



CONSUMER MOBILITY

SUMMARY

Customer Profile:
Smartphone OEM

Region:
Asia

Industry:
Consumer Electronics

Solutions:

- Audio Codecs
- Audio Post Processing
- Container Parsers

Addressed Challenges:

- Low CPU usage and memory footprint
- Highly robust error handling

For more information on Ittiam's Audio products, visit:

<http://www.ittiam.com/products/software-ips/audio/>

CUSTOMER

The customer is a multinational consumer electronics giant from Asia and one of the world's leading manufacturers of smart phones and tablets.

ENGAGEMENT BACKGROUND

Ittiam provided a comprehensive suite of Audio IPs – Audio Codecs, Container Parsers and Audio Post Processing solutions on customer's proprietary ARM Cortex A8 platform. Ittiam delivered superior quality and performance replacing customer's incumbent vendor as the solution provider for their audio requirements.

KEY CHALLENGES

The solution was targeted for deployment in multiple consumer products based on a common platform. Some of the key challenges include:

- Really low CPU usage to minimize battery consumption
- Low memory footprint for audio processing
- High robustness with capabilities to handle various erroneous and invalid conditions without any causing failure in the user applications
- Ease of integration of components for faster time to market
- Smooth playback with play, pause and seek functions

Additionally, both the processor variant and the operating system used by the customer were new to the industry. Ittiam had to rapidly port the IP and fine tune performance while addressing all challenges listed above.

SOLUTION OVERVIEW

Audio Codecs: MP3, HE-AACv2 (includes AAC-LC and HE-AACv1), FLAC, WMA and AMR-NB

Audio Post Processing: Resampler, Mixer, Booster and Equalizer

Container Parsers: ASF, FLAC, MP3 and AAC

IMPACT

Ittiam demonstrated a deep understanding of ARM processor and codec design architectures. Addressing the challenges in a timely manner enabled the customer to launch their products on schedule. The project scope evolved further with additional requirements for product updates which demonstrates strong confidence in Ittiam's capabilities.

About Ittiam

Ittiam Systems is a global technology company with deep R&D driven solutions for media creation, management and consumption. Ittiam provides advanced media codecs, software development platforms, systems and workflows for embedded and online applications. Its solutions are at the heart of tens of millions of lifestyle products that drive mobility, content access, networking and sharing.

For more information visit www.ittiam.com or contact us at mkt@ittiam.com