PACKAGED SEMICONDUCTOR ASSEMBLIES AND ASSOCIATED SYSTEMS AND METHODS

ABSTRACT

Semiconductor packages, packaged semiconductor devices, methods of manufacturing semiconductor packages, methods of packaging semiconductor devices, and associated systems are disclosed. A semiconductor package in accordance with a particular embodiment includes a die having a first side carrying a first bond site electrically connected to a sensor and/or a transmitter configured to receive and/or transmit radiation signals. The semiconductor package also includes encapsulant material at least partially encapsulating a portion of the die. The semiconductor package includes a conductive path from the first bond site to a second bond site, positioned on a back surface of the encapsulant, which can include through-encapsulant interconnects. A cover can be positioned adjacent to the die and be generally transparent to a target wavelength.

(Fig. 1)