

Error Prevention for μ -Components on Circuit Boards

Thursday 8 December 2016 13:45 (30 minutes)

Components with flat termination on package bottom side - so called Bottom Termination Components according to IPC-7093 - are the fastest growing component family on electronic circuit boards. A terminal pitch of 400 μ m meanwhile is standard for new packages and due to market requirements electronic component packages continuously become smaller and smaller.

Due to many package variations and sometimes extremely area differences between thermal pads and the sum of peripheral pads fundamental knowledge is required for appropriate land dimensioning. The circuit board designer must know about processing risks of different component packages to design error free and save to manufacture circuit boards.

As the thickness of the smallest components meanwhile is in the range of 100 μ m and solder joints thickness very often is below 50 μ m, circuit board topology - soldermask and silkscreen becomes a critical part and can dramatically influence reliability of electronic assemblies

The presentation addresses the risks of bottom terminated μ -Components and gives guidelines for dimensioning of landpattern and save processing of this package types.

Primary author: TAUBE, Rainer

Presenter: TAUBE, Rainer

Session Classification: Session 7

Track Classification: Keynote