High density PWB with Copper Bump Technology

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Abstract

Recent high density PWB requires 'stud via', which is filled up with any conductive materials, to enable 'stacked via' and/or 'joint on via' structure. In this report, its necessity is verified from a viewpoint of PWB design. Then NMBI, which is one of 'stud via' technologies, is introduced being compared with other ones. NMBI is based on the techniques of bump etching of a three-layer metal and copper-to-copper connection in the atmosphere. Its features, applications and reliability of Cu-Cu interconnection are treated followed by subjects in the future.

Resume

1983/03 Received Master Degree in Applied Physics from Nagoya University

1983/04 Employed by IBM Japan, Process Engineer of Hard Disk Assembly

1988/10 Transferred to Circuit Packaging Operation (Printed Circuit Board)

2001/03 Employed by Samsung Electro-Mechanics, FC Development, etc.

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