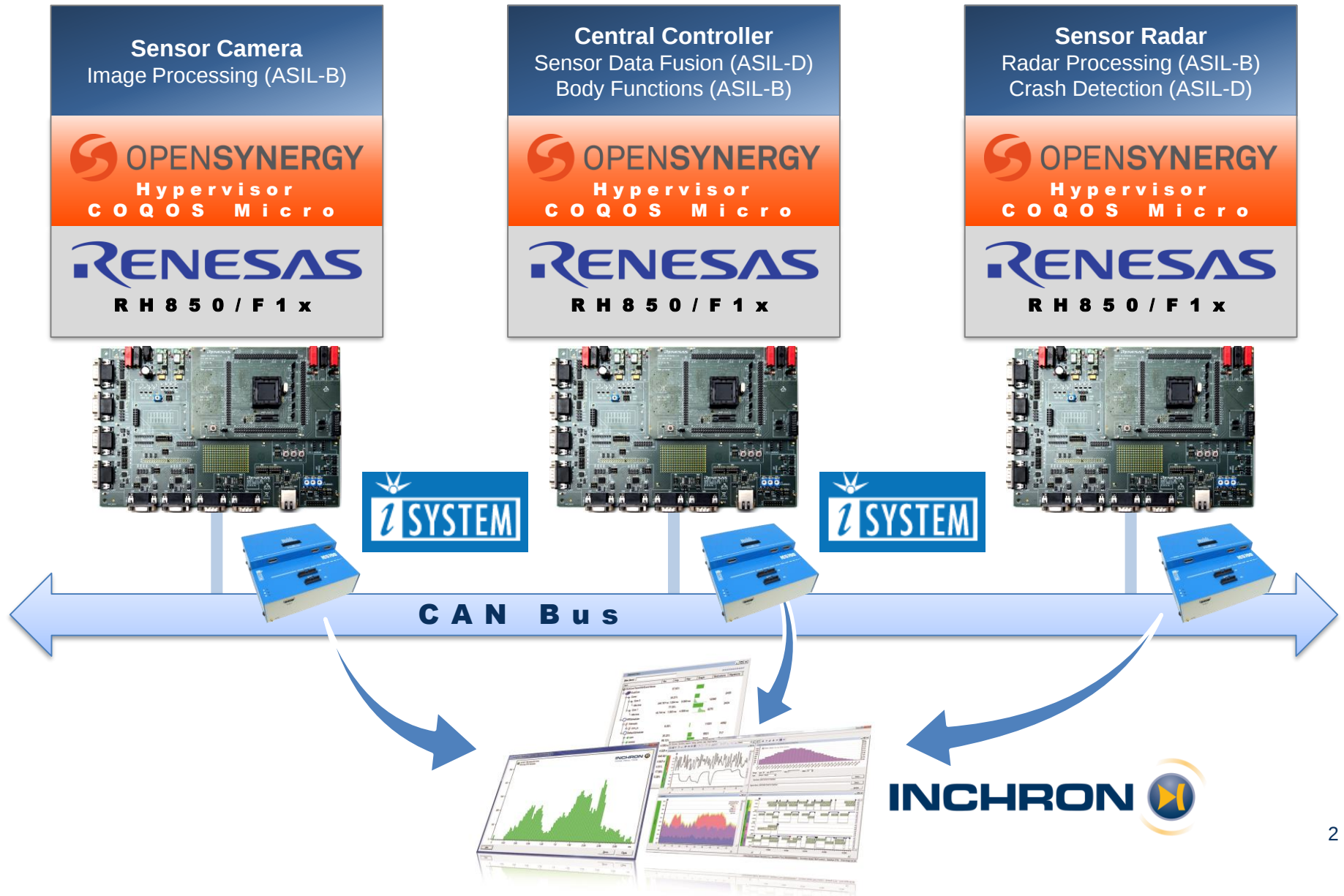


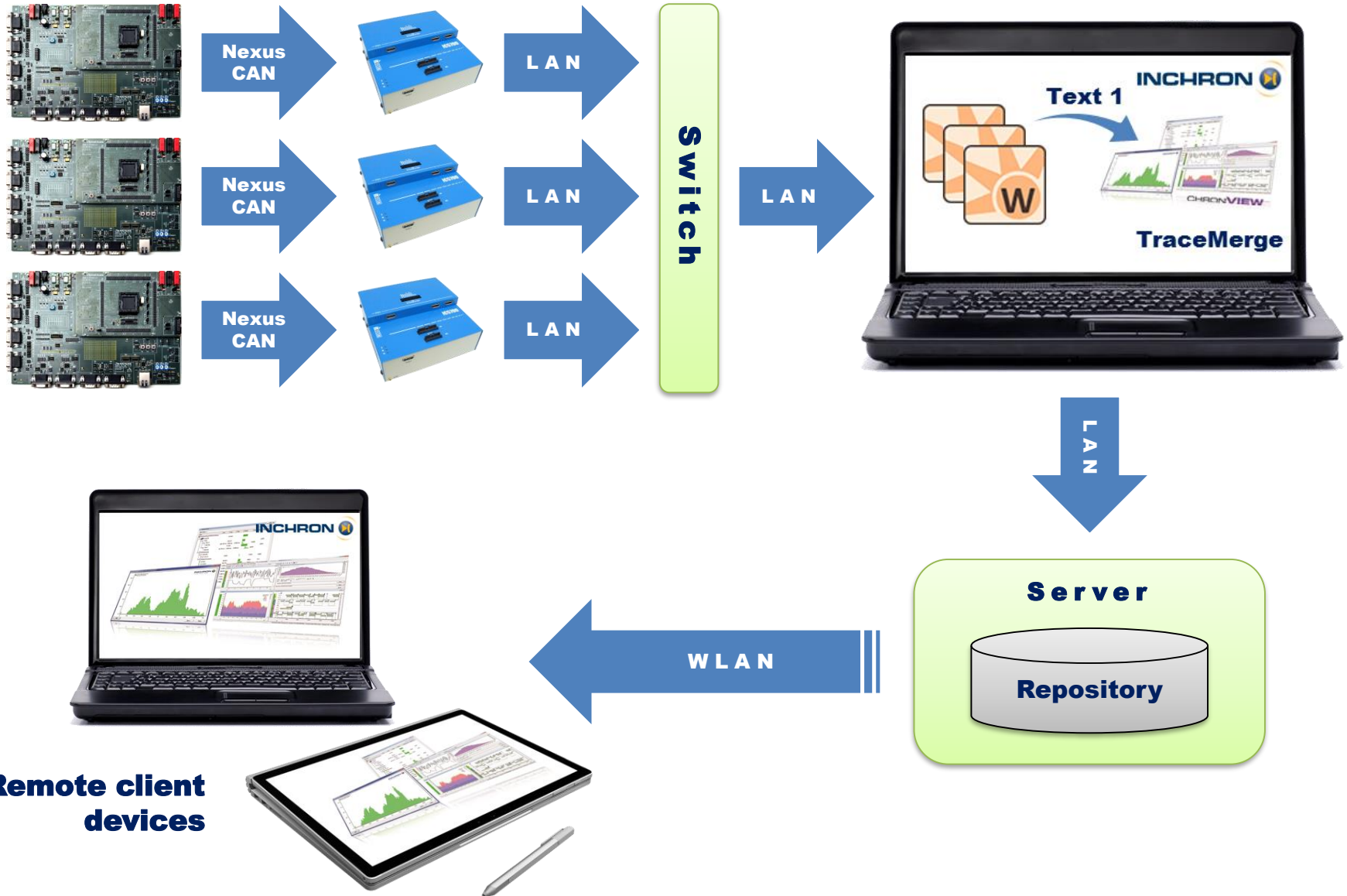


Efficient Development of Automotive Embedded Systems
by **Renesas, OpenSynergy, iSYSTEM and INCHRON**

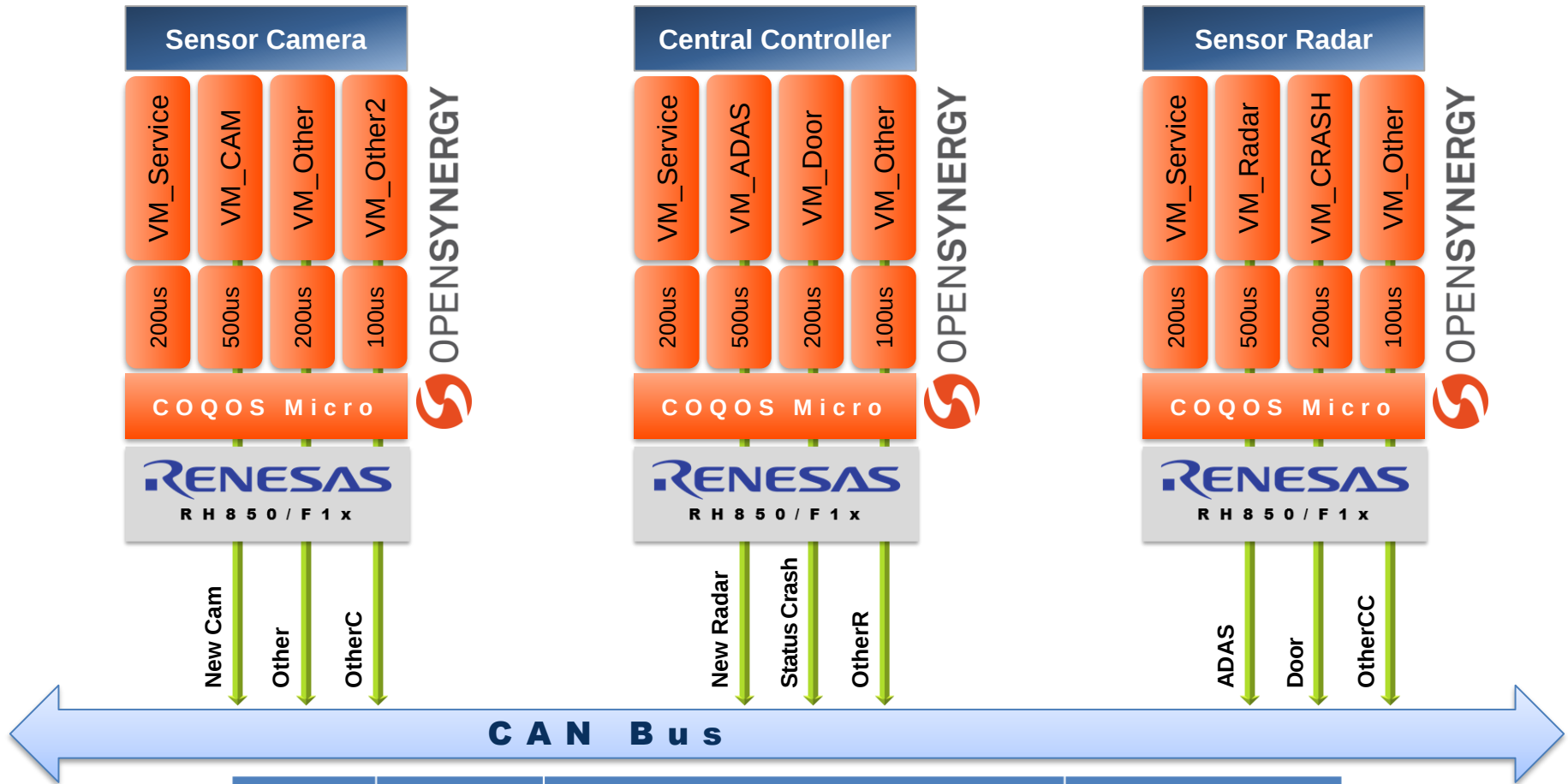
Demonstrator Setup



Data flow



VM and CAN Setup



ID	Name		
0x100	NewCam		
0x110	Other		
0x120	OtherC		

Demonstrator Setup



Enhance the capabilities of your existing trace and debug tool

Reliable decisions

- Function mapping
- Execution order
- Partitioning
- Activation period
- Priority
- Start offset
- Core affinity
- Resource sharing

Efficient analysis and diagnosis

- CPU load
- Net execution time
- Response time
- Jitter
- End-to-end latency
- Data age / loss / reuse
- Blocking time

Intuitive trace visualization

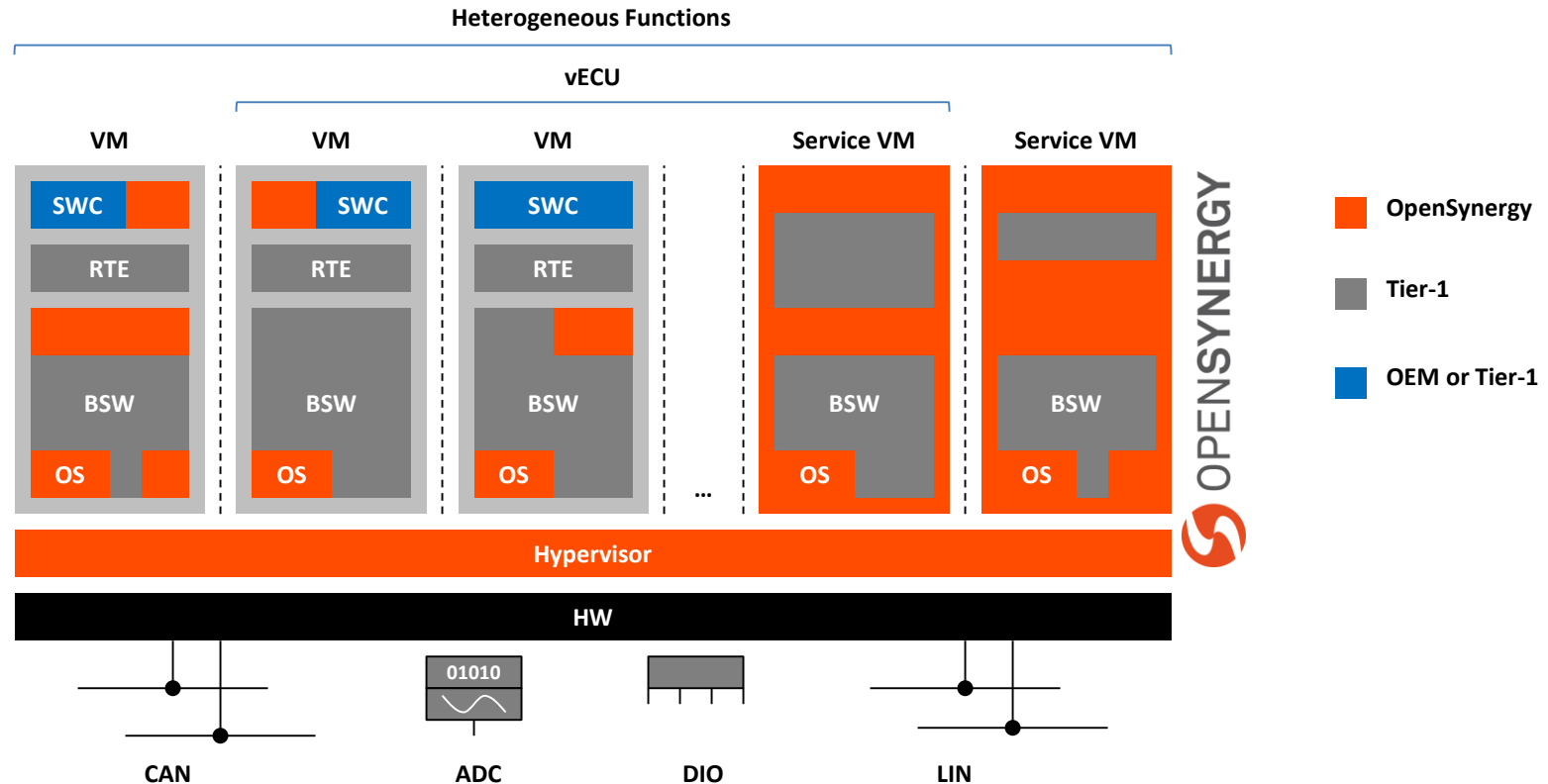
- RTOS states
- Function nesting
- Events
- Data values
- Rate changes
- Data flows
- Stack consumption



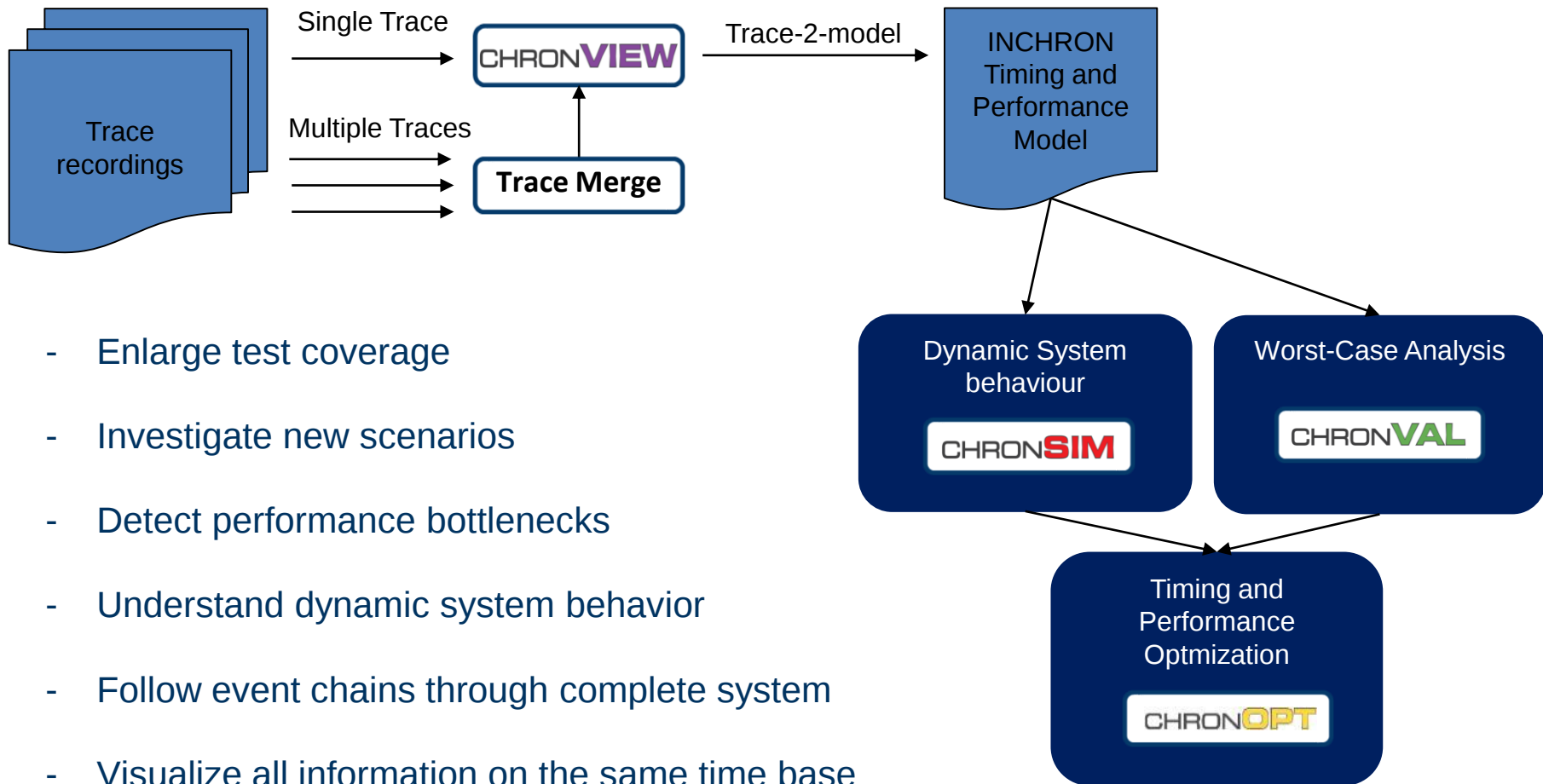
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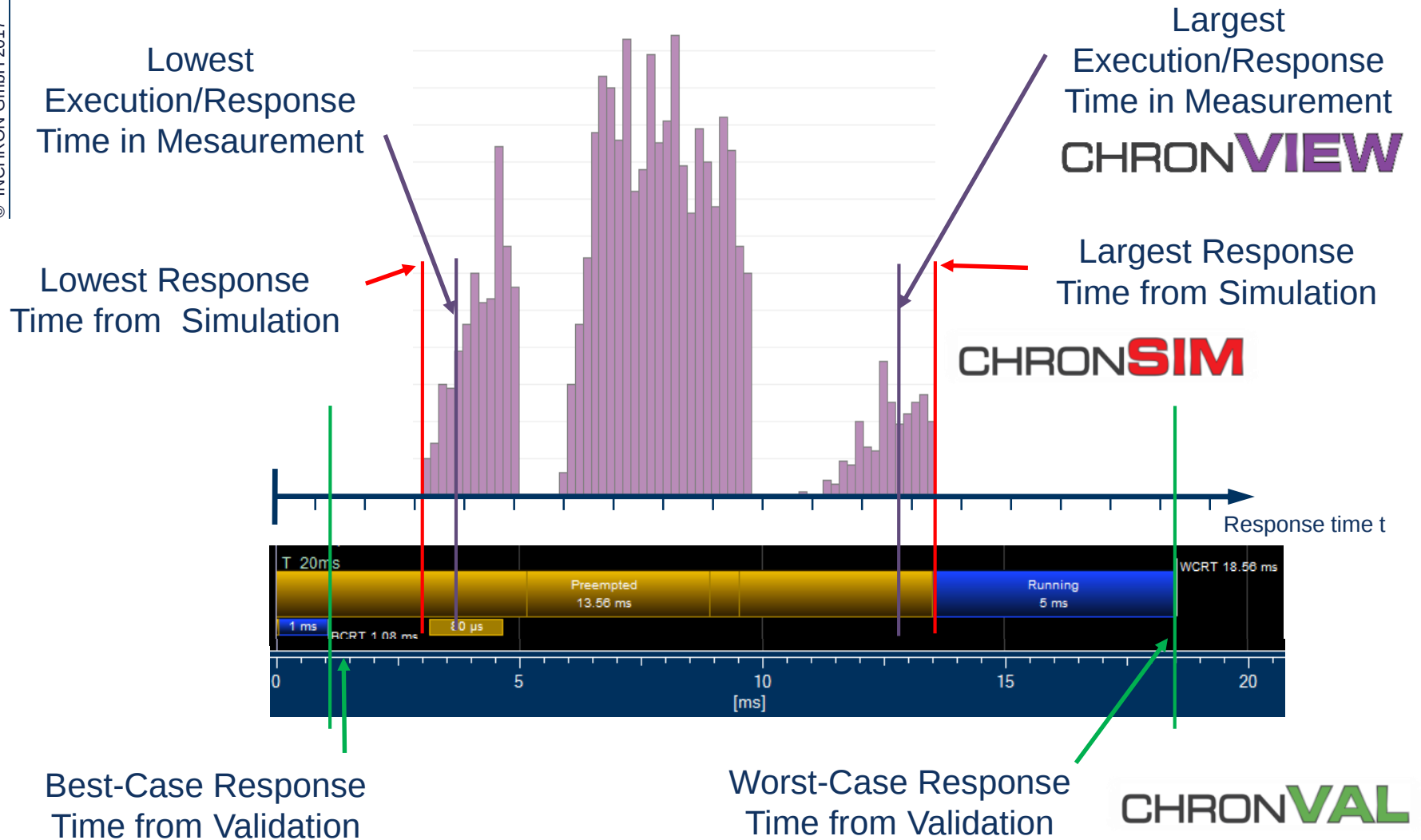
Overview COQOS Micro



- A **VM (Virtual Machine)** is a software container running on top of the separation kernel. A VM consists of a single OS and user software. 3rd-party BSW, RTE and SWC may be part of a VM to provide system functions.
- The **Hypervisor** (separation kernel) is responsible for the scheduling of the VMs and for the software containment (freedom from interference – ISO 26262).
- A **Service VM** is a specialized VM able to provide basic functionality to VMs (shared access to I/O as an example) as an intra-ECU service.
- The **COQOS Micro** software platform supports the clustering of VMs to enable the concept of vECU. A vECU is able to act as a standard ECU (diagnostics as an example) at the vehicle system level.



Measurement – Simulation - Validation



Get in touch!

