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(54) Title: A METHOD OF MANUFACTURING A PLURALITY OF ELECTRONIC ASSEMBLIES

(57) Abstract: A method of manufacturing a plurality of electronic devices is provided. Each one of a plurality of first conductive terminals on a plurality of integrated circuits formed on a device wafer is connected to a respective one of a plurality of second conductive terminals on a carrier wafer, thereby forming a combination wafer assembly. The combination wafer assembly is singulated between the integrated circuits to form separate electronic assemblies. Each electronic assembly has a respective die from a separated portion of the device wafer and a carrier substrate from a separated portion of the carrier wafer. The process of fabricating electronic assemblies is simplified and costs are reduced because the dies are connected to the carrier substrate at wafer level, i.e. before singulation. The combination wafer assembly also allows for an underfill material to be introduced and to cured at wafer level and for thinning of the device wafer at wafer level without requiring a separate supporting substrate. Alignment between the device wafer and the carrier wafer can be tested by conducting a current through first and second conductors in the device and carrier wafers, respectively.



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