

SIMULATION

DIGITALIZE YOUR PRODUCT BEFORE YOU ACTUALLY PRODUCE IT

One of TRITEM's main areas of expertise is turning the physical software-controlled systems into their virtual representations. A Virtual HiL cannot operate without some of the parts of the system being simulated. This is true also about a **Digital Twin** of the system which is already operating in the field.

There are dozens of simulation frameworks in the market and each of them may have its own advantages and disadvantages. However, the tricky part is to find out the optimal balance between what is needed and what is not really needed to make the other subsystems "think" they're interacting

with a real piece of hardware. Here is where TRITEM's technologies really shine: our **ELMo®** simulation engine operates on a logical level, taking into consideration the wiring of the system and the functionality of its individual components. It knows what to simulate (even in real time) and what can be kept out of the scope to make sure that no simulation development effort is put to waste.

By making it so smart, we made it extremely flexible at the same time. **ELMo®** is capable of adapting itself automatically within minutes in response to the changes in the system's architecture, electrical setup or control software. This greatly reduces the amount of time and effort necessary to switch between product variants or to test other solutions.

If you are familiar with the concept of Digital Twin, you need to know that TRITEM's software can put together the pieces of your idea and change it into a virtual reality. We leverage this technology in our **Virtual-HiL** concept applied within our **EXiL** platform.

WHAT DO YOU GET?

- ✓ Your complete system – in a virtual form
- ✓ A state-of-the-art logical simulation solution applicable in a HiL-like testing solution or a Digital Twin
- ✓ Full support of Real-Time simulation on hardware interface signals and buses
- ✓ Dedicated service ensuring that the quality of the simulated models is as good as it gets
- ✓ Modelling services – let our experts do it for you