

# Addressing Equipment Challenges of a Fab Conversion to 200mm

Ken Vandehey  
Hewlett Packard

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## Introduction / Problem Definition

A number of business drivers supported the need to convert the Hewlett Packard Corvallis, OR fabs from 150mm to 200mm. As part of the conversion effort, beginning in October 2002, the organization was faced with completing the conversion of a 200mm pilot line within one year and continuing to “ramp” while maintaining a 150mm production line through mid-2006.

Many fab and equipment challenges were encountered throughout the planning and execution of the conversion, from facilities infrastructure upgrades, through the maintenance support of single-sourced tool sets. In addition, decisions of whether to upgrade existing tools or purchase new platforms given supplier obsolescence plans, in-house maintenance support, and capability needs were significant factors to consider.

## Methodology and Implementation

A Logistics Team was formed, representing the major facets of the organization to complete the planning and oversee the implementation of the conversion, addressing many of the associated challenges as they surfaced.

The presentation will cover the significant challenges associated with the facilities upgrades, defect density,

methodologies of supporting 150mm and 200mm parallel lines, equipment strategies, and ergonomic solutions.

## Rollout and Lessons Learned

The conversion program will continue through 2006, at which time all 150mm production will cease. The presentation will cover the plans for the remaining conversion activities, as well as the important lessons learned.