yieldWerx helps QuickLogic boost Engineering Productivity

Background

QuickLogic Corporation (NASDAQ: QUIK) is the leading provider of ultra-low power, customizable sensor processing platforms, Display, and Connectivity semiconductor solutions for smartphone, tablet, wearable, and mobile enterprise OEMs. Called Customer Specific Standard Products (CSSPs), these programmable 'silicon plus software' solutions enable our customers to bring hardware-differentiated products to market quickly and cost effectively.

QuickLogic before and after yieldWerx

Prior to using **yieldWerx**, the process engineers at QuickLogic were unable to export reports, efficiently perform data analyses, or load data log files.. In addition, the tools they were using supported very few data formats. Hence, the company lacked the capability to create customized ICC Wafer maps based on actual logged values. These types of maps are very valuable for process targeting and product characterization.

With **yieldWerx** now deployed at QuickLogic, the engineers can prepare data analysis reports in real time that are produced in a manner that allows them to be sent directly to the Wafer Fabs and test houses for quick decision making. **yieldWerx** provides QuickLogic the ability to eliminate all of the noise in the data, optimizing root-cause analysis, saving up to 90% of the time that was previously spent in just preparing the data.

Increased Engineering Productivity

With **yieldWerx**, QuickLogic engineers are able to get their production job support done quickly and efficiently, allowing them more time for high-value activities. With the help of the powerful visualization tools included with **yieldWerx**, QuickLogic is now able to analyze characterization data in as little as 30 minutes and prepare a dashboard of reports for enterprise-wide quick decision making. Before **yieldWerx**, as the data could not be loaded and analyzed in real time, the test setup would be allocated to a different product, delaying further adjustments until the test system was available again. This delay used to not only add substantial test cost but also affected the yield ramp of the product resulting in additional production costs.

Optimized detection of operational issues

With **yieldWerx** now implemented, there has been a dramatic improvement in the data available for QuickLogic engineers so that they can shorten the time for processes such as device characterization and root cause analysis. Previously, if there were probe card issues, they would only be noticed with an obvious repeating pattern in the wafer map. Now the engineers are able to get a "by site" yield result at their desk. This real time capability makes the team members more efficient in tracking down systematic operational issues that impact yield and quality – leading to faster production ramps, greater manufacturing yields, and lower manufacturing costs.

> "We are in a new product development stage and are optimizing the process for achieving the device characteristics required by the market. Being able to do this with a small number of wafers with high accuracy is a huge benefit. We are glad to have **yieldWerx** at the heart of our test operations and we now totally rely on its analysis. **yieldWerx** helped us in improving device yield, perform early defect detection, reduce engineering time and improve equipment utilization."
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> -   **Rajiv Jain (VP WW Operations and IT)**