

Title (en)
METHOD FOR CONNECTING ELECTRONIC COMPONENTS TO A SUBSTRATE, AND A METHOD FOR CHECKING SUCH A CONNECTION

Title (de)
VERFAHREN ZUR VERBINDUNG VON ELEKTRONISCHEN BAUELEMENTEN MIT EINEM TRÄGERSUBSTRAT SOWIE VERFAHREN ZUR ÜBERPRÜFUNG EINER DERARTIGEN VERBINDUNG

Title (fr)
PROCEDE PERMETTANT DE MONTER DES COMPOSANTS ELECTRONIQUES SUR UN SUBSTRAT ET PROCEDE DE VERIFICATION DUDIT MONTAGE

Publication
EP 1048069 A1 20001102 (DE)

Application
EP 99953603 A 19990827

Priority
• DE 9902670 W 19990827
• DE 19839760 A 19980901

Abstract (en)
[origin: DE19839760A1] The invention relates to a method for connecting electronic components to a substrate, whereby at least one terminal contact of the component is connected in an electrically conductive manner to at least one terminal contact on the upper side of the substrate by depositing a solder bump on at least one of the terminal contacts to be connected. The component is precisely connected to the substrate, and the at least one solder bump is soldered in order to moisten the contact surfaces. The invention provides that, during soldering, the at least one solder bump (24) is deformed in the plane of contact such that a degree of deformation is obtained which permits a two-dimensional evaluation of the degree of deformation by analyzing a radiograph of the connection point.

IPC 1-7
H01L 21/60; **H01L 21/66**

IPC 8 full level
H01L 21/60 (2006.01); **H01L 21/66** (2006.01); **H05K 3/34** (2006.01); **H05K 1/02** (2006.01)

CPC (source: EP US)
H01L 24/16 (2013.01 - EP US); **H01L 24/81** (2013.01 - EP US); **H05K 3/3436** (2013.01 - EP US); **H01L 22/12** (2013.01 - EP US); **H01L 2224/0401** (2013.01 - EP US); **H01L 2224/05552** (2013.01 - EP US); **H01L 2224/05555** (2013.01 - EP US); **H01L 2224/06051** (2013.01 - EP US); **H01L 2224/10175** (2013.01 - EP US); **H01L 2224/13099** (2013.01 - EP US); **H01L 2224/16238** (2013.01 - EP US); **H01L 2224/81801** (2013.01 - EP US); **H01L 2924/01004** (2013.01 - EP US); **H01L 2924/01013** (2013.01 - EP US); **H01L 2924/01027** (2013.01 - EP US); **H01L 2924/01029** (2013.01 - EP US); **H01L 2924/01032** (2013.01 - EP US); **H01L 2924/01033** (2013.01 - EP US); **H01L 2924/01057** (2013.01 - EP US); **H01L 2924/01068** (2013.01 - EP US); **H01L 2924/01075** (2013.01 - EP US); **H01L 2924/01078** (2013.01 - EP US); **H01L 2924/01079** (2013.01 - EP US); **H01L 2924/014** (2013.01 - EP US); **H01L 2924/15787** (2013.01 - EP US); **H05K 1/0269** (2013.01 - EP US); **H05K 2201/09381** (2013.01 - EP US); **H05K 2201/09427** (2013.01 - EP US); **H05K 2203/0465** (2013.01 - EP US); **Y02P 70/50** (2015.11 - EP US); **Y10T 29/49004** (2015.01 - EP US); **Y10T 29/49144** (2015.01 - EP US); **Y10T 29/49149** (2015.01 - EP US)

C-Set (source: EP US)
1. **H01L 2224/05555 + H01L 2924/00014**
2. **H01L 2224/05552 + H01L 2924/00012**
3. **H01L 2924/15787 + H01L 2924/00**

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
US 6678948 B1 20040120; DE 19839760 A1 20000302; EP 1048069 A1 20001102; HU P0100338 A2 20010628; HU P0100338 A3 20041129; JP 2002524854 A 20020806; WO 0013228 A1 20000309

DOCDB simple family (application)
US 53053600 A 20001211; DE 19839760 A 19980901; DE 9902670 W 19990827; EP 99953603 A 19990827; HU P0100338 A 19990827; JP 2000568120 A 19990827