



IoT SoC Design Services

System Elite assists a startup company in completing dedicated chips for active and passive noise reduction solutions applicable to industrial spaces, home appliances, medical devices, and other specialized application scenarios.

The Challenges Faced By a Startup

Jack Ma delivered a speech, where he discussed the concept of trial and error as a tactical approach. The essence of trial and error is not to make mistakes but to seize opportunities in a constantly changing environment. For a startup, winning the race against time and quickly assimilating the operational experiences of other companies, whether successful or not, is a crucial challenge given limited resources. The management of "opportunity cost" and "sunk cost" becomes an essential consideration in the ultimate decision-making process for businesses.

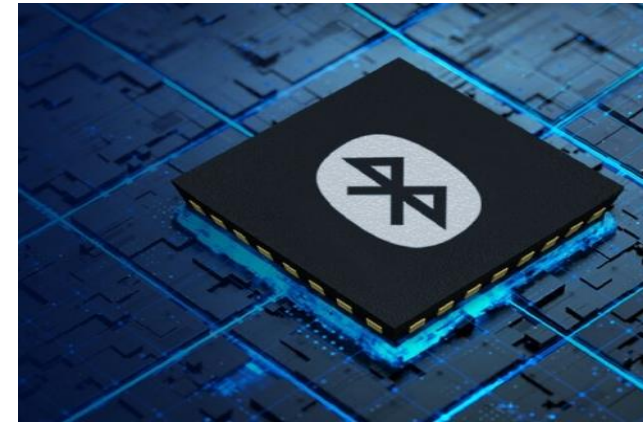
Active Noise Cancellation in Open Public Space A Success Story

A story of risk reduction for a startups and fostering an environment conducive to innovation.

From System-on-Chip architect, design, validation, certification, to product launch, System Elite is your SoC design team for Smart IoT Solution

Key Features

- Designated hardware accelerator for customer specific algorithm and utilizing the FPGA environment for preliminary validation allows for early testing of market acceptance. In the early stages, a startup can avoid excessive resource investment.
- Significantly reducing the processing delay of digital filters by several orders of magnitude, the system can process signals from multiple noise sources in just 35 microseconds.
- Custom SoC is applicable for more complicated noise environments and can accommodate more high value-added specialty markets.



Realize customer algorithm in IoT SoC

Combining DSP · PLL · ADC/DAC audio codec and BLE Network Processor in an SoC.

Solution & Benefits

- No need to maintain a high-cost chip design team, as the entire project only requires 1/8 of the original workforce demand. This effectively reduces company personnel and operational costs.
- Developed a new project without purchasing of IPs or EDA tools. Leveraging System Elite owned industry-standard chip development tools significantly reduces the development costs (NRE) by more than half and shortens the development time by about one third.
- Custom SoC is designed to support a variety of complicated noise environments and is able to meet the requirements of high value-added specialty markets.
- With System Elite as its chip design partner, the startup has its own brandname SoC and becomes an IC company to increase its company valuation and continues to raise more funding.

