GL Studio delivers high-performance, high-reliability UI development to the automotive industry

Case Study

Goal:
Providing software developers and UI/UX designers in the automotive markets a graphical User Interface (UI) development tool that specializes in high-performance, reliability, rapid time to market, and functional safety.

Challenge:
Often in UI development, designers and software developers have difficulty achieving a feature-rich and visually appealing user interface without having to sacrifice either major UI features or runtime performance. A seamless UI content creation process that does not compromise design or functionality is required for 2D/3D content, from prototyping to implementation readiness in one platform. It is necessary to deliver a UI tool where the developers and designers are driving the user experience while designing instrument clusters, head-up displays, infotainment, rear seat entertainment, and connected car mobile applications.

Solution:
DISTI’s GL Studio is a UI tool with rapid time to market workflow that allows developers to go from prototype to production implementation in one design, all with no change to the original designer's vision. DISTI has provided GL Studio UI tools and services for 20 years. GL Studio has the most reliable runtime with the best performance to the automotive, aerospace, and medical markets. GL Studio is the first tool to achieve ISO 26262 ASIL D pre-certification for functional safety capable user interface graphics.
Benefits of GL Studio:

- 80% faster time to market
- 6x better runtime performance
- 50% less CPU utilization
- Highest code reliability
- First UI tool to achieve ASIL D
- 500ms or less UI startup time
- Absolute design flexibility
- Lower lifetime program costs

Automotive Applications:

Leading OEMs and Tier 1 suppliers use GL Studio to create cutting-edge graphics for digital clusters, HUDs, and IVI solutions. GL Studio has supported over 40 different Arm-based target systems with adoptions by companies such as Boeing, GARMIN, GE Transportation, Hyundai Mobis, Jaguar Land Rover, Lockheed Martin, NASA, Northrop Grumman, Raytheon, and The Spaceship Company. GL Studio can be ported to any OpenGL based target system; however a partial list of supported platforms is [here](#).

Why Arm:

As a charter member of the Arm Automotive Developer Community (AADC), DiSTI collaborates with Arm to deliver high-performance UI development tools with unique functional safety features to the automotive industry. The collaboration between Arm and DiSTI enables Tier 1 and OEM customers to receive the latest UI technology for rapid time to market and lower cost without compromising the UI designer’s vision, the developer’s functionality or the runtime performance.

Arm Technology and GL Studio:

The combination of Arm technology and GL Studio software enables developers/designers to have system-wide hardware, right-first-time development of multi-processor designs, and high-reliability UI to the automotive industry.

Additional GL Studio and DiSTI information:

- [GL Studio](#)
- [About DiSTI](#)
- [DiSTI Inducted as Charter Member of Arm - Press Release](#)

See these related links for more information:

- [Arm Automotive Solutions](#)
- [Arm Automotive Developer Community](#)