

# PHYSICAL DESIGN (DDR PHY) FOR A GLOBAL LEADER IN ELECTRONIC DESIGN AUTOMATION AND SEMICONDUCTOR IP

## CUSTOMER PROFILE

The customer is a global leader in electronic design automation and semiconductor IP.

DDR PHY IP is part of their wide spectrum of IP products portfolio.

## EXECUTIVE SUMMARY

The customer was looking for instantaneous scale up of team to handle IP hardening in bleeding edge technologies. Quick ramp up, being productive in short time, on schedule execution to meet additional and unplanned project requirements without compromising in the quality of the deliverables.

Our expertise in physical design and a deep understanding of the customer's product helped us deliver perfect product designs at fast turnaround along with well-defined and customizable execution and sign-off processes.

## CHALLENGES

**Key challenges in this engagement:**

**a) Aggressive schedule:** Customer wants to scale up and make the implementation team productive within a very short span of time, on schedule execution meeting all quality metrics as per the standard protocol. The key to our customer's success lay on our agility and ability to respond quick, both in terms of putting a capable team together and ramping the thus formed team up on the design implementation flow.

**b) Moving targets:** The characteristic of bleeding edge technology node is that the design requirements, especially that is dictated by the foundry (PDK) also evolves as the design activity progresses. In addition to the technology node being new, which has its own challenges in learning the nuances, evolving PDK poses even more excitement.

## SOLUTIONS

### THE TEAM

Fully understanding the needs of the team to address the challenges, a good leader with technical stronghold, along with a middle and junior team was formed. The team was trained on the customer design flow. The finer aspects of the flow were stressed during the training, so that the team was well-versed with the flow.

### THE FLOW

During the initial phase of the project, highest priority was given to stabilizing the flow and automating it so much that even the specific requirements of the technology node were automated. The flow kept on adapting to the newer requirements the evolving PDK continued to pose until the final stage.

### RAPPORT WITH THE CROSS FUNCTIONAL TEAMS

The working relationship with the cross functional teams was important as multiple cross functional teams were involved in the implementation. Clear and transparent communication, extensive usage of bug tracking platform, periodic reviews helped the cross functional teams to co-work efficiently.

### PLANNING AND PRIORITIZATION

Planning and prioritization is the key to success for any short duration project. The evolving requirements necessitated a dynamic and adaptive style of project management.

## RESULTS AND ROI

On time delivery of the project while meeting all quality requirements due to strategic planning.

We delivered significant cost savings to the customer. This was achieved by having less resources onsite who were supported by a large team of qualified experts operating offshore, at considerably reduced rates. Our team had a very fulfilling exposure to the customer's design methodology, which makes our team expandable and scalable.

Customer and their customers, in return, were delighted with the outputs our team was able to put forth.