Cu

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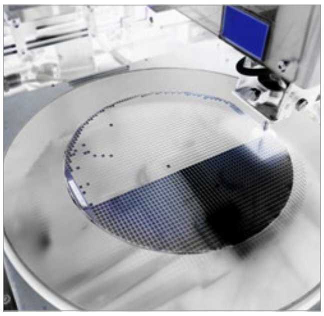
umicore

IntraCu® Additives

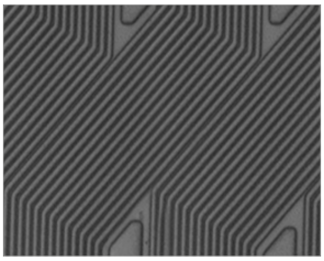


Take Advanced Packaging to a completely new level

Umicore´s business unit Electroplating provides innovative patented additives for copper electroplating into the advanced packaging industry.

IntraCu® as a modular Copper electroplating additive system embodies an integral part of our joint product offering. It is manufactured in state-of-the-art clean room environment to meet quality standards of the semiconductor industry.

IntraCu® additives can be seen as a POR replacement for Microbumps in IC packages, RDL in wafer level packaging and Pillar in flip-chip packaging.



Advantages

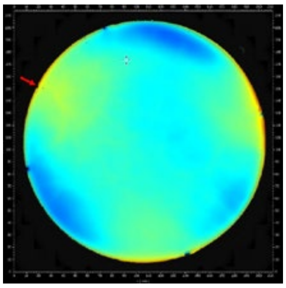
- Bamboo-like structure
- Matte Cu, Ra < 0.2 µm
- Flat topography
- Stable tensile strength
- Resistant to grain growth
- Resistant to etching
- Bright Cu, Ra < 0.03 µm
- ±50% process window for Cu pillar and RDL
- Total in-film organics < 11 ppm
- Excellent KV-less performance

Applications

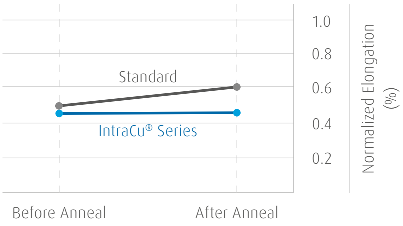
- Fine line RDL (< 2 µm)
- Cu-to-Cu direct bonding
- 2-in-1 bright Cu (Cu pillar and RDL)
- 2-in-1 with KV-less requirement

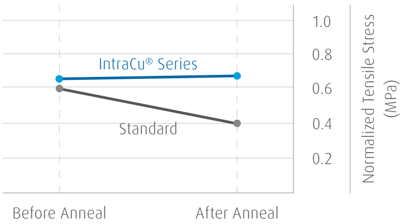
IntraCu® Additives

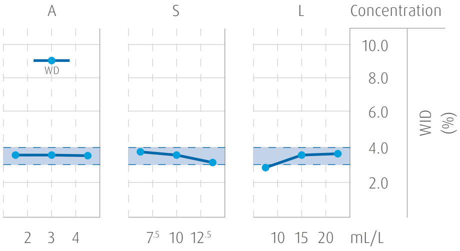
TECHNICAL SPECIFICATIONS

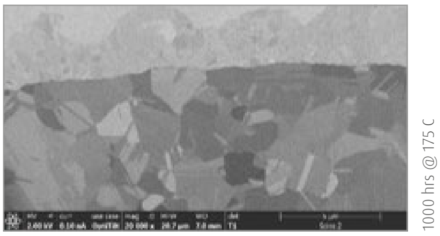


Very low stress of IntraCu® SC layers:
8 inch blanket wafer, plated on one side
with 20 µm, shows warpage < 10 µm.









YOUR CONTACT

Do you have a specific question or would you like a no-obligation quote calculation?
Our specialist will be happy to help you with any technical questions you might have.

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