

Title (en)

METHOD FOR STUDYING THE TEMPERATURE RELIABILITY OF EN ELECTRONIC COMPONENT

Title (de)

VERFAHREN ZUR UNTERSUCHUNG DER TEMPERATURZUVERLÄSSIGKEIT EINES ELEKTRONISCHEN BAUELEMENTS

Title (fr)

PROCEDE D'ETUDE DE LA FIABILITE EN TEMPERATURE D'UN COMPOSANT ELECTRONIQUE

Publication

EP 2984494 A1 20160217 (FR)

Application

EP 14712244 A 20140317

Priority

- FR 1353184 A 20130409
- EP 2014055257 W 20140317

Abstract (en)

[origin: WO2014166701A1] The invention relates to a method for analysing the temperature reliability of an electronic component (10) comprising an electronic chip (12) mounted in a housing (11), said electronic chip (12) consisting of a plurality of layers (13-15) of materials. The invention is characterised in that the method comprises the following steps: thermally coupling a thermally conductive coupling body (25) to the electronic chip (12); determining a wavelength according to the layers (13-15) of material to be crossed and the absorption rate of a layer of material to be used; and thermally stressing an area of interest (20) by means of a laser source (32) emitting the pre-determined wavelength.

IPC 8 full level

G01R 31/28 (2006.01); **G01R 31/311** (2006.01)

CPC (source: EP)

G01R 31/2858 (2013.01); **G01R 31/2875** (2013.01); **G01R 31/311** (2013.01)

Citation (search report)

See references of WO 2014166701A1

Citation (examination)

- US 6078183 A 20000620 - COLE JR EDWARD I [US]
- LELLOUCHI D ET AL: "MEMS failure analysis case studies using the IR-OBIRCH method - Short circuit localization in a MEMS pressure sensor", PHYSICAL AND FAILURE ANALYSIS OF INTEGRATED CIRCUITS, 2009. IPFA 2009. 16TH IEEE INTERNATIONAL SYMPOSIUM ON THE, IEEE, PISCATAWAY, NJ, USA, 6 July 2009 (2009-07-06), pages 827 - 831, XP031526469, ISBN: 978-1-4244-3911-9
- GLOWACKI A M ET AL: "Systematic Characterization of Integrated Circuit Standard Components as Stimulated by Scanning Laser Beam", IEEE TRANSACTIONS ON DEVICE AND MATERIALS RELIABILITY, IEEE SERVICE CENTER, PISCATAWAY, NJ, US, vol. 7, no. 1, 1 March 2007 (2007-03-01), pages 31 - 49, XP011187285, ISSN: 1530-4388, DOI: 10.1109/TDMR.2007.900056

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

FR 3004262 A1 20141010; FR 3004262 B1 20150515; EP 2984494 A1 20160217; WO 2014166701 A1 20141016

DOCDB simple family (application)

FR 1353184 A 20130409; EP 14712244 A 20140317; EP 2014055257 W 20140317