

Title (en)
INTEGRATED CIRCUIT MODULE AND MULTI-CHIP CIRCUIT MODULE COMPRISING AN INTEGRATED CIRCUIT MODULE OF THIS TYPE

Title (de)
INTEGRIERTES SCHALTUNGSMODUL UND MULTICHP-SCHALTUNGSMODUL MIT EINEM SOLCHEN INTEGRIERTEN
SCHALTUNGSMODUL

Title (fr)
MODULE DE CIRCUITS INTEGRES ET MODULE DE CIRCUITS MULTIPUCE COMPRENANT UN MODULE DE CIRCUITS INTEGRES DE CE
TYPE

Publication
EP 1792344 A1 20070606 (DE)

Application
EP 04786825 A 20040923

Priority
DE 2004002108 W 20040923

Abstract (en)
[origin: WO2006032219A1] The invention relates to an integrated circuit module (3) comprising a carrier substrate (4) with terminals for electrically contacting the carrier substrate (4) and a motherboard (2) and comprising at least one semiconductor chip (9) that is electrically contacted to the carrier substrate (4) and integrated into the substrate (4). The carrier substrate (4) comprises at least one cavity (8) that adjoins a mounting surface (10) for the motherboard (2) and holds at least one semiconductor chip (9). The cavity (8) is equipped with connection contacts (11a, 11b) for assigned connections of the semiconductor chip or chips (9), said contacts electrically contacting the semiconductor chip (9) and the carrier substrate (4). The carrier substrate (4) is multi-layered and comprises conductor tracks that extend transversally through several layers and the cavity (8) is hermetically sealed by a thermally conductive cover (12).

IPC 8 full level
H01L 23/10 (2006.01); **H01L 23/36** (2006.01); **H01L 23/498** (2006.01); **H05K 1/14** (2006.01)

CPC (source: EP US)
H01L 23/057 (2013.01 - EP US); **H01L 23/10** (2013.01 - EP US); **H01L 23/3677** (2013.01 - EP US); **H01L 23/49805** (2013.01 - EP US);
H01L 23/49822 (2013.01 - EP US); **H01L 23/50** (2013.01 - EP US); **H01L 25/165** (2013.01 - EP US); **H05K 1/141** (2013.01 - EP US);
H01L 23/66 (2013.01 - EP US); **H01L 2224/0554** (2013.01 - EP US); **H01L 2224/05568** (2013.01 - EP US); **H01L 2224/05573** (2013.01 - EP US);
H01L 2224/16 (2013.01 - EP US); **H01L 2224/73253** (2013.01 - EP US); **H01L 2924/00014** (2013.01 - EP US);
H01L 2924/01057 (2013.01 - EP US); **H01L 2924/01078** (2013.01 - EP US); **H01L 2924/09701** (2013.01 - EP US);
H01L 2924/1423 (2013.01 - EP US); **H01L 2924/15153** (2013.01 - EP US); **H01L 2924/15165** (2013.01 - EP US);
H01L 2924/15311 (2013.01 - EP US); **H01L 2924/1532** (2013.01 - EP US); **H01L 2924/16195** (2013.01 - EP US);
H01L 2924/3011 (2013.01 - EP US); **H01L 2924/3025** (2013.01 - EP US); **H05K 1/0206** (2013.01 - EP US); **H05K 1/0298** (2013.01 - EP US);
H05K 1/183 (2013.01 - EP US); **H05K 3/3436** (2013.01 - EP US); **H05K 3/3442** (2013.01 - EP US); **H05K 2201/066** (2013.01 - EP US)

Citation (search report)
See references of WO 2006032219A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2006032219 A1 20060330; CN 101002320 A 20070718; DE 112004003016 A5 20070913; EP 1792344 A1 20070606;
US 2011169162 A1 20110714

DOCDB simple family (application)
DE 2004002108 W 20040923; CN 200480043783 A 20040923; DE 112004003016 T 20040923; EP 04786825 A 20040923;
US 57301504 A 20040923