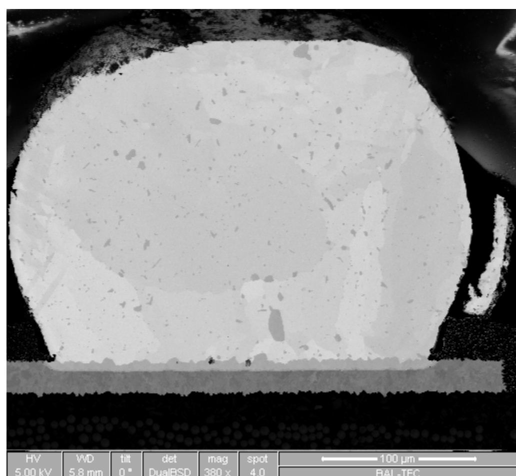

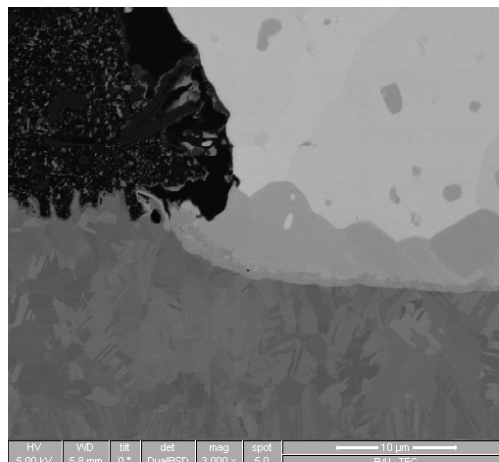

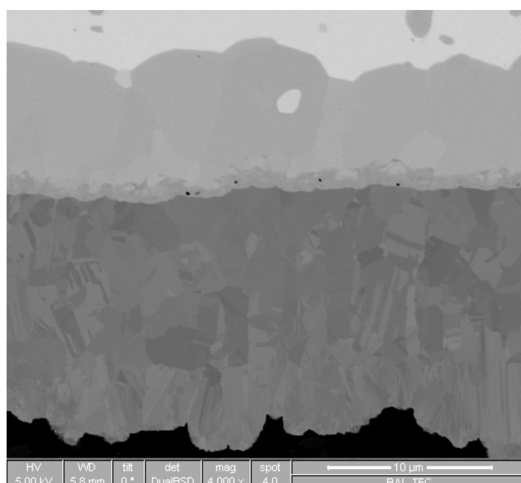

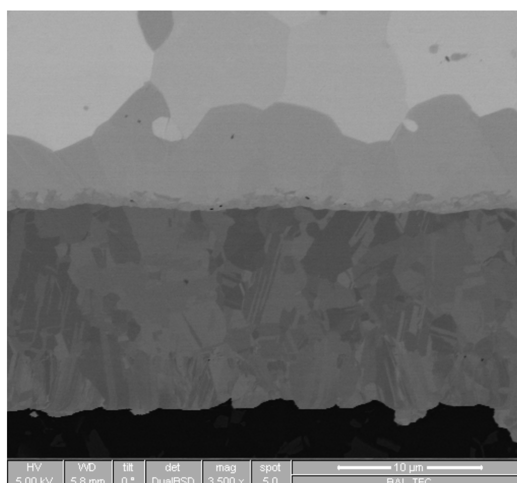

Cross section of a solder ball on a Ni / Cu pad prepared with the EM RES 101

LSN - Application Note

Leica EM RES 101

Cross Section of a Solder Ball on a Cu/Ni Pad

Market: Microelectronics QA/Research
Companies (e.g.): AMD, ZMD, Infineon, Qimonda, STM, Intel, Tek, Bosch, Sony, Nokia, Sharp etc.

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Leica EM RES 101 Application No. 1/7

Cross Section of a Solder Ball on a Cu/Ni Pad

Goal:

- Cross section of the solder ball structure to get information about the solder structure and its interface to the Cu / Ni pad

Process description (benchmark values for this particular sample):

Parameter	
Acceleration voltage	7 kV
Gun current	2.6 mA
Sample movement	Oscillation
Milling time	6 h 30 min

Results:

- Cross section of the solder ball structure without any damages
- The grain structure of the different materials is clearly visible
- Interfaces can be investigated

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