer connectors may include recesses that at least partially receive conductive columns protruding from a support substrate therefore. Assemblies may include the packages in stacked arrangement, without height-adding connectors.

[FIG. 17]