

Title (en)
INTEGRATED CIRCUIT HAVING PADS AND INPUT/OUTPUT (I/O) CELLS

Title (de)
INTEGRIERTE SCHALTUNG MIT KONTAKTSTELLEN UND EIN-/AUSGABEZELLEN

Title (fr)
CIRCUIT INTÉGRÉ POSSÉDANT DES PLAGES D'INTERCONNEXION ET DES CELLULES D'ENTRÉE/SORTIE (E/S)

Publication
EP 2020026 A4 20100609 (EN)

Application
EP 07759809 A 20070330

Priority

- US 2007065619 W 20070330
- US 38365606 A 20060516
- US 38365306 A 20060516

Abstract (en)
[origin: WO2007136932A2] A pad (20) is electrically connected to a first I/O cell (14) while also physically overlying active circuitry of a second I/O cell (16). Note that although the pad (20) overlies the second I/O cell (16), the pad (20) is not electrically connected to the I/O cell (16). Such a pattern may be replicated in any desired manner so that the I/O cells (e.g. 300-310) may have a finer pitch than the corresponding pads (320-324 and 330-335). In addition, the size of the pads may be increased (e.g. pad 131 may be bigger than pad 130) while the width "c" of the I/O cells (132-135) does not have to be increased. Such a pattern (e.g. 500) may be arranged so that the area required in one or more dimensions may be minimized.

IPC 8 full level
H01L 23/485 (2006.01); **H01L 23/52** (2006.01); **H01L 27/02** (2006.01)

CPC (source: EP KR)
H01L 21/82 (2013.01 - KR); **H01L 24/05** (2013.01 - EP); **H01L 24/06** (2013.01 - EP); **H01L 27/0203** (2013.01 - EP); **H01L 2224/02166** (2013.01 - EP); **H01L 2224/04042** (2013.01 - EP); **H01L 2224/05082** (2013.01 - EP); **H01L 2224/05083** (2013.01 - EP); **H01L 2224/05147** (2013.01 - EP); **H01L 2224/05181** (2013.01 - EP); **H01L 2224/05552** (2013.01 - EP); **H01L 2224/05624** (2013.01 - EP); **H01L 2224/05644** (2013.01 - EP); **H01L 2224/05647** (2013.01 - EP); **H01L 2224/06051** (2013.01 - EP); **H01L 2224/06153** (2013.01 - EP); **H01L 2224/06159** (2013.01 - EP); **H01L 2224/48463** (2013.01 - EP); **H01L 2224/49431** (2013.01 - EP); **H01L 2924/00014** (2013.01 - EP); **H01L 2924/01005** (2013.01 - EP); **H01L 2924/01006** (2013.01 - EP); **H01L 2924/01013** (2013.01 - EP); **H01L 2924/01015** (2013.01 - EP); **H01L 2924/01029** (2013.01 - EP); **H01L 2924/01033** (2013.01 - EP); **H01L 2924/01047** (2013.01 - EP); **H01L 2924/01073** (2013.01 - EP); **H01L 2924/01079** (2013.01 - EP); **H01L 2924/1306** (2013.01 - EP); **H01L 2924/14** (2013.01 - EP)

Citation (search report)

- No further relevant documents disclosed
- See references of WO 2007136932A2

Cited by
US11199553B2

Designated contracting state (EPC)
DE FR GB IT NL

DOCDB simple family (publication)
WO 2007136932 A2 20071129; **WO 2007136932 A3 20090326**; EP 2020026 A2 20090204; EP 2020026 A4 20100609; JP 2009537988 A 20091029; KR 20090025239 A 20090310

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