MICROELECTRONIC IMAGERS AND METHODS OF MANUFACTURING SUCH MICROELECTRONIC IMAGERS

ABSTRACT

Microelectronic imagers and methods of manufacturing such microelectronic imagers are disclosed. In one embodiment, a method for manufacturing a microelectronic imager can include irradiating selected portions of an imager housing unit. The housing unit includes a body having lead-in surfaces and a support surface that define a recess sized to receive a microelectronic die. The method also includes depositing a conductive material onto the irradiated portions of the housing unit and forming electrically conductive traces. The method further includes coupling a plurality of terminals at a front side of a microelectronic die to corresponding electrically conductive traces in the recess in a flip-chip configuration. The microelectronic die includes an image sensor aligned with at least a portion of an optical element carried by the housing unit and at least partially aligned with the recess. The method can then include depositing an encapsulant into the recess and over at least a portion of the microelectronic die.

Fig. 1