Embedded test and validation for 6th generation Intel® Core™ processors

The recently launched sixth generation Intel® Core™ processors codenamed Skylake are now also supported with special model libraries for testing and validation. The libraries, called VarioTAP®, models, allow flexible execution of processor emulation tests using the processor’s native debug interface. Thereby the CPUs can be used as embedded test tools for design validation of prototypes and production test applications.

The processors with the Skylake microarchitecture were introduced in August 2015 as a successor to the Broadwell architecture. Like its predecessors, they are manufactured in a 14 nm process, thus offering higher CPU and GPU performance with reduced energy requirements. The development and verification of the VarioTAP models was realized in cooperation with the company Congatec, using the fanless, sealed COM Express Module TC170.

The BGA socket and the new LGA 1151 socket of the Skylake processors typically do not allow direct contact with external instruments. VarioTAP® offers embedded instruments for test, hardware debug and design validation even after mounting. Users in the field of OEM, EDM and EMS can now refer to new tools to accelerate prototyping, shorten time frames for New Product Introduction (NPI), and ensure the quality of production test with reduced access.

In the context of new product development, GOEPEL electronic has joined the Intel® Intelligent Systems Alliance as General Member. Intel Intelligent Systems Alliance is a global ecosystem of 200+ member companies that provide the performance, connectivity, manageability and security developers need to create smart, connected systems. Close collaboration with Intel enables Alliance members to innovate with the latest technologies, helping developers deliver first-in-market solutions.

Picture: Congatec COM Express Compact Module TC170 with Intel® Core™ processor, connected to TIC122 TAP Interface Card from GOEPEL electronic.
About GOEPEL electronic:
GOEPEL electronic is a worldwide leading vendor of innovative electronic and optical test and inspection systems, being the market leader for professional JTAG/Boundary Scan solutions for Embedded System Access (ESA). A network of branch offices, distributors and service partners ensures the global availability of the products as well as the support of the more than 8,000 system installations. Founded in 1991 and headquartered in Jena/Germany, GOEPEL electronic employs currently more than 215 employees and generated a revenue of 30 Million Euro in 2014 (ca. $32 Mio). GOEPEL electronic has continuously been ISO9001 certified since 1996 and has been honoured with TOP-JOB and TOP-100 awards for being one of the best medium-sized companies in Germany. GOEPEL electronic’s products won several awards in recent years and are used by the leading companies in telecommunication, automotive, space and avionics, industrial controls, medical technology, and other industries. Further information about the company and its products can be found on the internet at www.goepel.com.