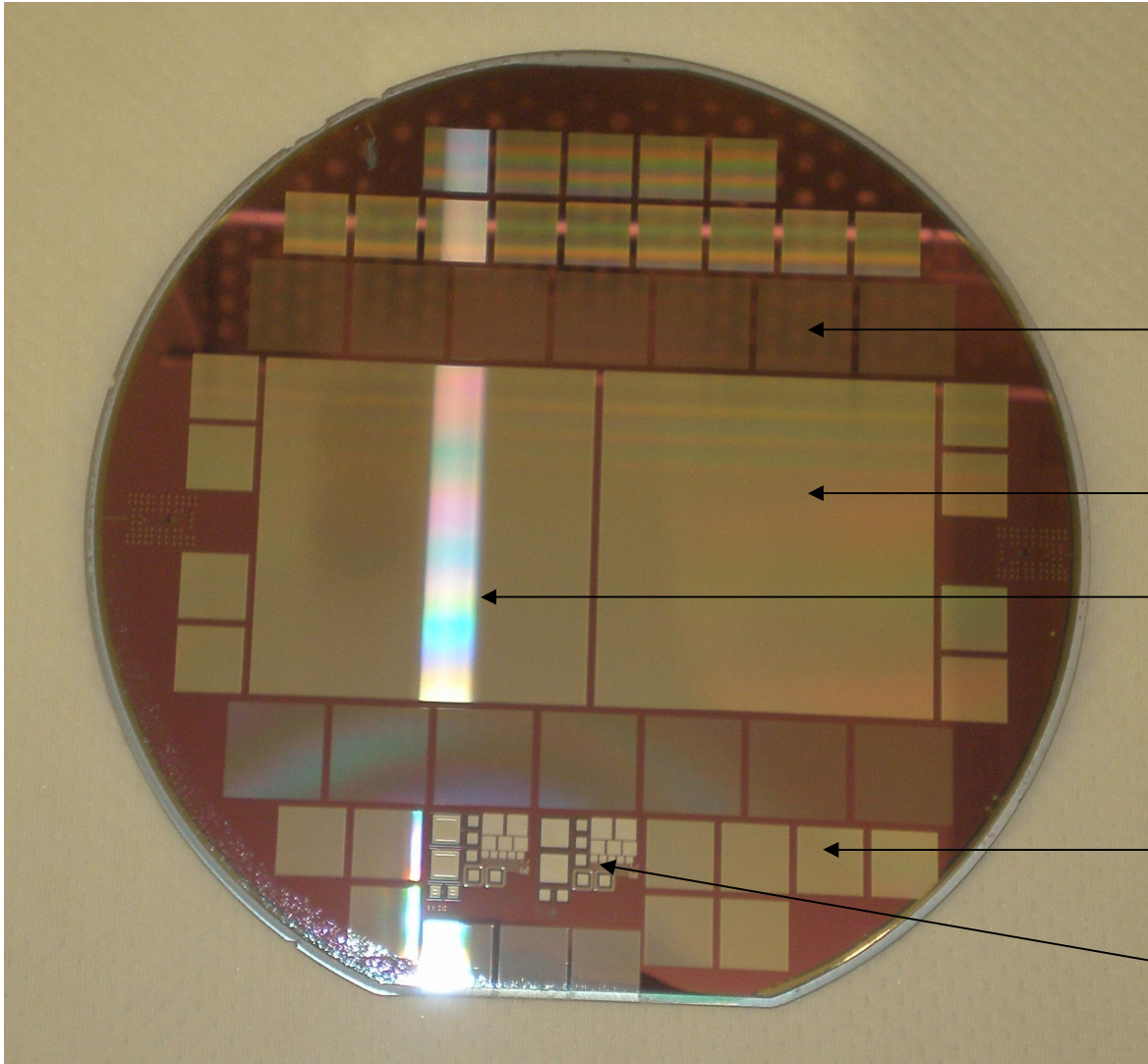


VTT

EDGELESS STRIPS & PIXELS



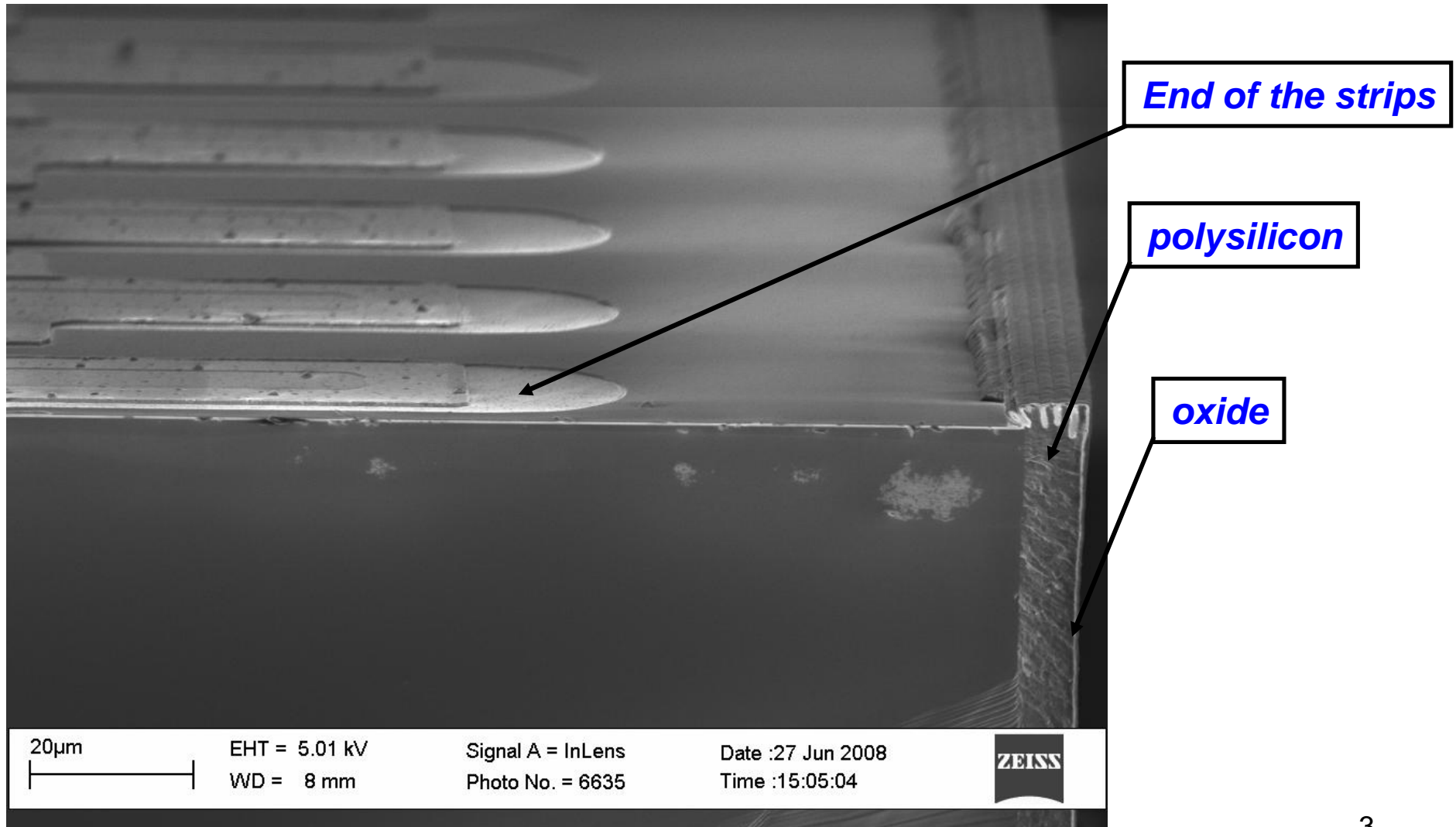
MEDIPIX 2
COMPATIBLE
EDGELESS PIXEL

MAIN DEVICES:
• 5X5 SQCM
• DC & FOXFET

BABY DEECTORS
• 1X1 SQCM
• DC, PT & FOXFET

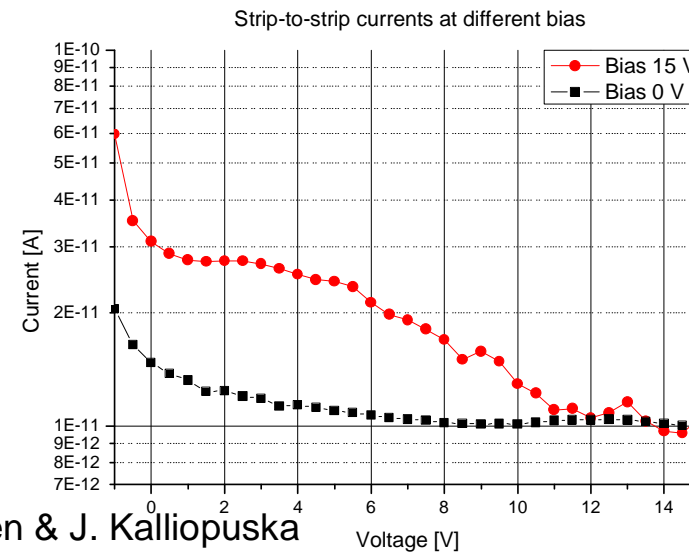
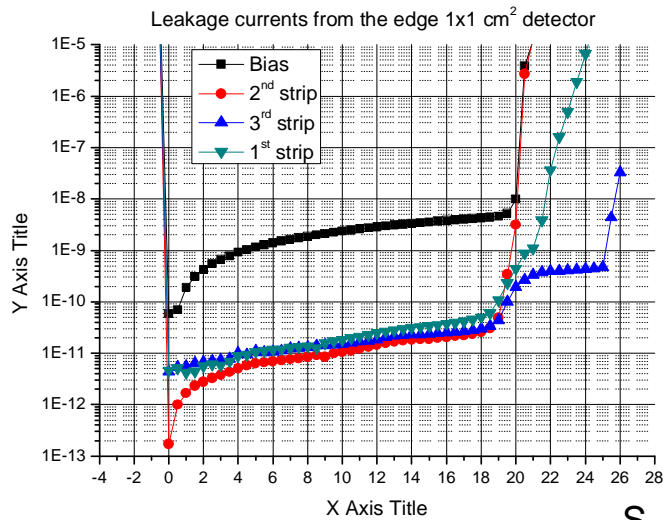
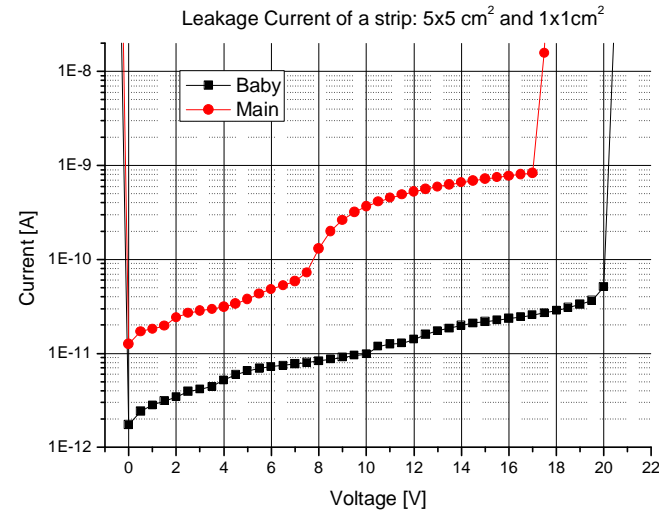
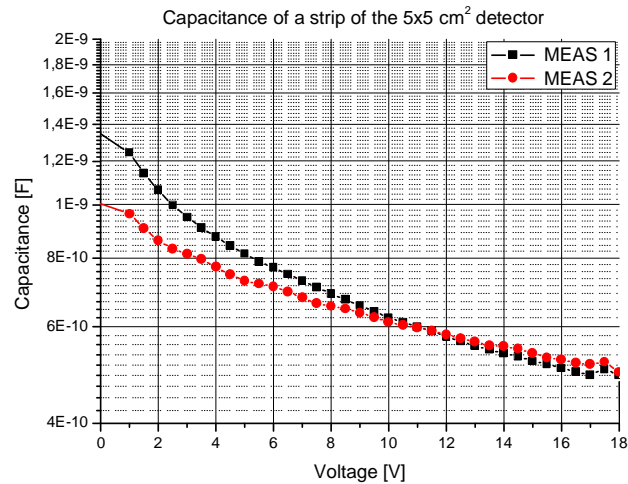
TEST CHIP

SEM photograph from at the edge



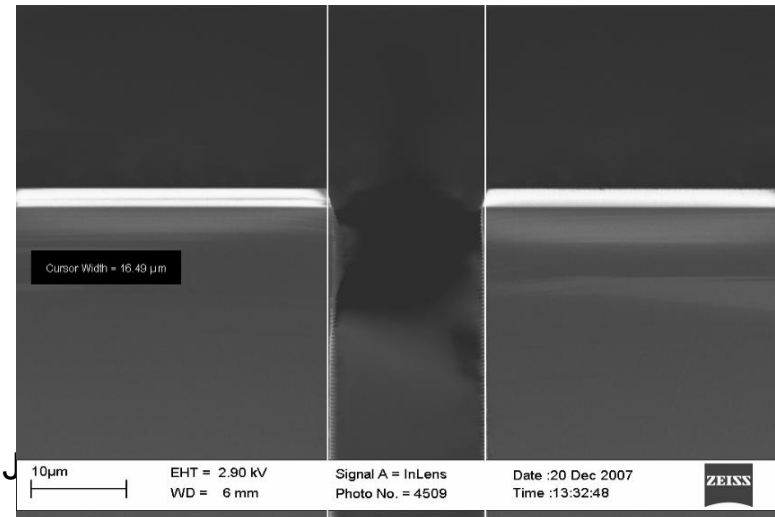
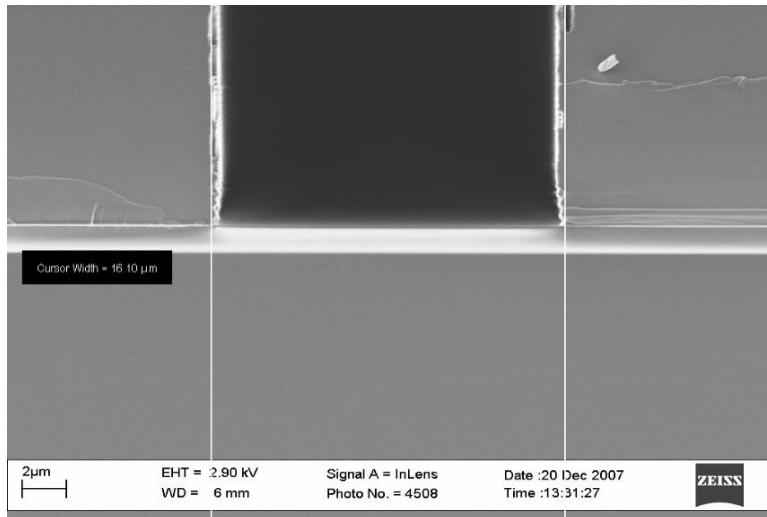
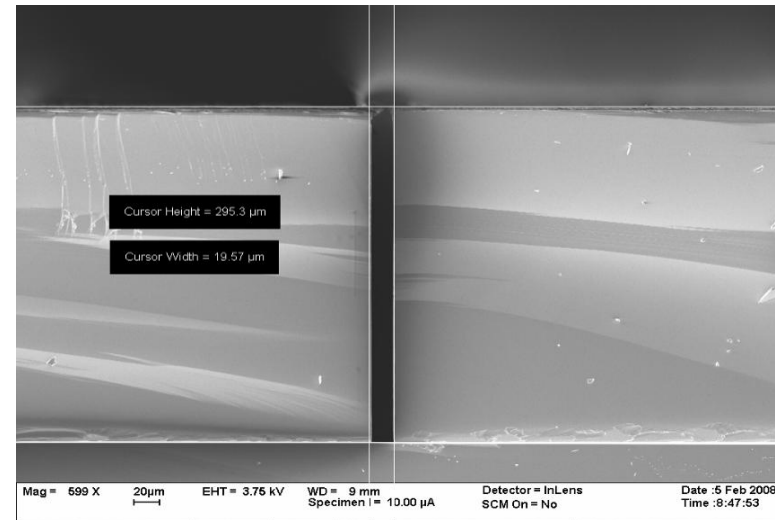
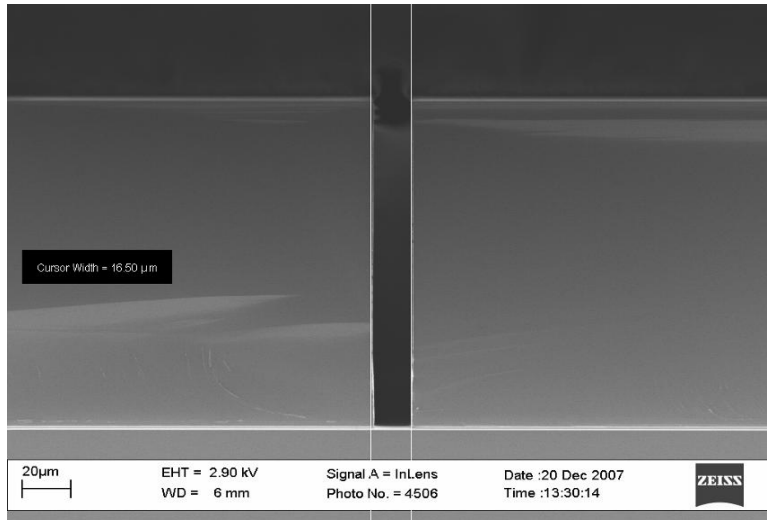
PRELIMINARY CHARACTERIZATION

- IV- and CV-curves measured from the isolated strips of the microstrip detectors.



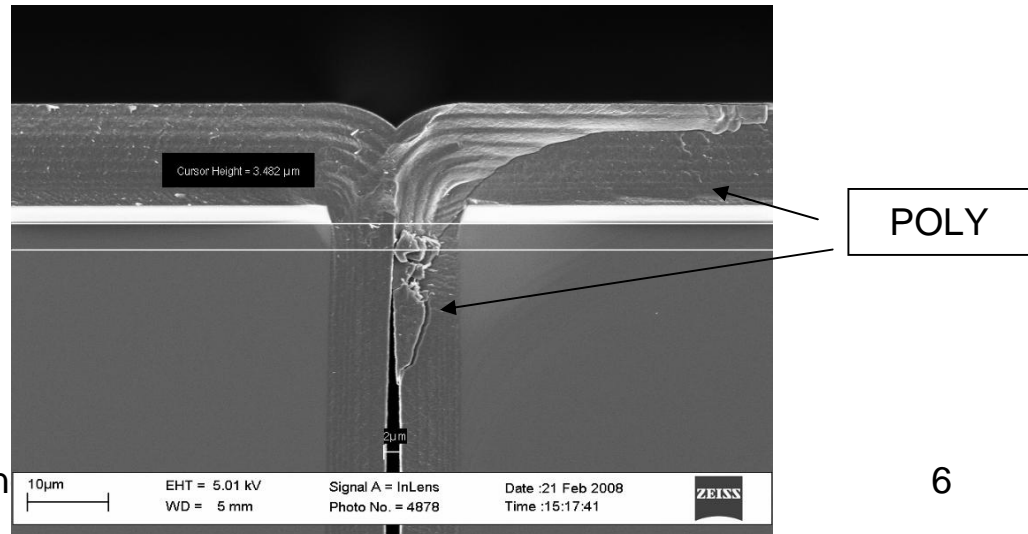
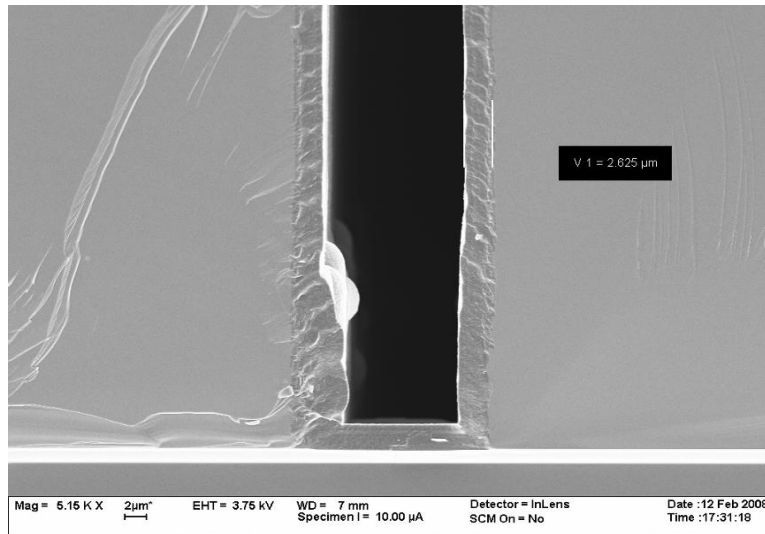
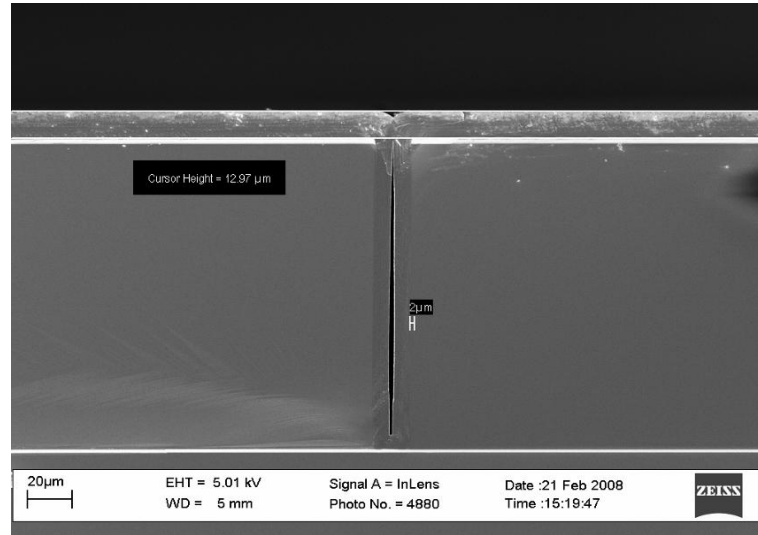
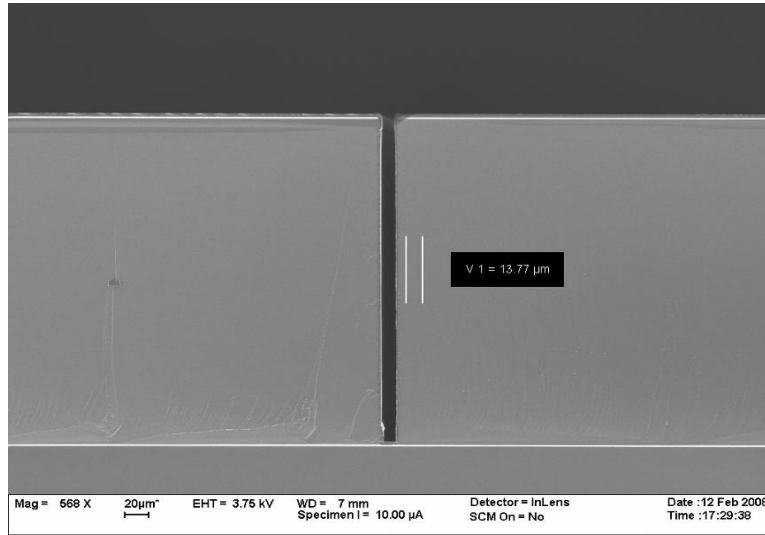
EDGE ETCHING

- VERTICAL ETCH PROFILE – SLIGHT TILT WOULD BE PREFERRED FOR POLY FILLING



EDGE FILLING

- SMALL VOID INSIDE EDGE POLY – GOOD OR BAD ???



SUMMARY

1. PROPOSED FABRICATION SCHEME SEEMS TO BE OK
2. MANY PROCESSING LESSONS LEARNED
3. LEAKAGE CURRENTS TENTATIVELY OK
4. PROBLEMS WITH BREAKDOWN
5. BREAKDOWN PERHAPS DUE TO DIFFICULTIES IN THE CHIP DETACHMENT – NEW PROCESSES FOR THIS AVAILABLE LATER THIS YEAR
6. PROCESS TUNING NEEDED
7. TESTING CONTINUES