

Testtalk *focus*

LARGE NORTH AMERICAN OEM

Helping achieve company goals

In 2001, this large OEM had 31 big iron ICT systems. Engineers and Managers were determined to reduce test cost to be more competitive, even though they operate in an industry where defect escapes are not tolerated due to the high costs of failure. Following an analysis of the actual defects found in their process, they decided to switch to CheckSum low-cost ICT systems. By 2008, this OEM has over 50 CheckSum testers and has reduced direct ICT costs from \$0.20 per board to \$0.08 per board, generating \$10 million in savings over 7 years. Quality levels have improved during that time as well, because the OEM has used their savings to implement test strategies that add coverage and prevent escapes.

While the CheckSum testers cost only around half what the big iron testers cost, the largest savings come from the fixture, program, and support costs. Big iron testers were designed to solve a major problem of the 1980s – high defect rates in digital components. Short wire fixtures, (what used to be) high speed vector

electronics, and complex software were required to solve the digital defect problem. Fortunately, digital defect rates are down to ppm levels and can be best caught at functional test. This means that low cost ICT systems generate the same results as those older big iron machines. Non-muxed fixtures and easier to write programs combine to make fixture costs about half that of big iron. And, CheckSum has free software upgrades and has never had support contracts. Same results, less hassle and cost.

So, why don't more companies switch? Why doesn't the slow bleed of big iron get noticed at all companies?

This large OEM understood that they needed to change to capture the savings they identified by understanding their fault data. Many companies do not analyze their failure data and even more discourage change. Fortunately, this OEM trusted their analysis, sold their big iron testers, and was tremendously successful.