
Eli Assoolin

DSP Group Uses ENOVIA
for Design Reuse and IP management

DSP Group, Inc, a leading global provider of wireless chipset solutions for converged communications at home, adopted ENOVIA's Design Data Management (DDM) solution Synchronicity to manage its work-in-progress data for integrated circuit design. Contact Mag spoke with Eli Assoolin, WW CAD Director of DSP Group about why managing and sharing IP is so important when dealing with the complexities inherent to chip design.

Contact Mag: Why is it important to manage IP for companies in the semiconductor industry?

Eli Assoolin: As a multi-disciplinary company in the fabless semiconductor industry, with many different disciplines such as chip designers and production engineers working together, we need to manage an extraordinary amount of data. Each of our customers has specific codes that it needs us to program in each chip, and which can result, in any specific year, in hundreds of different chips with different codes. So on one hand we have many customer derivatives that we need to provide and on the other hand we have to support a large number of processes that rely on IP that can change on a daily basis. This IP needs to be shared among our different designers and consequently we have to be able to trace exactly where this IP was used, who used it, sometimes across multiple sites, and share this information around the globe. It's very important that the deliveries between R&D groups, each handling millions of different files, be traceable because each mistake can cause havoc and even a product recall that can cost millions in defective chips and lost time. We need to be very accurate and organized in terms of the way we handle the thousands of files and configurations by building a system where all the IP will "live". This IP has a lifecycle; we need to manage it and when new IP comes in we need to implement this change either by replacing existing IP or adding the new one to an existing configuration.

C.M.: Why have you chosen ENOVIA's Synchronicity?

E.A.: First of all, it is an all-in-one solution. Synchronicity provides a solution for basic configuration management with version control tools and process management. Second of all we have a solution, Synchronicity ProjectSync, which is our collaborative tool for tracking issues, design requirements and specifications. And we also use Synchronicity to manage all our IP. All these solutions are based on the same platform; they talk to each other, which was an extremely important criterion when we were looking for a configuration management system.

Another important point is the interface between Synchronicity and the Electronic Design Automation tools we use to design our chips. A Synchronicity interface is embedded in our EDA systems, such as Cadence, making work a seamless experience. And last but not least, we chose ENOVIA because we wanted a company that will work with us and support us and that speaks our language. There is a plethora of configuration management software on the market but it's the expertise of the ENOVIA configuration management and application engineers and the quality of the relationship with Dassault Systèmes and their local reseller AST that shifted the scales in favor of Synchronicity.

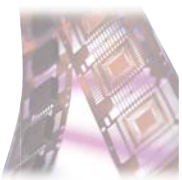
C.M.: What are some of the benefits encountered?

E.A.: Every day in chip design is critical. If we had to wait until a chip came back from production to find flaws, this could set us back months. It takes time for a chip to come back from production and time to check it. If we find errors related to configuration management it can be a very unpleasant situation especially if the errors are due to the fact that we used a wrong version of IP. Today this type of problem is close to zero.
We also developed automatic release mechanisms in Synchronicity, which is in sharp contrast to the way we worked before, i.e. using manual checklists. Today the time it takes to collect, integrate and release a design has improved dramatically leaving more time for innovation. And by identifying issues early, we have saved weeks in our overall product delivery process.

Communication between teams has also improved. We can trace the impact each failure will have throughout the entire design to production process and know exactly what issues will arise and where. We are more confident that we are implementing the right version and that the information we extracted was the information we intended to use. We cannot imagine our work today without a toolset like Synchronicity.

C.M.: What does the future hold?

E.A.: We feel today that we have the right solution and it is important to continue to the next stage and manage the entire product lifecycle. I think the integration between Synchronicity and IP Management for full PLM coverage is very important. Today we are mostly focusing on R&D and will continue to develop our configuration management system. We also plan to implement the Semi-Conductor Accelerator for IP Management. One day all the disciplines involved in chip production will use the same database. When all the different components of a product will talk and be managed together, we will have achieved a quantum leap in productivity •)



More about DSP Group

DSP Group, Inc. (Nasdaq: DSPG) is a leading global provider of wireless chipset solutions for converged communications at home. Delivering system solutions that combine semiconductors and software with reference designs, DSP Group enables world-leading consumer electronics (CE) manufacturers to cost-effectively develop innovative revenue-generating applications with fast time to market. At the forefront of wireless semiconductor development and operational excellence for over two decades, DSP Group provides a broad portfolio of chipsets integrating DECT, Wi-Fi, PSTN and VoIP/CoIP technologies with state-of-the-art application processors. Enabling converged voice, audio, video and data connectivity across diverse consumer products – from cordless and VoIP phones to IADs and home infotainment centers – DSP Group closely partners with CE manufacturers to shape the future of residential converged communications.
www.dspg.com