



RTL Market Trends 2009 Climbing Out from the Bottom

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EXECUTIVE SUMMARY

It would be nice if we could present these numbers as being completely correct, but we can't. We are still suffering from the Cadence bookings machinations of the past. This time the numbers reflect a more negative view of Cadence that actually exists. The problem is by how much. We believe that there is only a 15% to 20% downside left in Cadence's revenue figures. That probably will be taken care of this year but may run into 2010. What is compounding the problem is that the Upper Mainstream Users, Cadence's main customer base, is continuing to drop out of the Implementation market. That mainly shows up in the IC CAD and RTL Synthesis numbers. We just don't know by how much.

Still these are by far the best look at the market we've had since 2004; before the bookings game started. What we are seeing is the flattening of the RTL market while the ESL market grows as it becomes the design methodology of choice. IC CAD continues to grow even as we are losing seats, because of the merciless march of Moore's Law. There may be fewer IC CAD engineers but the ones that we have are being swamped by problems that only RET (Resolution Enhancement Tools) and DFY (Design for Yield) tools can resolve. That will bring more dollars into the EDA vendor's bottom line. So welcome to the future; 2008 was the first year of the new era of EDA.

INTRODUCTION

This report comprises the "RTL and Below" section of the EDA 2009 Market Trends. RTL (Register Transfer Level) was once called CAE (Computer Aided Engineering). It was one of three major applications listed under the overall EDA market, and it included all of the CAE tools. However, as in previous years, we now break out ESL (Electronic System Level) and report the remainder as "RTL and Below." "RTL and Below" includes RTL, gate level and transistor level design tools. In this report we will discuss market share, trends, and forecasts for the "RTL and Below" subapplications that will most impact the EDA landscape.

For two years now, the shift to ESL has been a key driver of a decreasing RTL market. 2008 was no exception, and the shift to ESL is bringing down the RTL market even more than before. The “RTL and Below” applications fell in 2008.

The economic turmoil clearly had an impact on the “RTL and Below” market, though we expect the RTL market to begin picking up as early as 2010. Further adding to a dismal year for RTL was the sharp decline in revenue by Cadence, who plays in nearly every RTL subapplication.

Also, some of the decline in revenue in RTL is an artifact of how we collect the numbers. Since the beginning of RTL design, we have classified design tools at their highest level of use. A prime example would be the decline of gate level simulators as RTL simulators took over the gate level simulation job. At one point, Verilog simulators were used for gate level simulation, but revenue for those tools was listed under the appropriate RTL subapplication instead of the gate level subapplications.

Indeed, the RTL market is facing a tumultuous period. The shift of revenue from RTL to ESL will continue to negatively impact the RTL market over our forecast period. Coupled with the fact that there continues to be price pressures on commodity-like tools in RTL, uncertain economic conditions, and turmoil at key vendors, you end up with a sharply declining RTL market in nearly every subapplication in 2008, with this trend continuing over the near term. However, by 2010 or 2011, the RTL market will be back in full swing, with pent-up user demand driving tool purchases.

OVERVIEW

The RTL and Below Market Trends report includes market share, market forecast and analysis by sub-applications for the RTL and Below sub-applications.

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