MICROELECTRONIC DEVICE PACKAGES, STACKED MICROELECTRONIC DEVICE PACKAGES, AND METHODS FOR MANUFACTURING MICROELECTRONIC DEVICES

ABSTRACT

A stackable microelectronic package includes a first microelectronic die attached to and electrically connecting with a first substrate. A second microelectronic die is attached to the first die on one side, and to a second substrate on the other side. Electrical connections are made between the first die and the first substrate, between the second die and the second substrate, and between the first and second substrates, e.g., via wire bonding. The electrical connecting elements are advantageously encased in a molding compound. Exposed contacts on the first and/or second substrates, not covered by the molding compound, provide for electrical connections between the package, and another package stacked onto the package. The package may avoid coplanarity factors, can be manufactured using existing equipment, allows for intermediate testing, and can also offer a thinner package height.

FIGURE : 1