Interview: Encounter 6.2: Reduce Duplication and Minimize Power Domain
From cdnusers.org on 4 April 2007

The release of Encounter 6.2 brings both feature maturation and new features to digital IC designers. In this cdnusers interview, Mui-Chwee Tong, Cadence product engineer lead, briefly discusses the most important features.

cdnusers: Tell us about your background working with the Encounter 6.2 product release.
Mui-Chwee: I’ve been Product Engineer Lead since SOC6.1. As PE lead, I organise and review specifications, help the PE team to meet expected milestones, organise alpha demos, conduct trainings, look out for possible design flow issues when new features are introduced and run regressions during the alpha and beta phases. In addition, I’m also product engineer for ECO and X feature in Encounter 6.2.

cdnusers: What is the one new thing designers should know about this release?
Mui-Chwee: This is a very difficult question. Encounter rolls out so many exciting features in every release and designers have many different interests. If I were to pick one feature, I think everybody should know our low power feature is maturing and supports Common Power Format (CPF).

cdnusers: Tell us how CPF works in Encounter 6.2
Mui-Chwee: CPF allows designers to incrementally add new information as the design progresses in the design flow. This will minimize all the effort to describe the power domain information again and again when the design needs to be processed by another tool. Hence CPF reduces duplicating effort and minimizes the chance of making errors.

cdnusers: Now tell us about a couple more features that users of Encounter 6.2 will find helpful.
Mui-Chwee: There are many more, such as ecoRemap, X, DFM/DFY. ecoRemap is a new feature introduced in 6.1 and maturing in 6.2. It allows designers to focus on the functional changes that they wanted to do and lets the tool take care of spare cell mapping that will yield the best timing and DRV. Without this feature, designers could spend weeks on multiple ECO iteration to address both functional changes and timing.

Another exciting feature is X. Encounter 6.2 allows designers to experience the power of X. When using it correctly, designers could reduce wire length and via count of the design. This will eventually lead to less power, better congestion, better yield and smaller die area. But, I must say
there are more X features planned to roll out in the next few releases, stay tuned!

Another emerging useful feature is DFM/DFY for 65nm and below. Encounter 6.2 could provide wire spreading and wire widening to improve yield.

cdnusers: Now some personal questions. How do you concentrate when working? Any tricks?
Mui-Chwee: Concentration is a challenge as PE; still trying to figure out a better way for "context switching". Too bad my brain is just a single core, no multi-threading. But, taking some time out for some exercise can effectively restore my concentration.

cdnusers: Where do you do your best thinking?
Mui-Chwee: Discussion with someone, anybody. Many times the answer is there when you try to present the problem to somebody.

cdnusers: What do you do after a long day or week of working on the Encounter products to relieve your stress levels?
Mui-chwee: Jogging. Jogging can be painful, but it strengthens my determination and regains a clear mind. It is a process to convert mental stress to physical stress, and allows you to rest better.