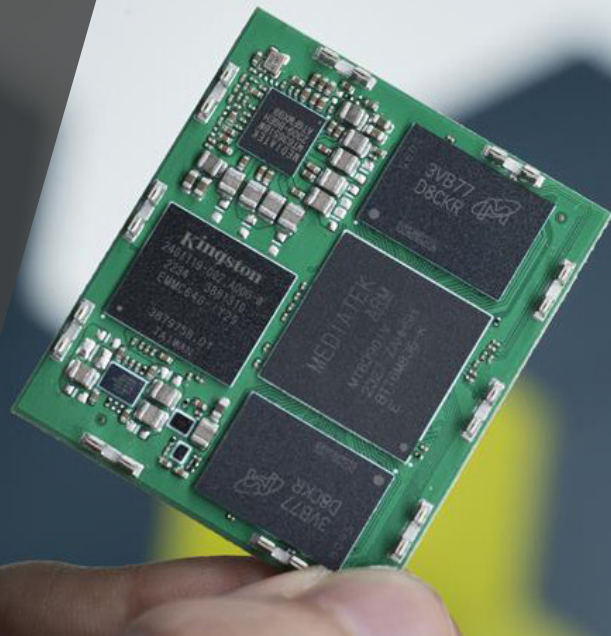# MEDIATEK | GRINN

Grinn Accelerates Edge AI Innovation with MediaTek Genio 700

Grinn GenioSOM-700 enables breakthrough enterprise-grade performance in small form factors

Case Study

Application

Advanced System on Module (SOM)

Background

In today's connected world, devices are expected to be more intelligent, compact, and efficient than ever. From smart homes and industrial automation to computer vision and robotics, product designers face the challenge of combining high computing power with low energy consumption—while still delivering products faster to market.

To meet these demands, Grinn, a leader in embedded computing solutions, partnered with MediaTek to create a groundbreaking innovation in edge AI design: the Grinn GenioSOM-700, the world's smallest System-on-Module (SoM) built on the MediaTek Genio 700 platform.

Challenge

Developing next-generation AI and IoT devices involves complex tradeoffs:

- **High Compute Demand:** Devices must process AI, video, and sensor workloads locally—without relying on the cloud.

- **Miniaturization Pressure:** Engineers must integrate advanced capabilities into increasingly smaller footprints.

- **Short Development Cycles:** Rapid market shifts demand accelerated design-to-production timelines.

These competing pressures often result in delayed product launches, rising R&D costs, and slower innovation.

Results:

The partnership between Grinn and MediaTek resulted in a breakthrough System-on-Module that brings enterprise-grade performance to small form factors.

- **Accelerated Time-to-Market:** Manufacturers can move from concept to production in weeks rather than months, reducing risk and accelerating ROI.

- **Real-Time Edge Intelligence:** On-device AI enables vision, voice, and analytics tasks to run locally minimizing latency and improving responsiveness.

- **Empowering Lean Teams:** Smaller development teams can deploy powerful AI-enabled products without deep hardware expertise.

- **Compact Powerhouse:** Despite its miniature size, the GenioSOM-700 delivers desktop-class performance with outstanding thermal efficiency.

Solution: The Grinn GenioSOM-700

The Grinn GenioSOM-700 addresses all three challenges in one compact platform. Powered by the MediaTek Genio 700, it delivers exceptional compute power, AI acceleration, and multimedia capabilities in an ultra-compact 37 × 42.6 mm module.

The MediaTek Genio 700 supports the following core technologies to enable this performance:

- Dual-core Arm Cortex-A78 and hexa-core Cortex-A55 CPUs

- Mali™-G57 GPU for advanced graphics and vision processing

- MediaTek 5th Generation NPU with up to 4 TOPS of AI performance

The key benefits of the Grinn GenioSOM-700 include:

- **Production-Ready Integration:** Skip the complexity of board-level design and move directly to production.

- **High-Performance Edge Computing:** Enable AI-driven vision, voice, and analytics workloads on-device.

- **Power-Efficient Operation:** Designed for 24/7 embedded environments.

- **4K Video & Robust Connectivity:** Ideal for smart home, industrial, and multimedia applications.

Conclusion

The collaboration between Grinn and MediaTek sets a new standard for edge AI performance, energy efficiency, and rapid deployment. The Grinn GenioSOM-700 empowers developers to create smarter, faster, and more connected devices—redefining what's possible in the future of intelligent embedded systems.

TO POWER NEXT-GEN AI

More Information on the Grinn GenioSOM-700

More Information on Grinn