



EVIDENCE[®]
EMBEDDING TECHNOLOGY

Evidence

(short) company description ...and a bit of roadmap!

Paolo Gai, pj@evidence.eu.com

IWES Workshop

Roma, 7 September 2017

The company



Retis Lab S. Anna

21 people, average 38 yrs
30% PhD degree



Located in Pisa

Working on a wide range of embedded applications and research topics

AUTOSAR

AUTOSAR Development member
since May 2017

Our Mission: We design and develop great software for small electronic devices



all rights reserved

www.evidence.eu.com

products and services

RTOS , Firmware, Embedded Linux

- AUTOSAR, OSEK/VDX, device drivers
- Embedded Linux: 12 Yrs experience
BSPs, GCC, U-Boot, Kernel drivers
- Initial developers of the SCHED_DEADLINE patch
- Hypervisors, Android, Ubuntu Core, QEMU and emulators



Application Development



Model-based design

- Matlab/Simulink/Stateflow



- National Instruments
LabView



- E4Coder toolset for code generation



- UML/SYSML/Ecore/
Eclipse/Accelio



(some) customers

OSEK, microcontrollers,
schedulability analysis,
code generation



Vodafone
Automotive



Linux,
SW devel.



SISTEMI
DINAMICI



Listed as 3rd party



ERIKA Enterprise (v2 and v3)



<http://erika.tuxfamily.org>



<http://www.erika-enterprise.com>

- ERIKA Enterprise is an RTOS **OSEK/VDX certified**
- ERIKA Enterprise implements the **AUTOSAR OS API**
- **open-source license and double licensing options** allowing **static linking** of closed src code
- Used by various industries and research projects

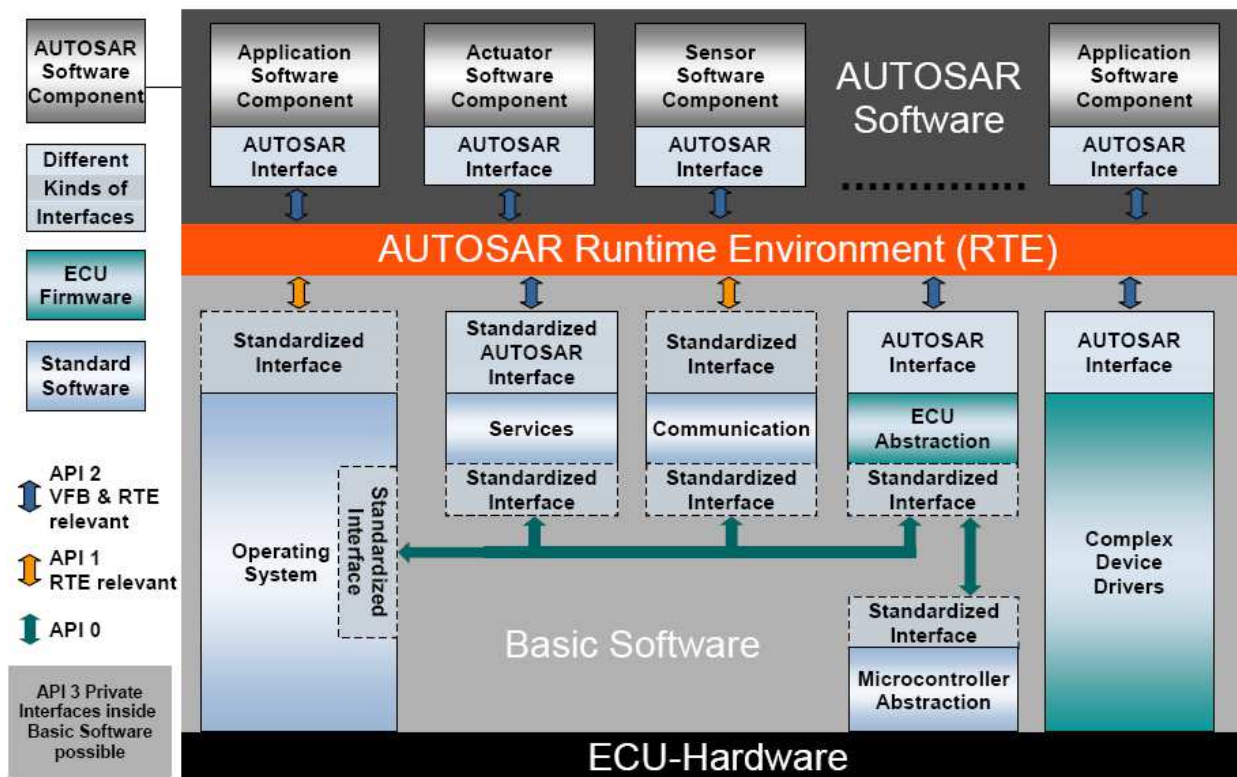


Vodafone
Automotive



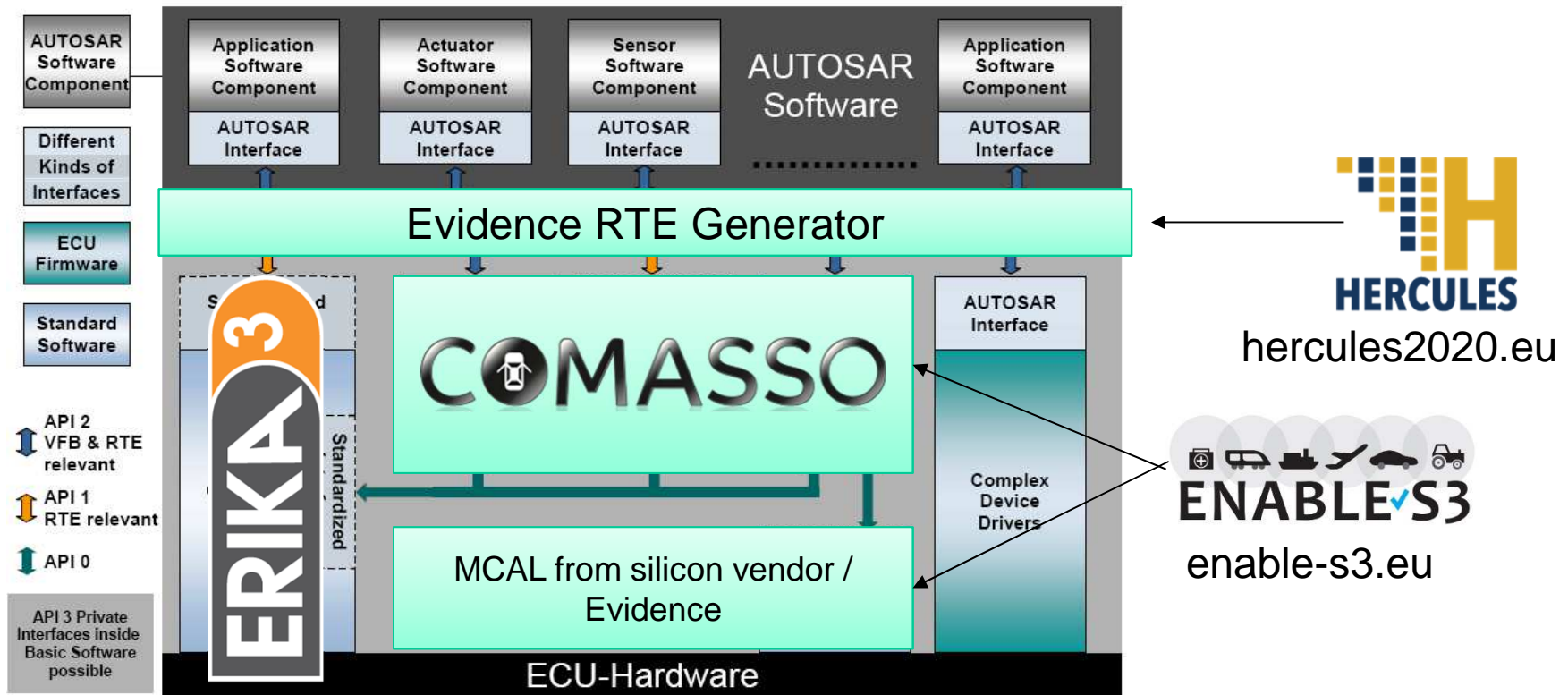
Building an AUTOSAR stack...

We want to fill the gap on Automotive SW providing a fully open-source (mostly Italian!) AUTOSAR system, ISO26262 compliant!



Building an AUTOSAR stack...

We want to fill the gap on Automotive SW providing a fully open-source (mostly Italian!) AUTOSAR system, ISO26262 compliant!

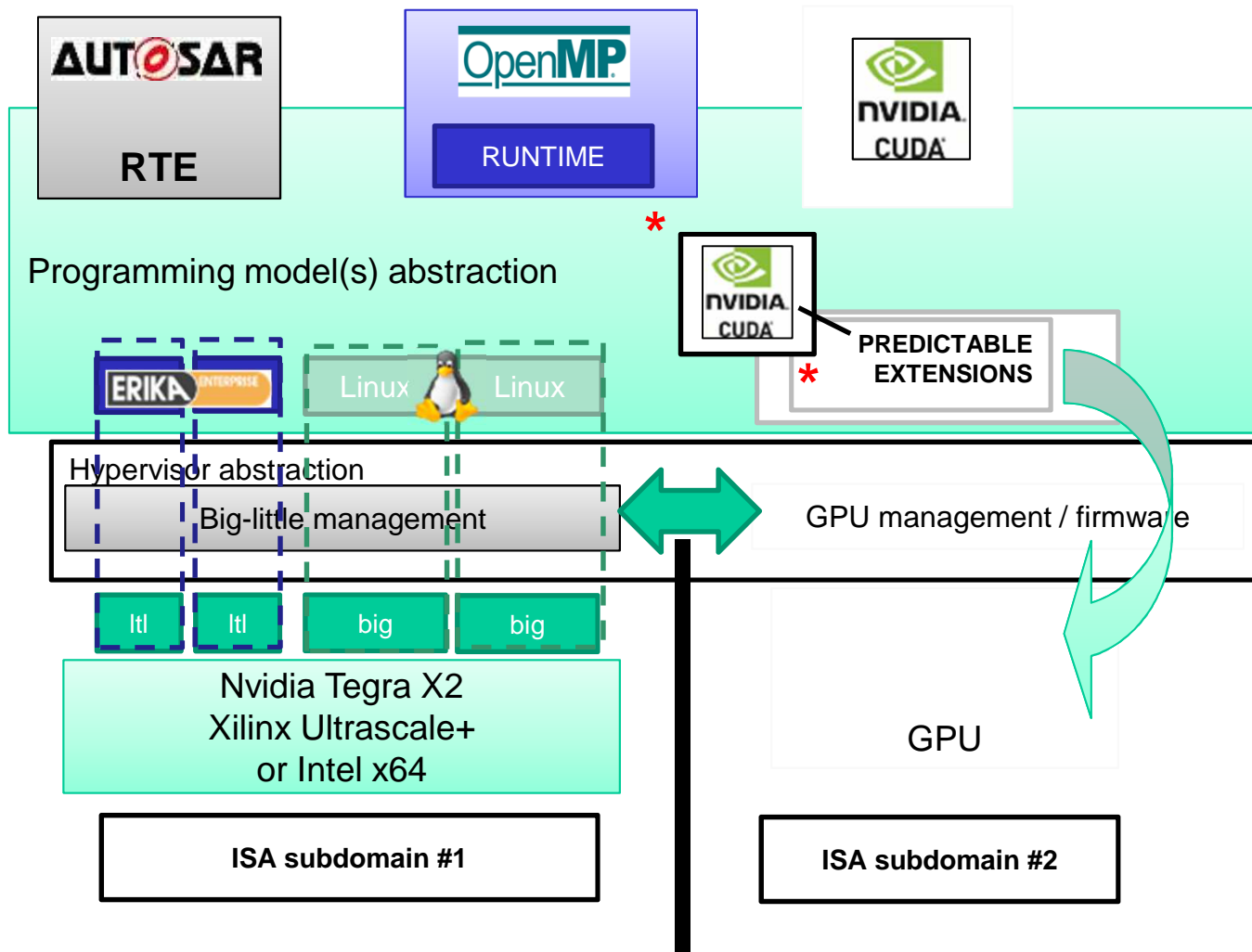


...integrated with Linux and Hypervisors

- We work on the Linux Kernel internals
 - Scheduler internals
 - GRUB Scheduler Patch just accepted mainline!
 - Power management
 - Network subsystem
 - Custom drivers
- We work with latest JailHouse, Xen, NVidia Vibrante

To merge ERIKA3 and Linux in a single real-time platform
for automotive and industrial usage

Mixing Linux, Hypervisors and AUTOSAR



RETINA

retinaproject.eu


HERCULES
hercules2020.eu

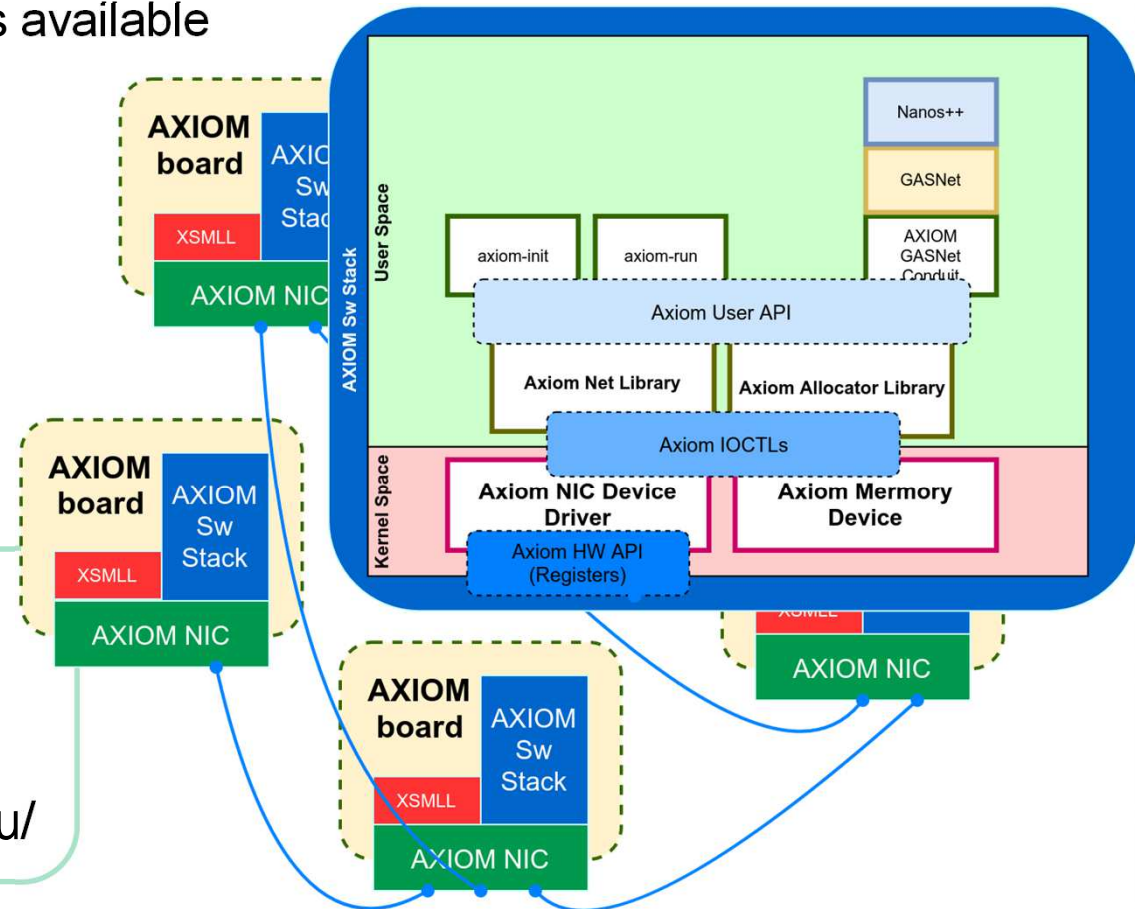
AXIOM – first SW stack available now!

- Real board based on Zinq Ultrascale+ or QEMU Emulation
- AXIOM-Link software specs available
- Device drivers
- Memory allocator
- Utility apps
- GASNet Spawner
- OmpSs@Cluster
- Currently reaching >8 Gbit/sec RDMA!



SW stack Available today!

<http://www.axiom-project.eu/>



...working with Evidence

```
char msg[] = {78, 111, 119, 32,  
              72, 105, 114, 105, 110, 103, 0};
```

- Master/PhD, Engineering/Computer Science
- C/C++/Qt/Java (Eclipse Ecore/Android)/Control engineers/Python
- **Passion, Passion, Passion!**
 - Passion for embedded systems
 - Passion for Linux internals
 - Passion for software architectures
- We are looking for good programmers, geeks allowed!

...what we offer

- A nice place to work (in Tuscany!)
- (Typically) in Pisa
- With great (and smart too!) colleagues
- In a (really!) collaborative environment
- (Depending on your tasks and attitudes)
possibility to travel for EU and Italian research projects
- A (probably too much?) dynamic environment... You'll
(almost) never do the same thing twice

Please send your CVs to info@evidence.eu.com

Contacts



Evidence Srl
Via Carducci 56
56010 S.Giuliano Terme
Pisa - Italy

Web: <http://www.evidence.eu.com>

E-mail: info@evidence.eu.com

Phone: +39 050 99 11 224