

Texas Instruments – DMOS6 300mm Wafer Fab Pilot Management Methodologies

In the semiconductor industry, non-production wafers have been a major component of the production cost structure. In an effort to reduce non-production wafer costs our factory formed an interdisciplinary silicon team. For the last year, the objective of this team has been to find the key issues to improve the management methodologies and opportunities to reduce non-production wafer cost.

This paper will address the key issues, goals, methodologies and lessons learned encountered by this team. The key issues are primarily related to cost per wafer and lead times. Some specific goals targeted include 30% reduction of silicon cost, less than 1% non-production to production wafer ratio, and other methods like pilot downgrade and cost management.

As part of the results and lessons learned of this project, some new methods, approaches and procedures will be presented. These activities include the advantage of in-house re-cleaning, the benefit of updating pilot specifications, improving WEB based pilot management, and targeting area specific budget control and accountability, among others.