

Key Customers Succeed with IC Compiler II – P&R with the Power of 10X



“Imagination has long been an early adopter of advanced design planning technology that delivers tangible results. Thanks to some unique design planning capabilities offered by IC Compiler II, we observed a boost to the throughput of our design exploration flow by at least 10X. As a result, we were able to realize a high quality floorplan for one of our latest PowerVR Wizard GPU cores in a fraction of the time we'd normally assign for this task.”

– Mark Dunn
EVP IMGworks SoC Engineering
Imagination Technologies



“Our results with IC Compiler II are very promising. Initial applications have demonstrated impressive turn-around times, especially at early phases where design exploration hinges on speed-to-results. While using IC Compiler II on a large hierarchical module of a current production design, we also noted significant improvements in QoR. We look forward to continued collaboration with Synopsys on the use of IC Compiler II.”

– JC Parker
Sr. Director, Design Tools & Methodologies
LSI Corporation



“IC Compiler II delivers breakthrough performance compared with IC Compiler, accelerating design turnaround, reducing memory requirements. We were particularly impressed by its scalable MCMC technology, which considers operating scenarios. We have already deployed IC Compiler II in real use and have leveraged the runtime power to improve the performance and reliability of our production LSI design.”

– Yasui Takuya
Manager, System LSI Business Division
Panasonic



“We have a long history of collaboration with Synopsys on improving throughput and productivity in physical design. IC Compiler II represented the single biggest leap in productivity we have seen in many years. On a Renesas design, IC Compiler II exhibited at least 7X runtime and 3X memory improvement, while delivering competitive quality of results. We are working with Synopsys to deploy IC Compiler II into production use.”

– Tatsuji Kagatani

*Department Manager of Design Automation Department
System Integration Business Division
Renesas Electronics Corporation*



High-performance design is Samsung’s lifeblood and Samsung sees IC Compiler II as key enabler for pushing the envelope on performance. IC Compiler II has demonstrated exceptional implementation speed-up on Samsung’s key processor design and Samsung is actively collaborating with Synopsys on utilizing the throughput gains to drive higher performance in production designs.

Samsung



“In our ongoing tapeout with IC Compiler II, STMicroelectronics is benefiting from an unprecedented 10x faster floorplan creation and 5X faster design implementation over previous approaches. Coupled with the capacity to handle partitions 2-3 times larger than any other solution, it is paving the way to an entire new way of thinking about physical design.”

– Indavong Vongsavady

*Director, Design Enablement and Services, Central CAD & Design Solutions
STMicroelectronics*



“We are extremely impressed with the unprecedented runtime speedup and superior QoR delivered by IC Compiler II on this tapeout. The ultra-fast implementation turnaround times enabled daily iterations on this complex SoC, allowing us to exceed our QoR goals. We have released our IC Compiler II based design kit to commence standardization on IC Compiler II to enable other critical designs within Toshiba to benefit from these game-changing capabilities.”

– Mr. Kazunari Horikawa

*Sr. Manager of Design Technology Development Department, Mixed Signal IC Division
Toshiba Corporation*



“Looking back, we can safely say it would have been exceedingly difficult to do a chip of this magnitude without IC Compiler II. Our experience proved the promise we saw early in the design with 10X faster design exploration and 5X faster implementation, enabling us to refine floorplans, up-size physical partitions and achieve faster clock speeds on this tapeout.”

– *Thierry Bauchon*
R&D Director
STMicroelectronics



“With our incumbent solution, gates to placement was about a day. With IC Compiler II we were able to cut it down to 5 hours. This is a huge improvement; a very big deal for us.”

– *Haroon Gauhar*
Principal Design Engineer
ARM



“Running full flow for 5M instances was achieved in less than 24 hours. By this amazing performance, we immediately decided to develop the IC Compiler II-based design kit.”

– *Tadahiko Yamamoto*
Chief Specialist
Toshiba



“By switching to IC Compiler II...it gave us 5X improvement. ...This level of productivity is truly a game-changer to enable us to have physical implementation overnight.”

– *Jiu-Shang Yang*
Technical Manager
MediaTek



“Design planning in IC Compiler II went from 3 days to 7 hours...P&R runtime 5-7X faster...full IP implementation in 8 weeks! Meeting the market window was not possible without IC Compiler II.”

– *Masakazu Nishibori*
Team Lead, Back-end Design
Renesas Electronics Corp.



“Cavium is already reaping the benefits of IC Compiler II, through both completed tapeouts and others in flight. With data volumes increasing exponentially year-over-year, we see IC Compiler II as a truly exciting solution to help meet our ever-shrinking development schedules for our highly differentiated networking solutions across all process nodes. Given the very real benefits that we have seen since our early collaboration with Synopsys, we are aggressively deploying and standardizing on IC Compiler II across our extensive development program.”

– Vishnu Yalala
Senior Director of IC Engineering
Cavium



“The certification of IC Compiler II on our latest, 16-nanometer production FinFET Plus process brings our industry-leading flows and methodologies to our mutual customers at this exciting production node. Our long, ongoing and deep collaboration with Synopsys served as the solid foundation to enable this certification collaboration.”

– Suk Lee
Senior Director, Design Infrastructure Marketing Division
TSMC