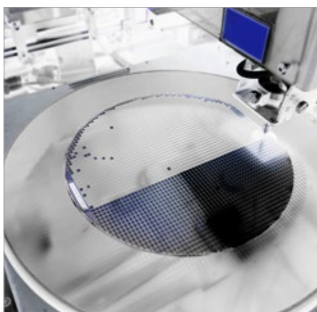
Version: 22 March 2021

IntraCu® Additives



Take Advanced Packaging to a completely new level

Umicore´s business unit Electroplating have partnered with SHINHAO Materials to provide 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

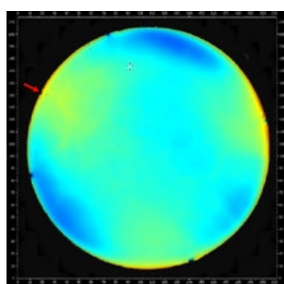
Applications

- 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

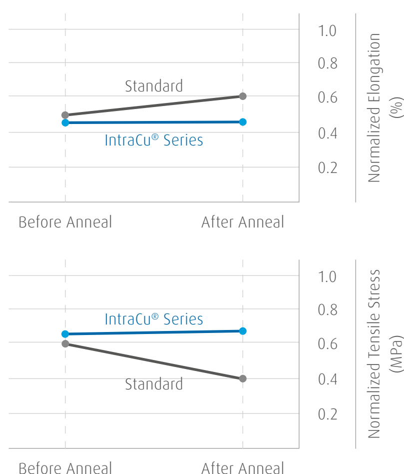
* Not available in Europe

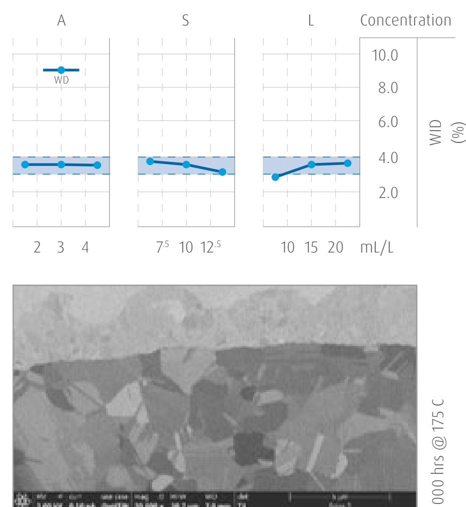
IntraCu® Additives*

TECHNICAL SPECIFICATIONS



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





* Not available in Europe

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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The information and statements contained herein are based on our experience in the fields of research and applied technology and are believed to be accurate at the time of publication, but - unless agreed in writing - we make no warranty with respect thereto, including but not limited to any results to be obtained. This product information sheet in the English language prevails any translation.

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