

Company profile

Evidence is a company operating in the field of software for embedded real-time systems. It was established at the end of 2002 as a spin-off of the ReTiS Lab of the Scuola Superiore Sant'Anna (Pisa).

Today, Evidence is a dynamic company that can boast collaborations with important subjects operating in the electronic, telecommunication, automotive, and industrial automation markets.

Mission

We provide innovative software solutions for the design and the development of real-time embedded systems, with a special focus on multicore hardware platforms.



Erika Enterprise and RT-Druid for Altera NIOS II

Advanced solutions for multicore applications

Evidence s.r.l.

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The development trends for next generation embedded devices shows that the future lies in multicore devices on the same chip.

Thanks to the configurability of FPGAs, the Altera Nios II platform gives developers the opportunity to design a multicore system-on-a-chip solution in few minutes.

Although the hardware design is simplified by tools like Altera SOPC Builder, the application development is made complex by the need to spread out the application code among different processors.

Evidence solutions aims to bring new approaches to the conventional embedded systems. Evidence provides two innovative products:

Erika Enterprise is an advanced RTOS for multiprocessor application that is the only kernel offering availability of a multiprocessor ready interface to developers working on the Altera NIOS softcore platform.

RT-Druid is a configuration tool that helps the developer in managing the design flow of an embedded project, allowing easy configuration of the system parameters.

Erika Enterprise and RT-Druid solve the main problems related to application development in multicore designs based on Altera Nios II.

- Per-seat licence
- Source code
- Royalty free
- The price is independent from the number of Nios II CPUs
- Maintenance contract included for the first 12 months

A free demo version of
Erika Enterprise and RT-Druid
is available at
www.evidence.eu.com

Erika Enterprise and RT-Druid

Solutions for multicore

Portable API

Each task can be thought to run on a single processor multi-threaded environment.

Multiprocessor support

Multiprocessor issues - like data cache disabling and mutual exclusion between different CPUs accessing concurrently at the same data structures - are handled automatically, simplifying the application design and verification.

Code placement

Multiprocessor hiding allows to migrate application code from a single processor to multiprocessors without changing too much the application source code.

Increased performances

To re-target an application from single to multiprocessor architectures you only require different OIL configurations.

Altera and Eclipse support

Full integration with the Altera SOPCBuilder components and the Altera HAL.

Erika Enterprise and RT-Druid for the automotive market

Real-Time predictability coupled with tiny footprints and small RAM memory usage are typical features required by automotive applications.

Erika Enterprise provides Hard Real-Time support, predictability and limited footprint for automotive applications designed with Altera Nios II.

RT-Druid toolset has been successfully integrated into the automotive power-train design flow of Magneti Marelli Powertrain Spa.

