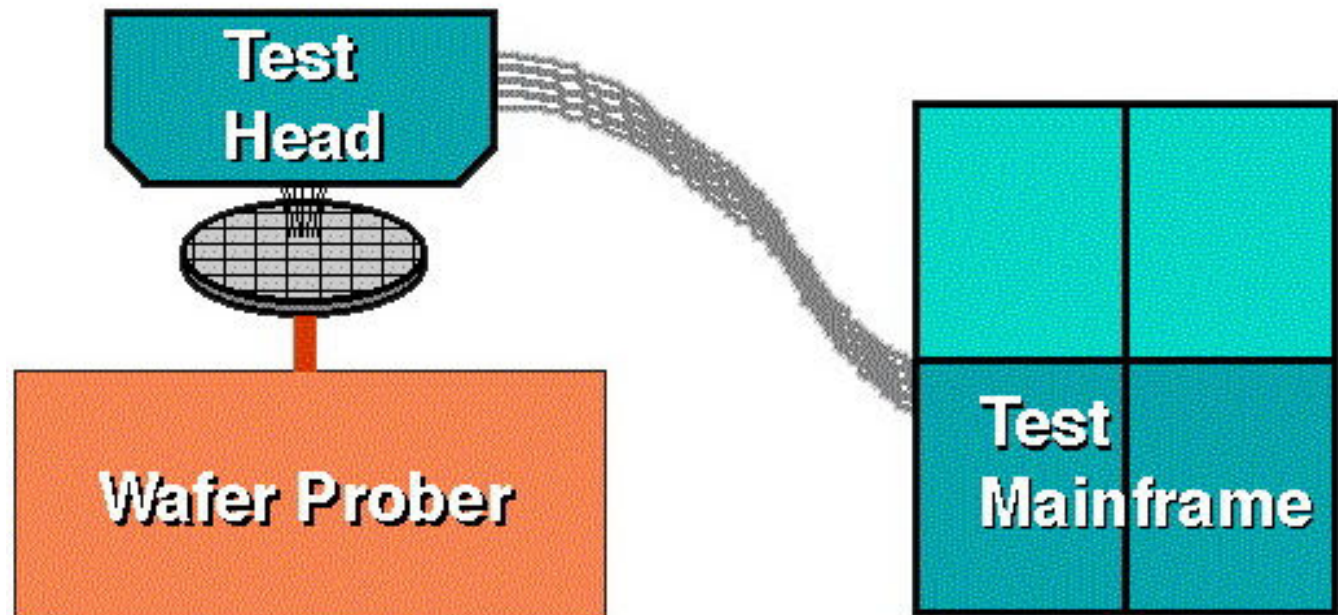


My contribution to Wafer sort Automation at Intel Fab 8

By Arie Lashansky

What I did at Intel

I was employed doing the "Wafer Sort " below is the basic layout of a wafer sort system

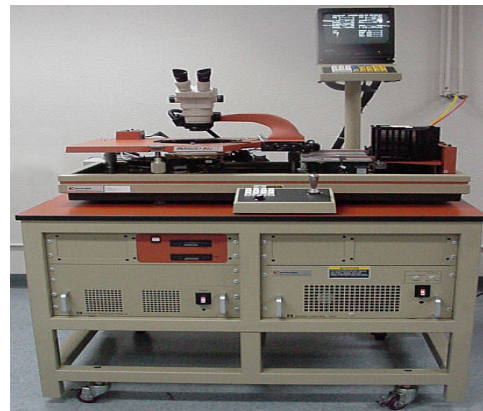


Tester and prober

I worked on the trillium VLSI tester system

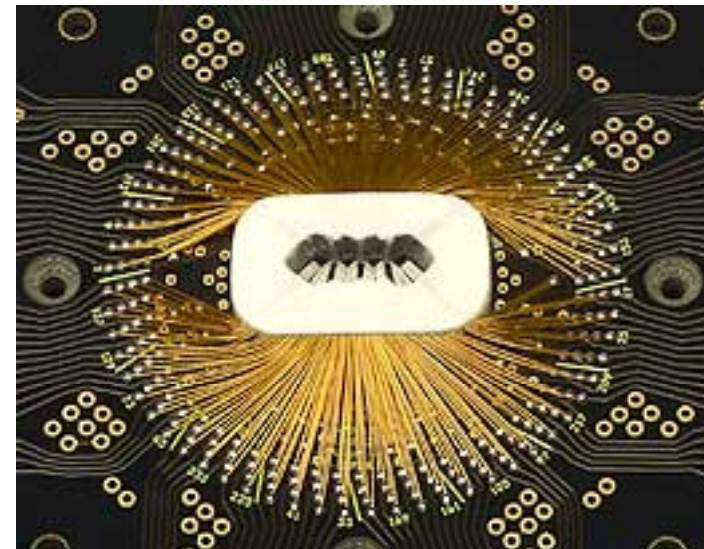
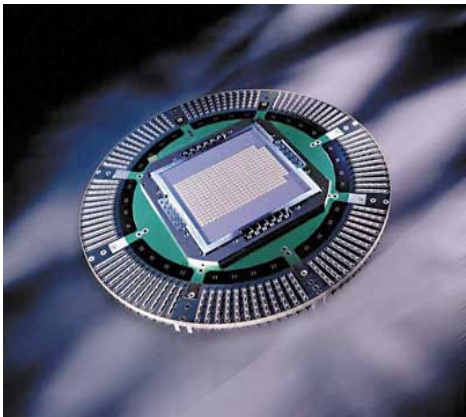


The wafer prober was a EG2010



Probe card

The probe card is a device that links the tester hardware to the wafer that is under test. Each pin needs to make contact with the wafer. If the probe mark is too small the yield will suffer if it is missaligned it can damage the passivation layer and let moisture damage the chip.



My contribution

I 2003 two testers were not running on one of the test heads as there way damaged the probe cards on the sand paper that was used to clean the probe cards.

I was at the time not responsible for the wafer prober or the automation that connected it to the tester.

The people who were responsible was the "Prober support group" as well as " Sort Automation" both had given up hope of fixing the Issue.

I noted that the problem happened on the first wafer of a new lot and that it happened after the "set probing heights tasks finished"

My contribution

I found that the wafer prober firmware had a system of updating the height of the cleaning block every time the heights for probing was updated. This system did not work well in some cases.

I worked with engineer who was responsible for the automation to add a task of "Set cleaning heights" after every "Set probe heights Task"

The two testers were put back into full operation after running at 50% for 2003.

Summary

The number of probe cards damaged at the Trillium operation went down and hence the Fab spent a lot less on fixing or replacing the probe cards 80% less probe card damage in 2004 on trillium.

The in April 2004 I got the worst annual review out of all the years I worked at Intel telling me to focus on my core job.

I stopped looking to fix problems that were not my Job to fix. and went into Autopilot doing my Job until the Fab closed as the Fab went into a mode of shutting down over the last few years it was easy to go with the flow and put my efforts into Learning the skills for post Fab 8.