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(54) Title: PACKAGING SUBSTRATE, SEMICONDUCTOR PACKAGE AND ELECTRONIC DEVICE

(54) 发明名称: 一种封装基板、半导体封装件以及电子设备

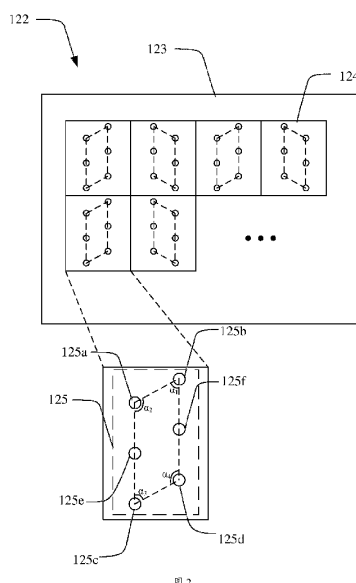


图 2

(57) Abstract: Provided in the present application are a packaging substrate, a semiconductor package and an electronic device. The packaging substrate comprises a substrate body, wherein the substrate body is provided with a plurality of unit regions; and each unit region comprises at least one solder ball group. The solder ball group comprises a first solder ball, a second solder ball, a third solder ball, a fourth solder ball, a fifth solder ball and a sixth solder ball which are arranged at intervals, wherein the first solder ball, the second solder ball, the third solder ball and the fourth solder ball are respectively located at four vertexes of a parallelogram, and the second solder ball and the third solder ball are respectively adjacent to the first solder ball; the fifth solder ball is arranged on one side of the parallelogram, and is located between the first solder ball and the third solder ball; the sixth solder ball is arranged on another side of the

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parallelogram, and is located between the second solder ball and the fourth solder ball; and the first solder ball and the fourth solder ball are located on a perpendicular bisector of a connecting line between the fifth solder ball and the sixth solder ball. Therefore, the crosstalk between pins can be reduced, and the packaging area is reduced, so as to realize a high-density and low-crosstalk pin arrangement mode.

(57) 摘要: 本申请提供一种封装基板、半导体封装件以及电子设备。封装基板包括基板本体。基板本体设置有多单元区域。每个单元区域包括至少一个焊球组。焊球组包括间隔设置的第一焊球、第二焊球、第三焊球、第四焊球、第五焊球和第六焊球, 其中第一焊球、第二焊球、第三焊球和第四焊球分别位于平行四边形的四个顶点, 且第二焊球和第三焊球分别与第一焊球相邻; 第五焊球设置于平行四边形的一个边, 且位于第一焊球和第三焊球之间; 第六焊球设置于平行四边形的另一个边, 且位于第二焊球和第四焊球之间; 第一焊球和第四焊球位于第五焊球和第六焊球之间的连线的中垂线, 从而可以降低引脚之间的串扰并减小封装面积, 以实现高密度、低串扰的引脚排布方式。