

Next-Generation Luminen Pro Smart Control Panels from Qbic Technology

MediaTek Genio 700 & 510 address challenges for robust, highly secure smart control panels

Case Study

Application

Control Panel for Meeting Rooms, Government Facilities, and Mission-Critical Environments

Background

When a global leader in enterprise video and control systems set out to modernize its meeting infrastructure, it faced challenges familiar to many organizations: outdated panels, increasing energy costs, and the growing need for reliable, secure, real-time collaboration.

To overcome these limitations, the company turned to Qbic Technology's Luminen Pro series—powered by MediaTek's Genio 510 chipset, with the pin-for-pin compatible Genio 700 available for advanced, customizable deployments.

Today, Luminen Pro panels enable secure, intelligent, and energy-efficient operations across mission-critical environments.

By combining high-performance processing, energy efficiency, and enterprise-grade security, Luminen Pro redefines what smart control panels achieve in meeting rooms, command centers, and high-security government facilities.

Challenge

Traditional industry solutions fell short of customer expectations:

- **Hardware Constraints on Modern Control:** Existing panels were unable to fully support advanced conferencing platforms and remote management features, hindering compliance in critical environments.



- **Deployment & Cable Management Issues:** Generic stands and mounts created cluttered cabling, making it harder to ensure professional-grade installations in enterprise and government environments.
- **Energy Efficiency & Thermal Management:** Mission-critical environments required devices that not only performed at high levels but also maintained low power consumption and effective thermal efficiency.
- **High Security & Reliability Needs:** Government-grade installations required devices meeting strict anti-interference, network lock, and compliance standards, including certifications for secure communications, such as the U.S. Department of Defense Joint Interoperability Test Command (JITC).
- **Durability Standards:** Panels had to meet stringent ESD and industrial protection requirements to ensure uninterrupted operation.

Solution

Qbic's Luminen Pro series comes standard with the MediaTek Genio 510, delivering the performance, efficiency, and security needed for modern environments. For projects that demand additional customization or higher computing capabilities, the MediaTek Genio 700 is available as an optional upgrade, providing even more headroom for performance-intensive applications.

- **High-Performance Processing:** MediaTek Genio 510 ensures smooth handling of web-based UIs, video conferencing, and demanding interactive control applications. For advanced use cases, the Genio 700 offers extended processing power and customization.
- **Energy Efficiency & Thermal Design:** Both the Genio 510 and 700 deliver superior power consumption efficiency and thermal management compared to competing chipsets, enabling fanless designs and longer device lifecycles.
- **Enhanced Security:** Luminen Pro combines MediaTek hardware with Qbic's Fortify+ security framework, providing robust protection against interference, secure authentication (via NFC/RFID), and compliance with government requirements.

Results:

With MediaTek Genio 510 as its foundation, the Luminen Pro series delivers powerful, secure, and energy-efficient performance as the standard. Organizations deploying Luminen Pro panels benefit from:

- **Seamless remote control** via intuitive Web UI/kiosk integration.
- **Deployment confidence with purpose-built** accessories that ensure stable installation, clean cable management, and a professional finish in enterprise and government environments.
- **High-performance conferencing** with smooth zoom and multimedia application support.
- **Government-grade security** validated by rigorous testing, ensuring compliance and trust in sensitive environments.
- **Energy-efficient, sustainable operation** that reduces power consumption and carbon footprint.
- **Future-proof flexibility with dual-OS support** (Android 13 / Linux Yocto), continuous security updates, and generational Android upgrade assurance for extended lifecycle value.

The result is a new benchmark for control panels in enterprise and government environments: powerful and secure out of the box with Genio 510, ready to scale further with Genio 700 when the mission requires it, and complemented by purpose-built accessories that deliver clean, reliable, and professional deployments.

- **Flexible by Design:** Supports both Android 13 (enterprise security updates, app compatibility) and Linux Yocto (resource-efficient, customizable for dedicated secure apps).
- **Long-Term Software Assurance** with Qbic's generational Android upgrade program and ongoing security patch support, ensuring devices remain compliant, secure, and future-ready.
- **Advanced Meeting Applications:** Optimized for conferencing platforms, with superior graphics for crisp visuals, stable connectivity, and integrated camera support, ensuring reliability in professional and government control environments.
- **Purpose-Built Accessories:** Qbic offers mount stands and accessories designed to fit seamlessly with Luminen Pro, providing stable installation, clean cable management, and a professional finish across environments.

Why MediaTek Genio 700/510?

Luminen Pro comes equipped with the MediaTek Genio 510, balancing performance, energy efficiency, and security.

- **Robust Processing Power:** Genio 510 handles GPU/CPU-intensive tasks for real-time video, conferencing, and kiosk applications, while Genio 700 scales even further for advanced environments.
- **Security Excellence:** Offers a more secure alternative to other options on the market, supporting compliance with U.S. DoD JITC interoperability testing standards.
- **Anti-Interference Performance:** Network-locked configurations and hardened system architecture provide resilience against environmental and cyber interference.
- **Power & Thermal Efficiency:** Optimized beyond conventional panel chipsets, ensuring consistent performance with lower power consumption, and improved thermal stability for long-term reliability.
- **Deployment Flexibility:** Works seamlessly across meeting rooms, command centers, and government-grade facilities.



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