Accelerating Smart Products developments

in High Tech & Electronics

Dassault Systèmes recently announced that they had acquired Geensoft.

Through this strategic acquisition, the V6 solutions portfolio is expanded into the whole area of embedded systems development and simulation, with the ambition to deliver the next generation of systems engineering PLM solutions, extending CATIA Systems capabilities to Embedded Systems & Software, reinforcing V6 Platform openness capabilities to help customers manage requirements throughout the complete product development process.

Over 95% of all electronic chips produced today are for Embedded Systems. Embedded systems are ubiquitous. Our global economy, our production of food, our transportation systems, our military defense, our communication systems, and even our quality of life and security depend on the efficiency and effectiveness of these embedded systems, which add substantial value to products.

They now include a very large proportion of the advanced products designed in the world, spanning transport (avionics, space, automotive, trains), electrical and electronic appliances (cameras, toys, televisions, home appliances / domotics, audio systems, and cellular phones), process control (energy production and distribution, factory automation and optimization), telecommunications (satellites, mobile phones and telecom networks), energy (production, distribution, optimized use), security (e-commerce, smart cards), and health (medical equipment, mobile monitoring), etc.

In the design of embedded systems it is necessary to make a number of technologies play together as the field of embedded systems is showing an increasing integration of mechanics with electronics and information processing (software functions and hardware processing units).

Embedded Systems are also characterized by integration of multiple components from different suppliers, with large variability to accommodate different configurations, and regulations constraints.

Managing this complexity and variability proves challenging to hardware and software engineering teams, who state requirements, describe problems, and test and implement solutions in different ways.

In recent years, DS has heavily invested to meet strong customer demand for multi-disciplinary integration and collaboration, and thereby support its customers' transformation strategies.

DS's V6 PLM platform delivers a unique collaborative environment that will bring together multiple systems engineering disciplines, working with literally hundreds of disconnected domain specific tools today.
By leveraging Geensoft technology on the V6 platform, and exploiting the power of 3D together with information search technology, DS is positioned to deliver a new class of PLM systems engineering solutions, providing:

- Coherent Engineering Data Model with single and unique meaning across the company for systems, mechanical, manufacturing, embedded electronics and now the embedded software.

- Open & integrated solution for embedded software business process from early requirements & architecture definition to physical software generation and testing,
- Complete & coherent functional mock-up ability to design, collaborate and simulate embedded systems with embedded software and 3D geometry all together, always synchronized at any maturity stage of the development process , enabling savings in engineering and on the EE Bill of Material (BOM) that can be very significant.
- Automation of variants generation from parametric system models, enabling much easier change management and higher quality.
- Full leverage of model base design methodologies, to “automate” systems engineering processes.
- Reuse of applications leveraging stable software platforms, and proper system models, enabling much easier HW retargeting and significant cost savings.

About Geensoft

Geensoft delivers industry-proven, best-in-class embedded systems development tools and professional services that help engineering teams in the aerospace, automotive, defense, energy, industrial automation, medical and transportation industries to more efficiently manage their engineering processes as well as design, verify and validate their model-based embedded systems applications. Headquartered in France, Geensoft has sales offices in Europe and Japan supported by a network of distributors and value-added integrators worldwide.