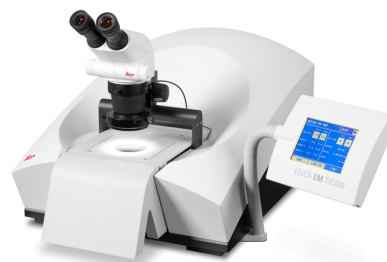


Cross section of a chip capacitor prepared with the Leica EM TIC 020



Application Note

Leica EM TIC020

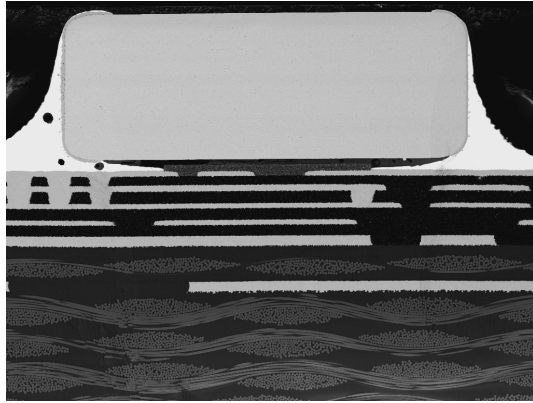
Cross Section of Chip capacitor

Market: Microelectronics QA/Research

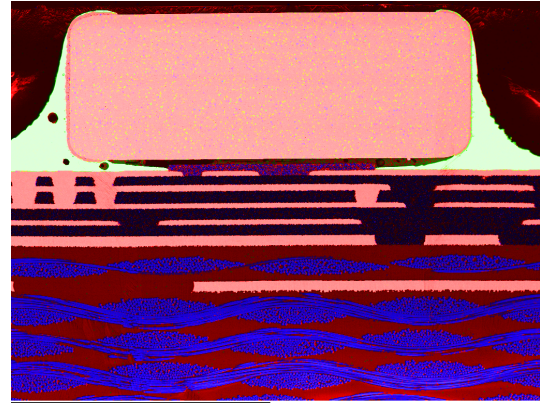
Companies (e.g.): AMD, ZMD, Infineon, Qimonda, STM, Intel, Tek, Bosch, Sony, Nokia, Sharp etc.

Living up to Life

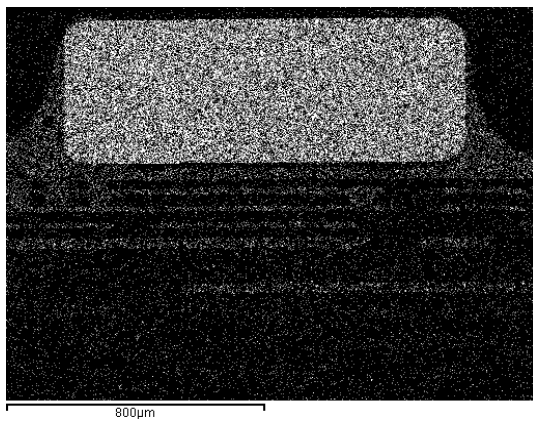
Leica
MICROSYSTEMS



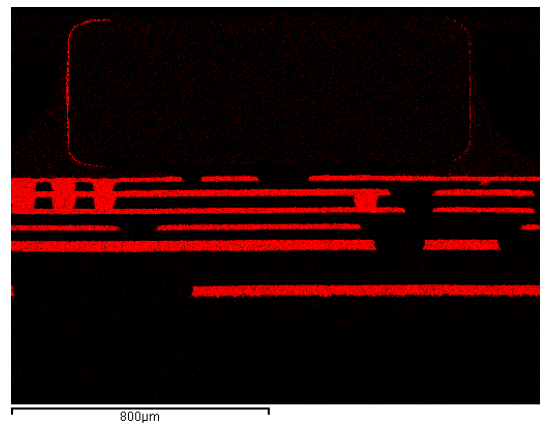
SE image



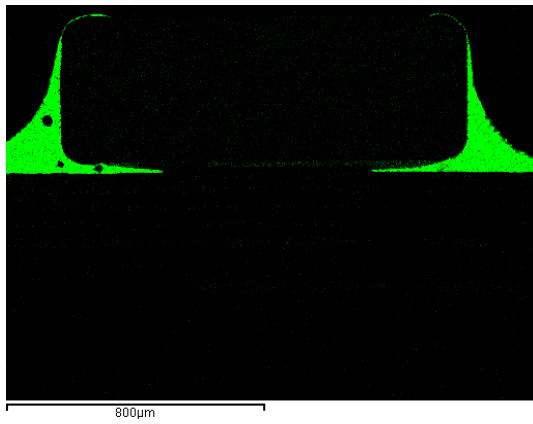
Mix map



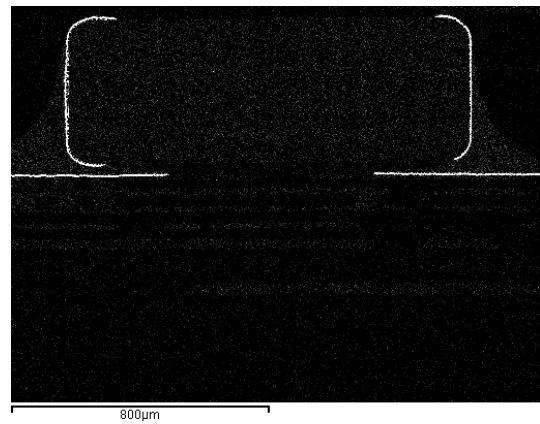
Ba



Cu



Sn



Ni

EDS images of the chip capacitor proof the quality of the slop cut

Leica EM TIC020 Application No. 1/12

Cross Section of Chip Capacitor

Goal:

- Cross section of the chip capacitor

Process description (benchmark values for this particular sample):

Parameter	
Acceleration voltage	7 kV
Gun current	2.6mA
Milling time	6 h
Cut depth	1.7 mm
Complete process time	15 h

Results:

- Very deep slope cut with perfect surface
- EDS images even from thin intermediate layers like Cu and Ni proof the preparation quality

Wolfgang Grünewald, Leica Microsystems
Wolfgang.Gruenewald@leica-microsystems.com