

Title (en)
BOARD ON CHIP PACKAGE AND PROCESS FOR MAKING SAME

Title (de)
BOARD-ON-CHIP-KAPSELUNG UND PROZESS ZU IHRER HERSTELLUNG

Title (fr)
BOÎTIER DE TYPE PLAQUETTE SUR PUCE ET SON PROCÉDÉ DE FABRICATION

Publication
EP 2082423 A1 20090729 (EN)

Application
EP 06837754 A 20061116

Priority
US 2006044465 W 20061116

Abstract (en)
[origin: WO2008060280A1] A board-on-chip (BOC) type semiconductor package comprises a substrate with an opening and a semiconductor die with a conductive area on its active surface. The die is mounted onto the substrate with the active surface facing the upper surface of the substrate and completely covering the opening in the substrate. The conductive area of the active surface of the die is exposed to the opening in the substrate. The die is joined to the substrate using an adhesive and is electrically connected to the substrate with wire bonds through the opening of the substrate. The wire bonds are protected with an encapsulant, which fills the opening in the substrate. Solder balls are implanted on the lower surface of the substrate at an area outside of the encapsulant. The package is characterized by the absence of encapsulant for the inactive side of the die and the absence of an encapsulant for the sides of the die.

IPC 8 full level
H01L 23/48 (2006.01); **H01L 21/60** (2006.01)

CPC (source: EP KR)
H01L 21/50 (2013.01 - KR); **H01L 23/13** (2013.01 - EP); **H01L 23/28** (2013.01 - KR); **H01L 23/3114** (2013.01 - EP); **H01L 24/06** (2013.01 - EP); **H01L 24/29** (2013.01 - EP); **H01L 24/32** (2013.01 - EP); **H01L 24/83** (2013.01 - EP); **H01L 24/97** (2013.01 - EP); **H01L 24/45** (2013.01 - EP); **H01L 24/48** (2013.01 - EP); **H01L 2224/0401** (2013.01 - EP); **H01L 2224/04042** (2013.01 - EP); **H01L 2224/06136** (2013.01 - EP); **H01L 2224/2919** (2013.01 - EP); **H01L 2224/32225** (2013.01 - EP); **H01L 2224/45144** (2013.01 - EP); **H01L 2224/48091** (2013.01 - EP); **H01L 2224/48227** (2013.01 - EP); **H01L 2224/4824** (2013.01 - EP); **H01L 2224/73215** (2013.01 - EP); **H01L 2224/83191** (2013.01 - EP); **H01L 2224/83192** (2013.01 - EP); **H01L 2224/83194** (2013.01 - EP); **H01L 2224/8385** (2013.01 - EP); **H01L 2224/97** (2013.01 - EP); **H01L 2924/01005** (2013.01 - EP); **H01L 2924/01006** (2013.01 - EP); **H01L 2924/01014** (2013.01 - EP); **H01L 2924/01015** (2013.01 - EP); **H01L 2924/0102** (2013.01 - EP); **H01L 2924/01022** (2013.01 - EP); **H01L 2924/01023** (2013.01 - EP); **H01L 2924/01027** (2013.01 - EP); **H01L 2924/0103** (2013.01 - EP); **H01L 2924/01033** (2013.01 - EP); **H01L 2924/0104** (2013.01 - EP); **H01L 2924/01049** (2013.01 - EP); **H01L 2924/0105** (2013.01 - EP); **H01L 2924/01056** (2013.01 - EP); **H01L 2924/01074** (2013.01 - EP); **H01L 2924/01079** (2013.01 - EP); **H01L 2924/01082** (2013.01 - EP); **H01L 2924/01087** (2013.01 - EP); **H01L 2924/014** (2013.01 - EP); **H01L 2924/0665** (2013.01 - EP); **H01L 2924/07802** (2013.01 - EP); **H01L 2924/10329** (2013.01 - EP); **H01L 2924/14** (2013.01 - EP); **H01L 2924/15311** (2013.01 - EP); **H01L 2924/181** (2013.01 - EP); **H01L 2924/18165** (2013.01 - EP); **H01L 2924/351** (2013.01 - EP)

C-Set (source: EP)
1. **H01L 2224/48091 + H01L 2924/00014**
2. **H01L 2224/83192 + H01L 2224/32225**
3. **H01L 2924/15311 + H01L 2224/73215 + H01L 2224/32225 + H01L 2224/4824 + H01L 2924/00012**
4. **H01L 2924/351 + H01L 2924/00**
5. **H01L 2924/181 + H01L 2924/00012**
6. **H01L 2224/97 + H01L 2224/85**
7. **H01L 2224/97 + H01L 2224/83**
8. **H01L 2224/97 + H01L 2224/73215**
9. **H01L 2224/97 + H01L 2924/15311**
10. **H01L 2224/73215 + H01L 2224/32225 + H01L 2224/4824 + H01L 2924/00012**
11. **H01L 2224/2919 + H01L 2924/0665 + H01L 2924/00**
12. **H01L 2924/0665 + H01L 2924/00**
13. **H01L 2224/45144 + H01L 2924/00014**

Citation (search report)
See references of WO 2008060280A1

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