MEDIATEK

FIGHT CAMP

FightCamp Elevates At-home Boxing Training with MediaTek's Edge AI Solutions

Case Study

Background

FightCamp, a company specializing in at-home fitness solutions, leverages AI capabilities and boxing training to provide the perfect modern interactive workout experience. They aspire to engage their users with high-energy and dynamic exercise-routines that improve their stamina, strength, and resilience over time.

When scaling their product's capabilities, FightCamp realized that their fitness console required edge-AI functionality, higher computing power, and better connectivity to provide real-time analytics and feedback. They partnered with MediaTek and integrated its Genio 350 SoC, to overcome challenges and upgrade their user experience.

Challenge

- **Inability to Connect to More than Four Trackers:** FightCamp's fitness console needed to connect to 8+1 devices simultaneously, rather than just 4.
- **Edge AI Implementation:** For real-time analysis and feedback on boxing techniques and enhanced personalized training, it needed to incorporate advanced edge-AI capabilities.
- **Higher Processing Power:** For the console to support multitasking services while being energy efficient, it required higher core computing power and data processing speed.
- **Stable connection:** The fitness console required a stable network connection for high-quality workout streaming to TVs.

Application

Fitness console

Results:

- Supports multiple trackers of the fitness console simultaneously
- Edge AI computing provides detailed feedback during workouts
- Powerful processing allows the console to track punch metrics and training posture in real-time
- Longer battery life along with handling intensive AI tasks
- Seamless connectivity to a TV for streaming workouts live

Solution Partner

FightCamp provides fitness solutions, combining innovative connected technology with engaging boxing training at home.

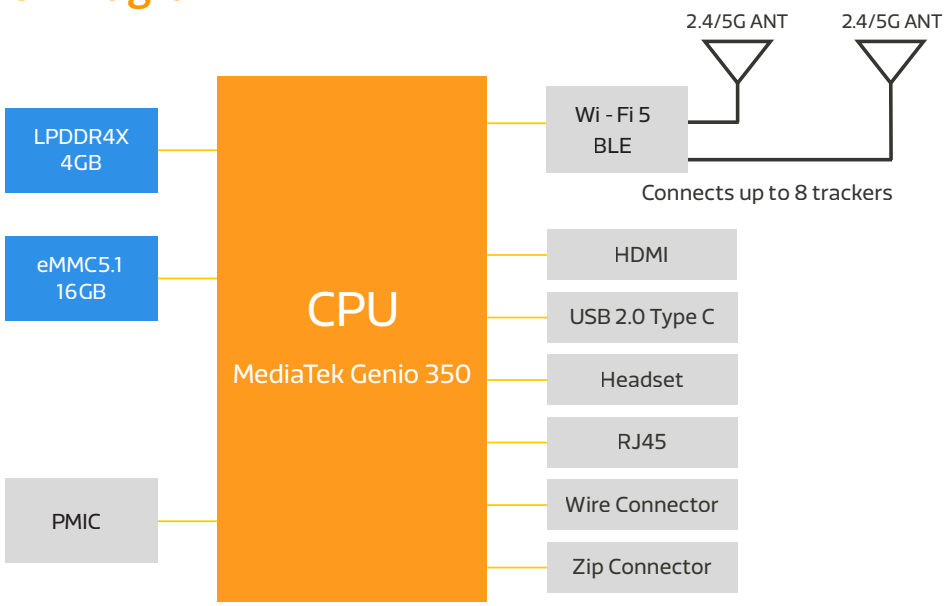
Solution

FightCamp selected MediaTek's Genio 350 System on Chip, a 14nm quad-core power-efficient SoC, for their fitness solution. This SoC offered robust AI capabilities, seamless connectivity, and efficient handling of intensive AI tasks without draining power or overheating. It enabled real-time punch tracking and posture analysis. Users could also connect the console to a TV for streaming workouts, creating an engaging and immersive experience.

How does MediaTek Genio 350 SoC Meet the Requirements?

- **Connectivity:** Integrated Wi-Fi and Bluetooth 5.1 enable low-latency, long-range, and multi-device pairing.
- **Edge AI:** Arm Mali™-G52 MC1 3D Graphics Accelerator (GPU). AI Processor Unit (APU) Cadence® Tensilica® VP6 processor, 700MHz at 0.825V delivers efficient motion-tracking and real-time feedback with minimal latency.
- **Processing Power:** The quad-core Arm® Cortex®-A53 CPU handles multiple tasks, while ensuring the console remains power-efficient and cool during extended use.
- **Multimedia Support:** The HDMI output enables high-definition streaming directly to the TV, supported by reliable network performance through integrated Wi-Fi.

Solution Block Diagram



Learn more about MediaTek Genio 350 SoC

Learn more about FightCamp