This eNewsletter brings   you a new article form our vendor Oregano Systems form Austria regard the IEEE 1588 standard. As you know KAL and Oregano provide a full solution for 1588 application for ASIC/FPGA.

Using the World's Smallest SYN1588® Fully Integrated Clock Synchronization Solution as a Building Block for a Radically New Approach to Coordinated Test, Debug, Trace and Replay in Distributed Systems

The complexity of embedded systems together with network bandwidth keep increasing constantly, not to mention the complexity of the networked distributed systems that are built from a plurality of such embedded units or the software they run. Support for test and debugging is hence routinely built into microcontrollers and SoCs, which typically form the centrepiece of embedded units. Currently this support, however, completely neglects the distributed character of today's and future systems.

A new solution for coordinated test, debug, trace and replay in distributed systems is thus introduced. It proposes that each of the networked embedded systems uses a high precision clock synchronization mechanism to guarantee a system wide global notion of time. To this end a fully integrated clock synchronization solution is presented, since it offers an unrivalled small memory footprint and gate count, while it is yet fully compatible, precise, and easy to use.

Furthermore dedicated hardware support is added to each node to allow the execution of debug and test tasks. Software on a single monitoring computer connected to the network performs debug and test actions just as if the nodes of the system were directly connected. Using this new solution it becomes possible to perform precisely coordinated test, debug, trace, and replay in distributed systems, thereby not requiring extra cabling and being operational even if the systems are already embedded in their

place of installation.

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We provide our customer with professional consultancy and ASIC Program Management, Consultancy Service. KAL has worldwide partners to provide Digital /RF/Analog ASIC Design Service, Supply Chain Service, Silicon IP Cores, EDA Tools as well as On site Engineering Service.

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Until then, we thank you for your continued support!

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