

## **Introducing Model Studio**

Carbon Design Systems is introducing Carbon Model Studio, a complete solution for the generation, validation, and deployment of hardware-accurate models. Built on Carbon's proven model compilation technology, Carbon Model Studio features an easy to use graphical user interface that simplifies the task of generating and managing models. This interface manages the entire model generation flow: from HDL source code, through build processes, to the integration with a virtual platform. Built in project management, error navigation and source code browsing allows one to easily identify modeling issues, correct them, and rebuild with a single click.

Carbon Model Studio provides drag-and-drop mapping of your cycle and pin-level RTL to the transaction level interfaces of ESL environments. Carbon Model Studio's ESL platform integrations include ARM RealView SoC Designer, CoWare Platform Architect, and OSCI SystemC.

While simulating a virtual platform, Carbon Model Studio assists the debug and management of the Carbonized RTL Models. Debug features like waveform generation and Carbon Model Studio's acceleration features (OnDemand and Replay) share a simple unified interface enabling easy user control

Carbon Design Systems is also unveiling OnDemand, an acceleration plug-in for Carbon Model Studio. OnDemand enables virtual platforms to run at maximum speeds while incorporating 100% hardware-accurate models. OnDemand gives Carbon Models the ability to automatically detect when a model is idle and to automatically disable itself, freeing precious CPU cycles for relevant testing. Conversely, an OnDemand enabled model will automatically detect non-idle stimulus and re-enable itself. The result is a model with very little runtime overhead, enabling software to be developed and debugged at instruction set simulator speeds and execute hardware behavior only when it is needed.

Along with the introduction of the Carbon Model Studio, Carbon Design Systems is releasing an upgraded integration with the SystemC platform. The improved SystemC integration is more robust and allows users greater control including the ability to specify the SystemC port types.