

Title (en)

BEOL PROCESS FOR CU METALLIZATIONS FREE FROM AL-WIREBOND PADS

Title (de)

BEOL-PROZESS FÜR CU-METALLISIERUNGEN OHNE AL-DRAHTBONDKONTAKTFLÄCHEN

Title (fr)

PROCEDE BEOL POUR METALLISATIONS DE CU DEPOURVUES DE PLAGES DE CONNEXION EN AL

Publication

EP 1490906 A1 20041229 (EN)

Application

EP 02719422 A 20020402

Priority

US 0210409 W 20020402

Abstract (en)

[origin: WO03085735A1] A process of making an interconnection structure of Cu FBEOL semiconductor devices that does not rely upon Al-wirebond pads which require additional patterning steps (for Al-via to Cu, Al-pad), comprising: a) providing a substrate having Cu wires and Cu pads embedded therein; b) selectively depositing a first metallic passivation layer on the top copper surfaces sufficient to prevent Cu oxidation and/or Cu out diffusion; c) depositing a final passivation layer; d) employing lithography and etching of the final passivation layer to cause pad opening of the fuses by exposing the passivated Cu in the bond pad area and in the fuse area; and e) causing additional passivation of open pad and open fuse areas by selective immersion deposition of Au.

IPC 1-7

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IPC 8 full level

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Citation (search report)

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