CCD Si packaging technology with copper via hole.

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Abstract

3 Dimensional semiconductor LSI technology were installed with Cu thin plating on Si via hole wall directly around 20u m sq. via . This technology applied to a prototype CCD package with via holes as the leaded out traces constructed in the CCD device Si bulk .

Prototype CCD work fully as the same level of the conventional wire bonding technology.

This technology show the wide range availability of this 3D Via hole interconnection

In the future electronics and other new opto-electronics products.

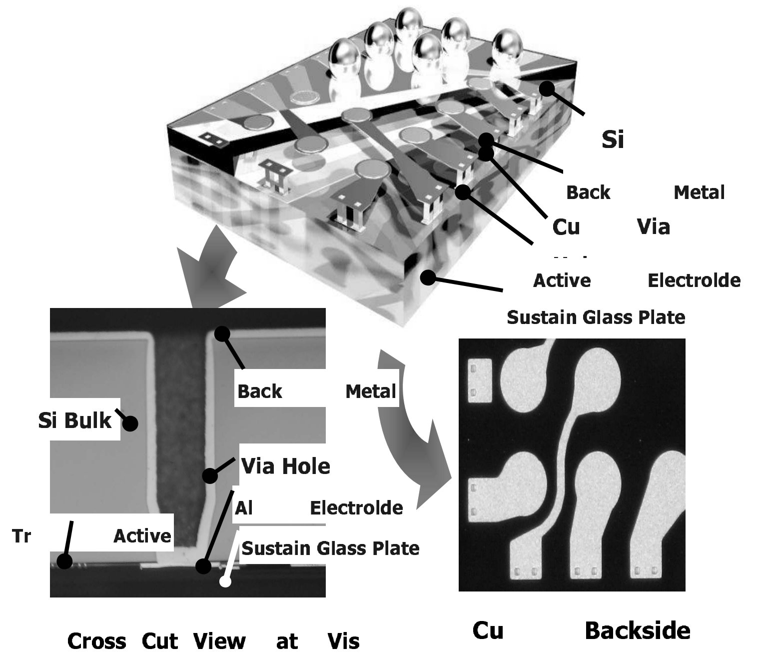

Fig.1 Prototype CCD Package structure with Cu traces in the Si bulk via wall and on the backside of the Si device.