

## Xiangcheng Communication Enhances Logistics Efficiency with T15 — Powered by MediaTek SoC

Digital Transformation, IoT, and Streamlined  
Logistics Workflows

### Case Study



### Application

Smart AIDC Handheld Device for Logistics

### Background

The logistics and e-commerce sectors are rapidly adopting smart AIDC devices to optimize workflows, leveraging real-time data collection and processing to drive efficiency.

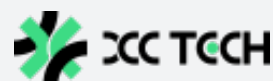
Xiangcheng Communication Technology (XC Tech), a leading solution provider, designed the T15, a smart AIDC handheld device tailored for logistics. It performs several tasks, including data collection, inventory management, and real-time communication with backend systems. They partnered with MediaTek to integrate its advanced MT8768 SoC to meet all the requirements of T15.

### Challenge

- **Network Connectivity:** Stable communication with backend systems is essential.
- **Data Processing Speed:** High-speed processing is required for multitasking applications like barcode scanning, and OCR reading.
- **Power Consumption:** Balancing performance with battery life for long working hours.
- **Device Portability:** Compact, robust, and cost-effective handheld device that integrates multiple functionalities.

### Results

- **Accelerated Development:** 15% reduction in development time with the integration of MT8768.
- **Extended Usage Time:** 20% longer operation on a single charge thanks to the chipset's low power consumption.
- **Connection Stability:** Wi-Fi 5, Bluetooth 5.1, 4G Cat-7 solutions and dual SIM support improved connection stability by 12%.
- **Work Efficiency:** Overall productivity increased by 18% through better performance and reliability.



### Solution Partner

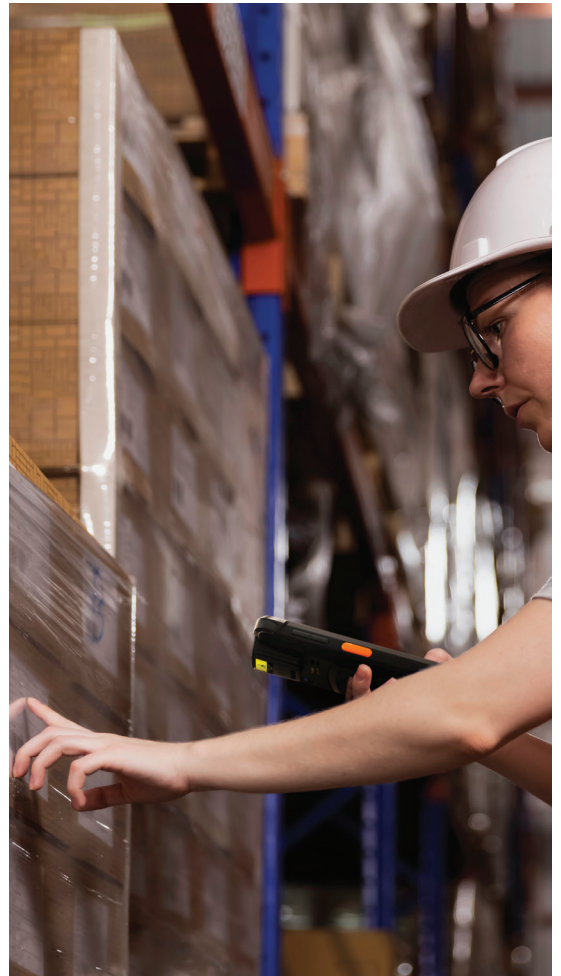
Xiangcheng Communication Technology (XC Tech) specializes in advanced industrial IoT solutions, enhancing operational efficiency across logistics, retail, and manufacturing sectors globally.

## Solution

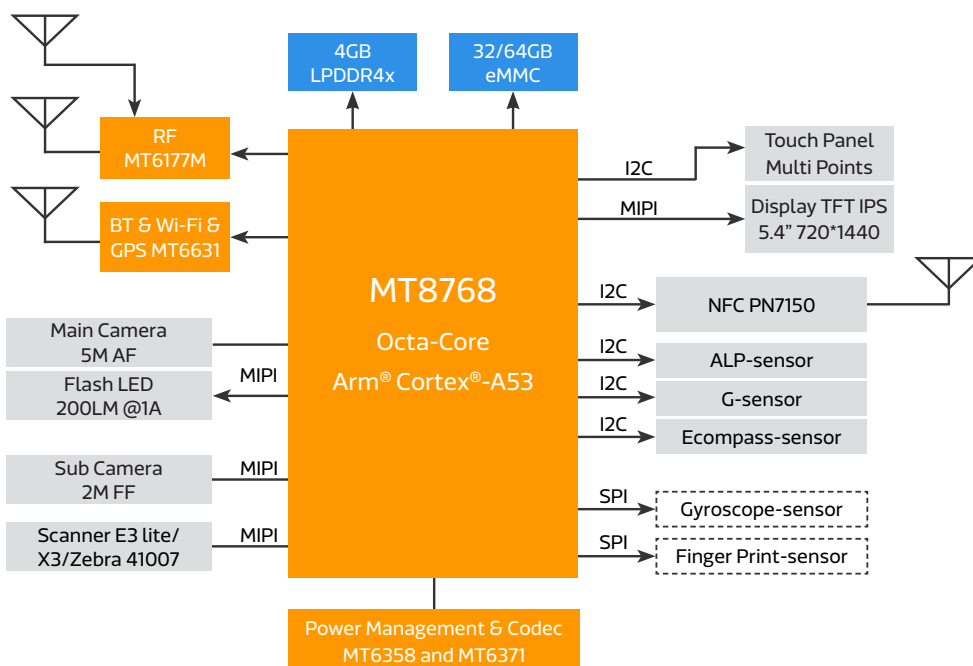
XC Tech selected MediaTek's MT8768 System on Chip (SoC) for the T15, a smart AIDC handheld device. The SoC features an 8-core CPU with 4 Arm® Cortex®-A53 running at 2.0GHz and 4 Arm® Cortex®-A53 running at 1.5GHz, along with a built-in GPU. This configuration provides the robust processing power necessary for running complex applications. It supports Wi-Fi 5, BT 5.1, and 4G Cat-7 with dual SIM dual standby capabilities, ensuring network stability and wide connection coverage. Consuming less than 4W of power, it enhances energy efficiency and caters to longer working hours.

### How Does MediaTek's MT8768 SoC Meet the Requirements?

- **Advanced Processing Power:** The octa-core architecture of MT8768 provides the necessary power to multitask without any lag while being power-efficient.
- **Network Connectivity:** Fully integrated Wi-Fi 5, BlueTooth 5.1, dual SIM support combined with 4G Cat-7 connectivity ensures stable, high-speed connectivity even in remote locations.
- **Power Efficiency:** Consuming less than 4W of power, the SoC enables extended device usage, critical for long shifts in logistics operations.
- **Cost-Effective Integration:** The high integration feature of the SoC reduces development resources and accelerates market entry, making it an economically viable option for manufacturers.



## Solution Block Diagram



Learn about **MediaTek MT8768**

