GreenSocs, Lauterbach and Western Digital Corporation work together to provide a coherent development environment using QEMU, SystemC and TRACE32

GreenSocs SaS, a French company and part of the Coseda Alliance, specialising in SystemC and QEMU, is pleased to announce an integration with the TRACE32 debug technology from Lauterbach GmbH, a German manufacturer of development tools specializing in debuggers and logic analyzers used for debugging embedded systems. The integrated development environment is now in use within Western Digital Cooperation, an American computer data storage company and one of the largest computer hard disk drive manufacturers in the world.

The integrated development environment allows Western Digital software designers to use an unlimited number of QEMU and SystemC based virtual platform models for their development and continual testing needs. QEMU is a generic and open source machine emulator and virtualization tool; it provides fast CPU models of a number of different architectures. SystemC standardized as IEEE 1666, is a set of C++ classes and macros which provide an event-driven simulation interface. It is the standard environment for constructing Virtual Platform models.

GreenSocs provides a sophisticated coupling between SystemC and QEMU. The advantage Lauterbach brings is the richness of the debug environment, which allows WDC to take full advantage of the virtual platform. The integration provided by GreenSocs allows the full performance advantages of QEMU and SystemC to be exploited (including multi-threaded simulation).

Jun Liu of Western Digital said “GreenSocs have supported us through this journey, and we are now able to use the same simulation technology to simulate a number of different core architectures, at extremely good simulation speeds, this has enabled our software teams to make great progress. The Lauterbach integration means we have a high-quality debug environment working efficiently with our own SystemC models and infrastructure”.

Mark Burton from GreenSocs said “We are exceedingly pleased to integrate these different technologies together, enabling our customers with a comprehensive environment for both software development and continual integration. SystemC is the glue that holds us together, but the way it’s used, and allowing multiple cores to use multiple threads brings a step change in simulation performance. Combining this with the Lauterbach technology gives the end user a complete, high performance virtual platform and debug package ideal for software and firmware engineers.” More information about GreenSocs can be found at http://www.greensocs.com/

“Lauterbach are happy with the way this integration has been accepted in the marketplace and the innovative nature fits perfectly with our company ethos of leading through technology. Software and firmware engineers are being called upon to deliver world class solutions whilst under the extreme pressure of time to market and leading edge solutions such as this have allowed our customers to stay at the top of their fields”, says Norbert Weiss, International Sales Manager at Lauterbach.