

# ANNUAL REPORT

# 2024

Matter



HMI



Wireless

5GHz  
2.4GHz



ESP

AI



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# Build Smart with **Espressif**



As a publicly traded, multinational fabless semiconductor company (Espressif Systems, SSE: 688018.SH), we develop low-power wireless communication chipsets and AIoT solutions that are green, versatile, and cost-effective. With a closed-loop development cycle, we advance core technologies, including Wi-Fi, Bluetooth LE, IEEE 802.15.4, RF, RISC-V MCUs, AI, operating systems, and cloud services. As IoT evolves, our expanding software capabilities have transformed Espressif into a comprehensive AIoT technology ecosystem company.



**1 Billion+**

Global IoT Chip  
Shipment



**Global  
Leader**

In Wi-Fi MCU  
Market



**200+ Patents**

In AIoT  
Technology



**10,000+**

Satisfied  
Customers  
Worldwide



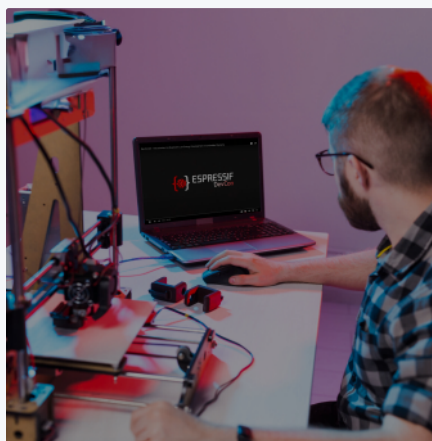
**2 Million+**

Active Ecosystem  
Developers

## SHARE CONNECT INNOVATE



**Open-source  
Communities**



**Conferences & Education  
Initiatives**



**Diverse  
Applications**

# Message from the CEO



"In 2024, Espressif achieved significant growth and innovation, driven by strong financial performance, strategic acquisitions such as M5Stack, and continuous advancements in AIoT solutions. Our expanding developer community and industry partnerships reinforce our mission to empower developers and shape the future of connected intelligence."

**Teo Swee Ann**

Espressif's Founder & CEO

As we reflect on 2024, I am proud to share that Espressif has experienced another remarkable year of growth and innovation. Despite global challenges, our commitment to excellence has delivered solid financial results and significant advancements across our technology portfolio.

In 2024, Espressif achieved revenues of CNY 2 billion, marking a year-over-year increase of 40%. Our gross margin exceeded 40%, highlighting our continued emphasis on efficiency and product differentiation. Net income reached CNY 340 million, demonstrating our capacity to balance ongoing investment in innovation with sustainable financial performance. These achievements reflect the trust our customers place in us and the unwavering dedication of our global team.

A significant milestone this year was our acquisition of M5Stack, a globally recognized leader in modular development platforms. This strategic move enhances our presence in the developer community and expands our footprint in the industrial and educational sectors. M5Stack's complementary ecosystem will accelerate our innovation pipeline and reinforce our vision to simplify embedded development, making it more accessible and efficient for developers worldwide.



Our thriving developer community remains a cornerstone of Espressif's success. Espressif DevCon 2024 gathered thousands of engineers, industry experts, and partners to share knowledge, showcase groundbreaking projects, and collaborate on IoT's future possibilities.

Furthermore, our solutions have garnered recognition from industry-leading companies. Apple highlighted Embedded Swift on ESP32-C6 at WWDC 2024, showcasing our role in enabling next-generation connected devices. Microsoft prioritized support for the ESP32 series within its IoT scripting language, DeviceScript, further expanding our integration in cloud-connected environments. OpenAI introduced support for ESP32-S3 in its Open RealtimeAPI Embedded SDK, and ByteDance's Volcano Engine partnered with Espressif to launch AI-powered IoT solutions, setting a precedent for deploying advanced AI models in IoT scenarios. We continue to enhance our open-source ecosystem, providing developers with the necessary tools to drive innovation.

Looking ahead, the rapid evolution of artificial intelligence continues to redefine the technological landscape. At Espressif, we remain dedicated to integrating AI deeply into our engineering and workflow processes. From edge computing to AI-assisted development, we are committed to pioneering innovations that transform how connected devices interact and perform. We will stay attuned to market dynamics, ensuring our solutions remain high-performance, cost-effective, and energy-efficient, effectively meeting our customers' evolving requirements.

As we enter the next phase of growth, I extend my deepest gratitude to our shareholders, partners, developers, and employees for their continuous support and dedication. Together, we will push the boundaries of connected intelligence.

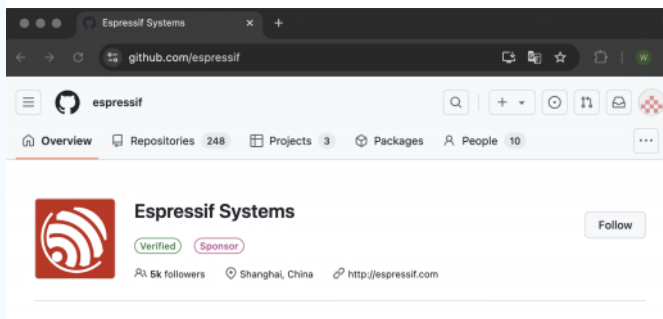
# Facts About Espressif

**9**R&D  
centers**72%**R&D  
employees**770**

employees

**30**employee  
nationalities**33%**female  
employees

GitHub

**130 K+**open-source,  
Espressif-powered  
projects

YouTube

**5.3 M+**views of the most  
popular videos of  
Espressif-powered  
projects

Book

**200+**books written about  
Espressif's SoCs in 10+  
languages

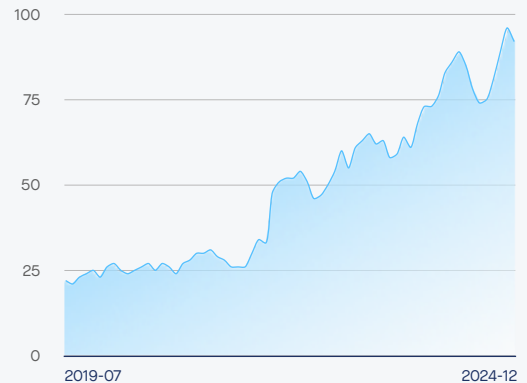
Reddit

**106 K+**members of  
ESP32 groups

# Brand Awareness

The ESP32 and Espressif brands have a strong sense of recognition among users. This recognition has become a key factor in our competitive advantage and success. Users identify with the ESP32 brand due to its reliability, performance, and versatility, which have been proven across various applications and industries. This strong brand awareness not only fosters customer retention but also attracts new users, thereby solidifying Espressif's position in the market.

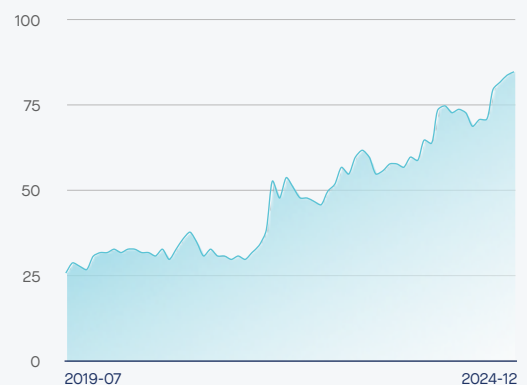
### ESP32 Google Trends



## Exceptional IC Design Capability

Espressif independently designs and develops its own chip products, with core IPs being self-developed. These chips are equipped with rich features, ensuring that Espressif's products stand out in the market and avoid the pitfalls of homogenized competition. By controlling the entire design process, Espressif can innovate rapidly and introduce unique functionalities that set our products apart from competitors, providing a distinctive edge in the IoT semiconductor industry.

### Espressif Google Trends



## Full-Stack Engineering Capability

Espressif possesses comprehensive engineering development capabilities that span from IP development to complete chip design, operating systems, firmware, software frameworks, application solutions, hardware design, edge AI, cloud, and apps. This full-stack engineering expertise allows Espressif to offer highly integrated solutions that meet a wide range of customer needs. The ability to control and optimize every layer of the technology stack is unique in the industry and enables Espressif to deliver superior products and services that are seamlessly integrated and highly efficient.

## Superior Cost-Effective and Stable Support

Espressif's products are known for their high performance and low cost, making them competitive in the market. We provide the cost efficiency necessary to promote large-scale commercialization in downstream industries. Additionally, we ensure the long-term availability of our products and offer stable and enduring software support, ensuring that customers can rely on their investments for extended periods. This commitment to value and reliability strengthens customer trust.

## Extensive Developer Community Support

Espressif has garnered support from a vast community of professional engineers who are familiar with Espressif's development platform and actively promote its value proposition. This large and engaged community not only aids in the rapid adoption and dissemination of Espressif's technologies but also contributes to continuous improvement through feedback and shared knowledge. The robust community support amplifies Espressif's market presence and enhances our reputation as a trusted and innovative leader in the industry.

# Core Technologies



## SoCs

### ESP8266, ESP32, ESP32-S, ESP32-C, ESP32-H and ESP32-P Series

Espressif offers integrated, reliable, and energy-efficient SoCs for Wi-Fi, Bluetooth Low Energy, Thread and Zigbee to various segments of the IoT market.



## OS

### ESP-IDF

Espressif's official IoT Development Framework.

It provides a self-sufficient SDK for any generic application-development on these platforms, using programming languages such as C and C++.

ESP-IDF currently powers millions of devices in the field, and enables building a variety of network-connected products, ranging from simple light bulbs and toys to major appliances and industrial devices.



## AI

### AFE (Audio Front-End) Algorithms

qualified as a "Software Audio Front-End Solution" for Amazon Alexa Built-in devices.

### 3A Audio Algorithms

including Acoustic Echo Cancellation (AEC), Audio Noise Suppression (ANS) and Automatic Gain Control (AGC), which significantly reduce noise and echo in calls, keeping high-quality voice intercoms stable at all times.



## Cloud

### ESP RainMaker

A comprehensive, development-free and maintenance-free AIoT solution for private Cloud deployment.

It is an all-inclusive solution that covers everything from the underlying chip to device firmware, third-party voice-assistant integrations, mobile apps and the dashboard.

Customers can build their own AIoT devices and ecosystem, with ESP RainMaker.



## Software

With our open-source software, such as Espressif's IoT Development Framework ESP-IDF, Audio Development Framework ESP-ADF, Mesh Development Framework ESP-MDF, Cloud Connectivity Platform ESP RainMaker, Facial Recognition Development Framework ESP-WHO, and Voice-Controlled Assistant ESP-Skainet, we have developed a framework for building AIoT applications, which is both complete and innovative.



## Matter

### One-stop Matter Solution

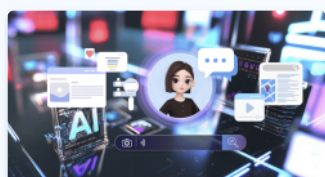
This is the culmination of Espressif's ongoing contribution to the Matter platform in various areas, including protocol formulation, core stack implementation and certification test events.



# Edge-Cloud AI

Leveraging AI and NLP technologies, Espressif's edge-cloud AI and Human-Machine Interface (HMI) solutions deliver a seamless and intuitive interaction experience. ESP32-S3 and ESP32-P4 support localized voice assistants and graphical touch interaction while integrating with cloud-based LLMs for more accurate semantic understanding and contextual engagement.

The LLM solution enables natural language processing and on-device voice recognition, which reduces cloud dependency, lowers latency, and enhances privacy. Meanwhile, the HMI solution combines voice, touch, and gesture recognition to provide a more intuitive and efficient user experience. Backed by a comprehensive support system, our solutions unlock the full potential of intelligent interactions at lower costs and higher efficiency, driving IoT devices to evolve from mere "tools" into "companions."



豆包大模型

OpenAI

文心

Qwen

讯飞星火  
IFLYTEK SPARK

deepseek



Audio Solutions



HMI Solutions



# Business Highlights

## Key Financial Data

CNY	Fiscal Year		
	2024	2023	2022
<b>Consolidated Statement of Income Data</b>			
Revenue	2,006,919,687	1,433,064,911	1,271,127,201
Gross profit	881,196,912	581,248,531	508,251,068
Selling expenses	62,919,353	52,583,650	49,323,100
General and administrative expenses	69,260,100	61,618,348	59,639,944
Research and development expenses	490,297,747	403,713,557	337,121,814
Net income	339,008,315	136,204,637	97,323,103
Net income attributable to Espressif	339,323,927	136,204,637	97,323,103
Earnings per share:			
Basic	3.0889	1.2151	0.8664
Diluted	3.0708	1.2092	0.8662
<b>Consolidated Balance Sheet Data</b>			
Working capital	1,432,356,145	999,068,356	1,518,383,808
Total assets	2,649,465,358	2,203,800,366	2,082,796,825
Long-term obligations	116,956,630	74,166,946	65,591,788
Total shareholders' equity	2,179,369,221	1,913,000,228	1,826,677,535
<b>Consolidated Cash Flow Data</b>			
Net cash provided by operating activities	220,472,557	302,597,343	71,321,658
<b>Non-GAAP Adjustment</b>			
Stock-based compensation	37,661,342	18,737,416	14,726,019
Non-GAAP net income attributable to Espressif	376,985,269	154,942,053	112,049,122

**N.B.:** Due to the company's implementation of a capital reserve to equity conversion in 2024, the earnings per share for each reporting period have been recalculated based on the adjusted share count.

## Key Financial Indicators

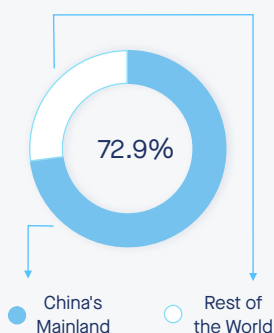
	Fiscal Year		
	2024	2023	2022
Gross margin	43.91%	40.56%	39.98%
R&D-to-sales ratio	24.43%	28.17%	26.52%
EBITDA margin	18.97%	10.01%	9.29%
Net income margin	16.89%	9.50%	7.66%
Weighted ROE	17.06%	7.14%	5.36%
Number of Espressif employees as of December 31	770	625	578

# Financial Analysis

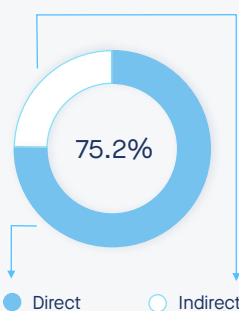
Espressif's total revenue in 2024 was CNY2,007 million, reflecting a significant increase of 40% from CNY1,433 million in 2023. This growth was driven by continued expansion in our customer base and increased adoption of our solutions. While some existing customers showed steady demand, new design wins in 2023 and 2024 played a key role in revenue growth. Net income attributable to Espressif for 2024 reached CNY339 million, representing a 149% increase from CNY136 million in 2023. This substantial growth was primarily attributed to higher revenue and improved profitability.

The overall gross margin stood at 43.9%, with the gross margin for IoT chips reaching 51.5%. The increase in gross margin reflects our continuous efforts to attract new, high-value customers. Due to the growth in business volume, our production costs have been further reduced through economies of scale. We remain committed to achieving sustainable profitability to support continued investment in research and development.

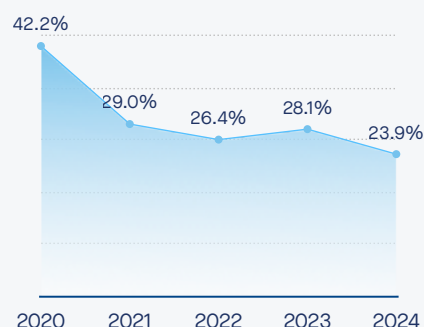
### Revenue by Area



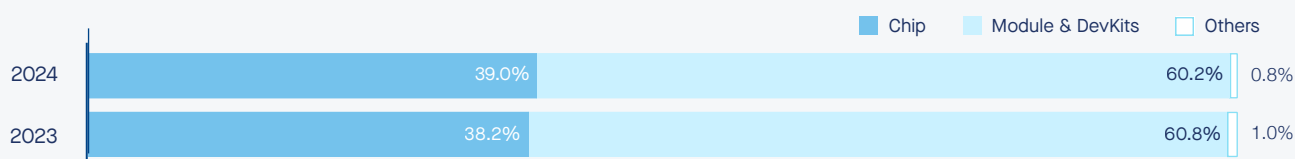
### Revenue by Sales Mode



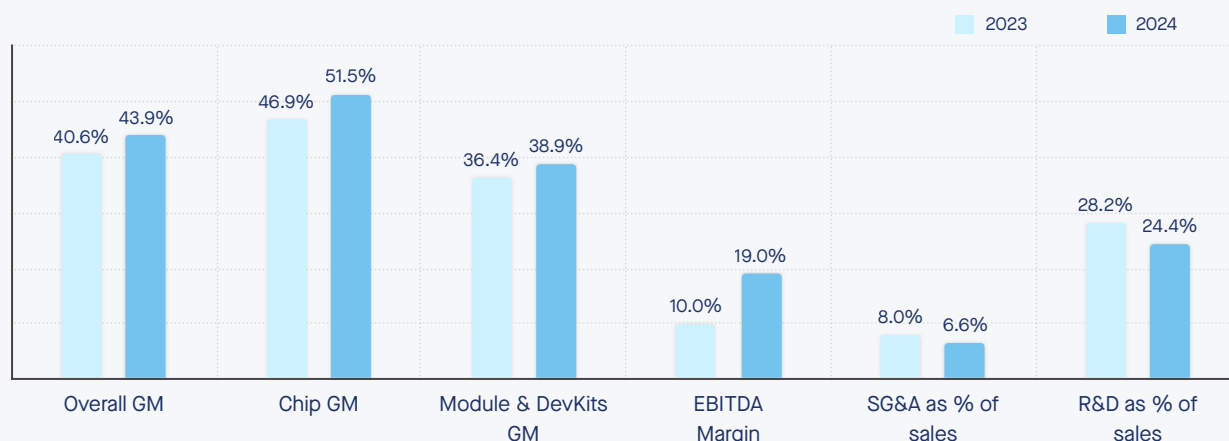
### Top-5 Customer Concentration Rate



### Revenue by Product Category



### Key Financial Indicators



# Management Report

## Business Strategy

Espressif Systems' business strategy emanates from our service/product areas and our engagement with the developer ecosystem.

Our product and service areas include AIoT chips, OS-level development environments, software tools, application solutions, and value-added services, such as Cloud and Matter. The above-mentioned products ensure that we are in the heart of numerous commercial AIoT applications in different markets, including smart home, consumer electronics, industrial automation, healthcare, etc.





## Key Products - IoT Chips

Espressif is recognized as a market leader in the field of Wi-Fi MCUs. We released our first Wi-Fi MCU in 2014, and our first Wi-Fi/Bluetooth LE combo chip in 2016. In 2020, we successfully developed our own RISC-V MCU core, adding it to our product portfolio, while in 2021 we released our first Thread/Zigbee/Bluetooth LE 5 combo chip and a 2.4GHz Wi-Fi 6 chip. In 2022, we released our first 2.4 & 5GHz Wi-Fi 6 chip and our product range has expanded to Wireless SoCs. In 2023, we released our first RISC-V multimedia SoC, integrated H.264 encoder, featuring AI instructions extension. This year, we reached an important milestone achieving BLE 5.4 Full-Feature SIG Certification. Additionally, we have made significant strides in integrating large language models (LLMs) with IoT applications, opening new possibilities for intelligent edge computing and AI-driven IoT solutions.

In fact, we have been constantly diversifying our product portfolio, introducing new solutions through our numerous investments. Thus, we now have various product lines in the main short- and medium-range connectivity technologies. Our core technologies are self-developed, including connectivity IPs, RF components, RISC-V IPs, software frameworks, tools, AI functions etc.

We also provide IoT modules and devkits based on our chips. The benefit for customers is that they can get direct support from us, shortening and optimizing their supply chain.



### ESPRESSIF Key Technologies-Chip



# Key Products - Chip Matrix



## Key Products - M5Stack Development Kits

Espressif acquired a majority stake in M5Stack in 2024 Q2. M5Stack is renowned for its innovative approach to hardware development and offers a modular, open-source platform that simplifies the creation of IoT and embedded system solutions, greatly enhancing deployment efficiency. The M5Stack ecosystem is built around its flagship main control module, powered by Espressif's all ESP32 series of chips, highlighting the deep technical synergy between the two companies.

M5Stack's product portfolio primarily comprises controllers and other hardware modules needed in IoT application solutions and is mainly sold to the industrial, education, and developer markets.

M5Stack maintains an impressive pace of launching one new hardware product every week. A diversified product portfolio with approximately 300 SKUs helps developers rapidly prototype end products, accelerating the design-in process for Espressif's products with end customers. This ultimately brings more business opportunities for Espressif's chips and modules.



### Controller



Voltage & Amperage  
Meter



Air Quality Kit



Cardputer



Rotary Knob

...

### Camera



PoE Camera

### Sensor



Weight I2C Unit

### Module



Lora Unit

### Kits



Stamp-Fly

...

## Market

The market for wireless SoCs is truly diverse, including applications for smart homes (e.g., smart lights, air conditioners, ovens, coffee machines, etc.), consumer electronics (e.g., smart speakers, drones, etc.), industrial automation (e.g., mechanical arms), smart agriculture (e.g., soil PH detector, CO<sub>2</sub> detector, etc.), healthcare (e.g., monitoring devices for diabetes, blood pressure, etc.), energy control (solar energy devices, EV chargers, etc.), the internet of vehicles (OBD devices, dashboards, etc.), and education (talking pens, interactive whiteboards, etc.).

The smart home remain our primary sources of revenue, reaching expected growth. Meanwhile, the penetration of IoT technology in other applications is accelerating. Moreover, new customers in non-smart home sectors are less sensitive to price and place greater emphasis on product performance and quality, which has helped us maintain our gross margin.

### Smart Home



Smart Ovens

### Consumer Electronics



Smart Speakers

### Industrial Automation



Mechanical Arms

### Smart Agriculture



Soil PH Detector

### Healthcare



Medical Detectors

### Energy Management



Smart Solar Panels

### Internet of Vehicles



Intelligent instrument panel

### Education



Talking Pens



# Business Model

## Business-to-Developer-to-Business (B2D2B)

Espressif has deployed the Business-to-Developer type of marketing, not only because it has gained prominence in recent years, but also because it has proven to be more effective since the influence of developers on organizations of all sizes has gained traction. In other words, most developers are R&D employees in various companies and bring forth business opportunities from the companies they work for.

This way, the developer ecosystem we have created at Espressif demonstrates how the value of networks can grow exponentially:

- The more developers we attract as customers, the more hardware and software solutions we generate.
- The more successful hardware and software solutions we create, the more our reputation spreads with positive feedback from happy customers/developers.
- The above-mentioned interaction between people in our network prompts the creation of more content, which -in turn- attracts more users/developers searching for new content.
- Likewise, other third-party development platforms join our ecosystem and bring in new developers, as our influence continues to grow.

Having successfully applied the B2D2B model, Espressif can now focus on R&D investments, while maintaining a small business team that supports a large number of customers directly. In fact, most of our revenue is gained through direct sales.



# Developer Community Content



Global Code Hosting Platform

## 130,000

ESP32 and ESP8266 Projects



Social Networking Site

## 106,000

ESP32 Group Members



Developer-written books

## > 200

Covering more than 10 languages



Chinese Video Sharing Platform

## 1.38 M

Views of the Most Popular ESP32 Video



Global Video Sharing Platform

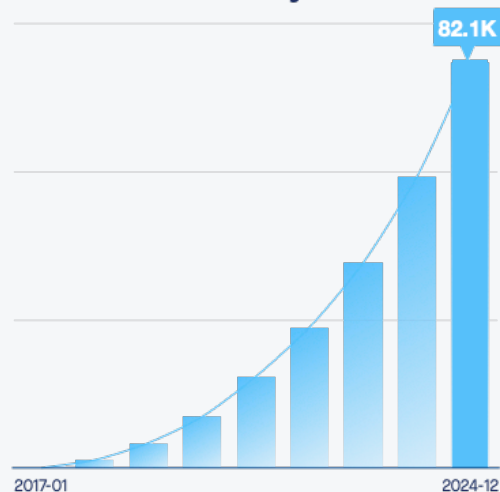
## 5.32 M

Total views of the most popular video on ESP32

## 27.26 M

Total views of the most popular shorts on ESP32

### Cumulative Number of GitHub ESP32 Projects



## Always a Hot Topic on Social Media



Posted on 1 Jan 2025

あけましておめでとうございます。

自宅に転がっていたAtom Echoで「なんでもおみくじ」を作ってみました。OpenAI RealtimeAPI Embedded SDKをESP32-PICO-D4で動かした事例でした。


[https://x.com/mas\\_sk/status/1874192656131326271](https://x.com/mas_sk/status/1874192656131326271)


Posted on 1 Feb 2025

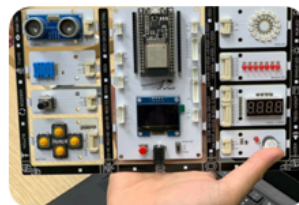
【ESP32】自制无损音乐播放器，支持有线和蓝牙耳机！


<https://www.bilibili.com/video/BV1EkFQeKerH>


Posted on 27 Feb 2025

I Want to Write a Guidebook on This ESP32 Board – Looking for Advice!

I'm planning to write a guidebook about an ESP32 development board that I designed. My goal is to make this book beginner-friendly.....


[https://www.reddit.com/r/esp32/comments/liybkz/i\\_want\\_to\\_write\\_a\\_guidebook\\_on\\_this\\_esp32\\_board/](https://www.reddit.com/r/esp32/comments/liybkz/i_want_to_write_a_guidebook_on_this_esp32_board/)


Posted on 12 Feb 2025

DeepSeek 语音对话机器人：用 ESP32 体验高质量 AI 对话


<https://www.bilibili.com/video/BV1T2KGGeXo>


Posted on 28 Jan 2025

Building real-time conversational AI on ESP32 (using LiveKit and WebRTC)

This is the first conversational ESP32 project to demonstrate real-time conversations using a custom speech pipeline (Silero for VAD, Whisper for STT, GPT4o for text-to-text and ElevenLabs for TTS).....



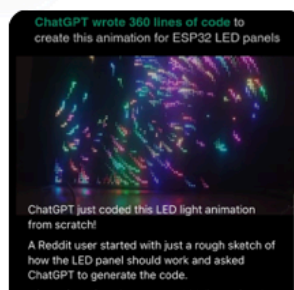
Posted on 3 Mar 2025

ESP32C3-1.54 墨水屏-多功能

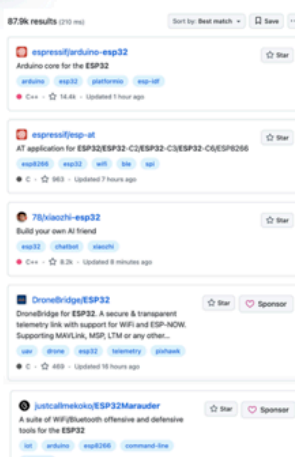
- Epub 阅读、txt 阅读、midi 音乐、闹钟、时钟、表盘、天气、配网、设置、文件管理器
- 由 ESP32 MP3 墨水屏阅读器精简而来，只保留了 MP3 音频
- 添加了蜂鸣器，可以播放 midi 音乐，当闹钟用
- 精简电路，元件少，焊接简单，外壳好打印，比较适合新手
- .....



Searched on 9 Mar 2025



Searched on 10 Mar 2025



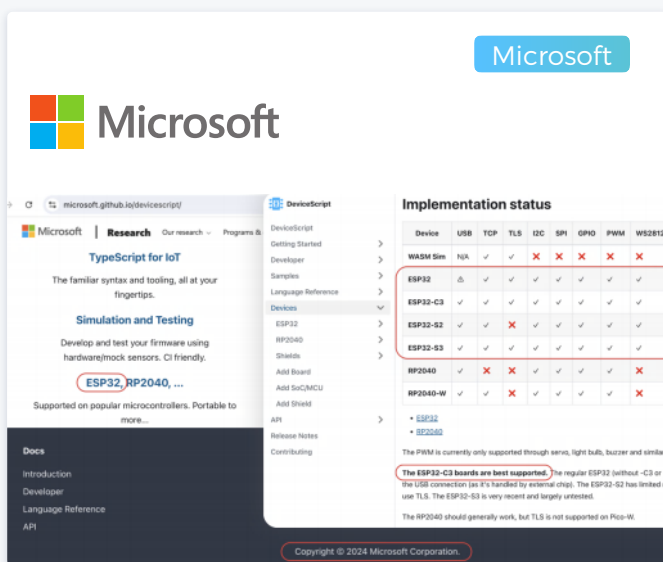
# Ecosystem Synergy

Espressif has always been committed to building a strong developer ecosystem, which has, in turn, influenced major technology platforms. As these platforms seek to integrate their technologies with the IoT domain, Espressif's products naturally become their preferred choice for technical integration. Together, we are shaping an open and dynamic ecosystem that empowers developers and accelerates technological innovation.

## Apple Showcases Embedded Swift on ESP32-C6 to Build Matter-Enabled Connected Devices



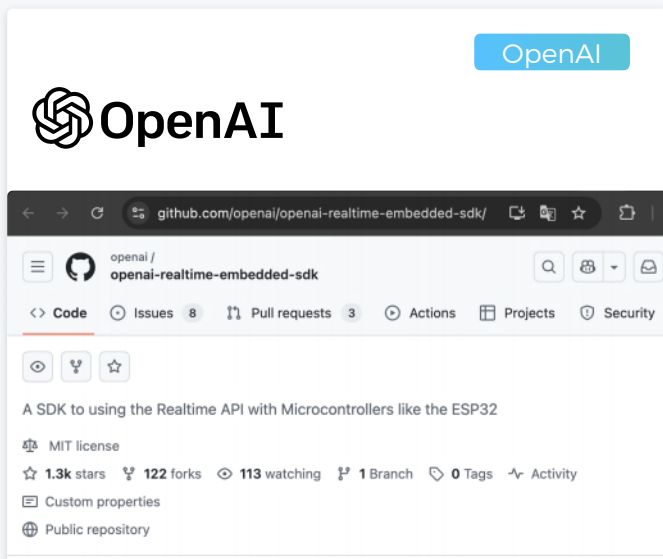
## Microsoft DeviceScript Supports the ESP32 Series



## ByteDance's VolcEngine & Espressif Co-Develop LLM-powered Embedded IoT Solutions



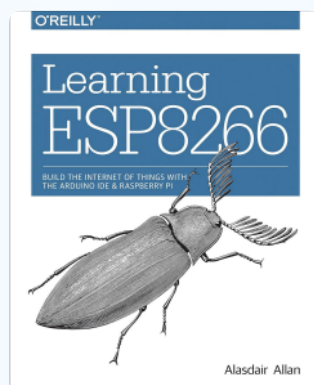
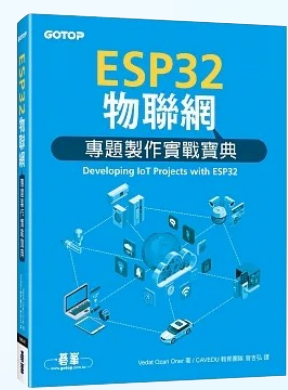
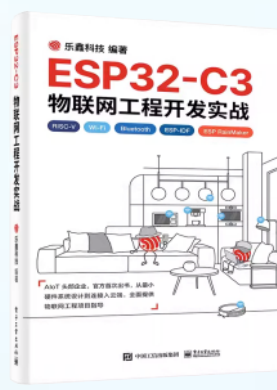
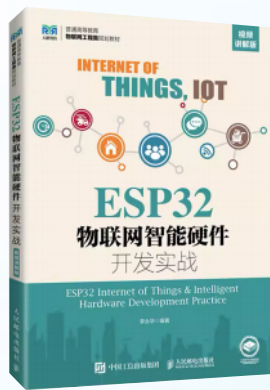
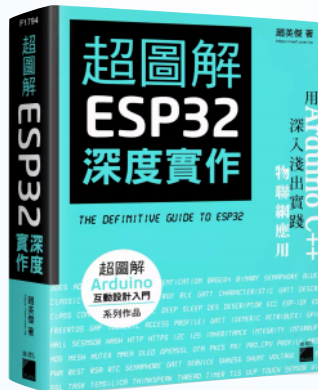
## OpenAI Releases Open RealtimeAPI Embedded SDK supported on ESP32-S3





## Books about ESP Products

More than 200 books on how to use ESP products can be found in the developer community and cover over a dozen languages.





# Research and Development

## R&D Investment

R&D investment is at the heart of Espressif Systems' development. During the reporting period, R&D cost CNY 490 million, which marked a 21.45% increase compared with that of 2023. At the same time, the R&D-to-sales ratio was 28.17% in 2023.

Espressif's escalating R&D investment cost can be attributed to the increase in the number of R&D staff and their subsequent compensation level, which increased significantly year-over-year.

CNY	Fiscal Year		change (%)
	2024	2023	
R&D Expenses	490,297,747	403,713,557	21.45
R&D-to-sales ratio	24.43%	28.17%	

## Intellectual Property

We seek to protect our technologies through a combination of patents, software copyright and trade secrets. By the end of 2024, the Company had been granted 201 patents. We continue to submit new patent applications relating to our recent R&D innovations.



### List of Intellectual Property Rights Applied and Granted

	2024		Cumulative number	
	Applied for	Granted	Applied for	Granted
Invention patents	17	9	150	98
Utility model patents	5	4	36	31
Design patents	0	0	11	11
Software copyright	4	3	27	26
Others	11	7	73	35
<b>Total</b>	<b>37</b>	<b>23</b>	<b>297</b>	<b>201</b>

**N.B.:** The number of patents that have been "applied for" does not include the rejected applications in China, or the PCT patent applications not submitted to any particular country, or any patent applications beyond the reporting period. The number of "granted" patents includes those with expired IP rights. The category of "others" includes overseas (non-Chinese) patent applications, i.e. the PCT patent applications, U.S. patent applications through the PCT route or the Paris Convention route, as well as patent applications in India.

## R&D Employees

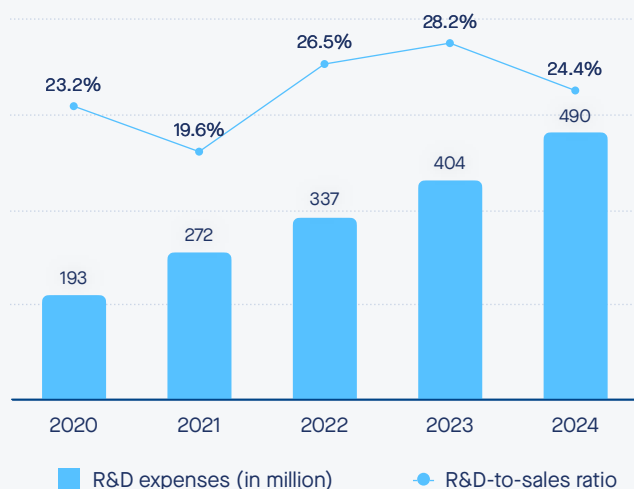
We are proud of our talented, diverse and multicultural workforce. By December 31, 2024, across our nine branches worldwide, we had employed 770 people, more than 71% of whom are in engineering roles. Meanwhile, we have expanded our business beyond Wi-Fi MCUs, thus offering innovative solutions to wireless connectivity and processing, including AI, RISC-V MCU, Wi-Fi 6, Bluetooth LE, Thread, Zigbee and other IoT-related technologies.

Since the research and development of software and hardware are inextricably intertwined, we constantly invest in software technology, too. Hence, we are currently focused on AIoT technologies, including toolchains, compilers, operating systems, application frameworks, AI algorithms, Cloud products, apps, etc. Our aim is to make Espressif a one-stop solution-provider offering anything relating to hardware, software and the Cloud.

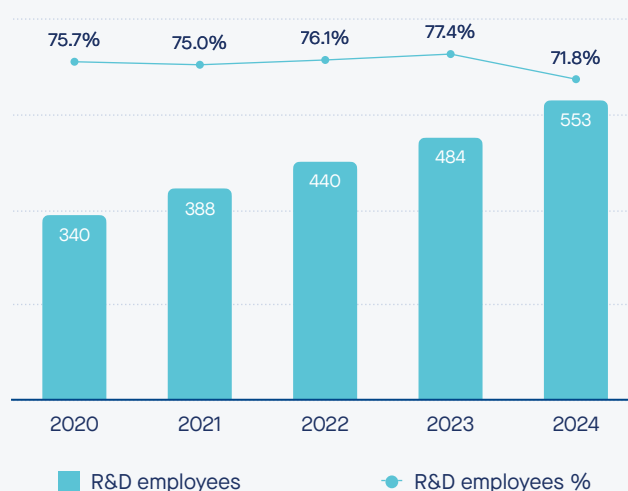
### Fiscal Year

	December 31, 2024	December 31, 2023
R&D employees	553	484
R&D employees as a percentage of total employees	71.82%	77.44%
Total compensation of R&D employees (CNY in thousands)	354,457	311,955
Average compensation of R&D employees (CNY in thousands)	684	675

### R&D Expenses



### R&D Employees



**N.B.:** Following the acquisition of M5Stack in 2024, M5Stack brought in its own production line and manufacturing staff, leading to a decrease in the proportion of R&D personnel.

# Ownership of Securities

## Basic information of securities

<b>Share types</b>	Ordinary share
<b>Share capital</b>	112,200,431 (as of December 31, 2024)
<b>Listing</b>	Shanghai Stock Exchange (SSE)
<b>Ticker</b>	688018.SH
<b>Listing Date</b>	2019-07-22

## Shareholder Structure as of December 31, 2024

Shareholder	Share Numbers	Percentage (%)
Espressif (Hong Kong) Investment Ltd.	45,016,142	40.12
Hong Kong Securities Clearing Company Limited	3,287,731	2.93
Wisdomshire Asset Management Co., Ltd. - Wisdomshire Youfu Private Equity Securities Investment Fund No.1	1,807,892	1.61
CITIC Securities Co., Ltd. – Harvest SSE STAR Market Chip Tradable Open-ended Index Securities Investment Fund	1,451,812	1.29
Wisdomshire Asset Management Co., Ltd. - Wisdomshire Youfu Private Equity Securities Investment Fund No.3	1,431,403	1.28
Shininvest Holding Ltd.	1,350,000	1.20
Ningbo Meishan Free Trade Port Le Tun Investment Management Partnership (Limited Partnership)	1,111,231	0.99
ICBC – Nuohan Growth Mixed Securities Investment Fund	851,134	0.76
Wisdomshire Asset Management Co., Ltd. - Wisdomshire Youfu Private Equity Securities Investment Fund No.2	794,577	0.71
CMS – Oriental Alpha Advantage Industry Hybrid Initiated Securities	789,324	0.70
<b>Top 10 shareholders</b>	<b>57,891,246</b>	<b>51.60</b>
Espressif Systems (Shanghai) Co., Ltd. Repurchase Special Securities Account	2,251,613	2.01
Other public shareholders	52,057,572	46.39
<b>Total of outstanding shares</b>	<b>112,200,431</b>	<b>100.00</b>

## Stock-Based Compensation

Espressif has four ongoing restricted stock incentive plans. The fair value of the restricted stock incentive plans is calculated by using the Black-Scholes model. The following table presents details of stock-based compensation costs acknowledged in the Consolidated Statements of Income.

### Restricted Stock Incentive Plans

Plan	Award Type	Number of Underlying Shares	Ratio of Underlying Shares (%)	Number of Employees in the Plan	Proportion of Awarded Employees to Total (%)	Grant Price (CNY)
<b>2019 RSIP</b>	Class II restricted stock	199,620	0.1779	21	2.73	43.59
<b>2020 RSIP</b>	Class II restricted stock	140,598	0.1253	145	18.83	65.02
<b>2021 RSIP</b>	Class II restricted stock	733,042	0.6533	207	26.88	65.64
<b>2022 RSIP</b>	Class II restricted stock	1,041,015	0.9278	139	18.05	83.86
<b>2023 I RSIP</b>	Class II restricted stock	86,893	0.0774	22	2.86	42.14
<b>2023 II RSIP</b>	Class II restricted stock	771,602	0.6877	53	6.88	27.86
<b>2023 III RSIP</b>	Class II restricted stock	90,778	0.0809	6	0.78	45.36
<b>2024 I RSIP</b>	Class II restricted stock	1,195,434	1.0654	167	21.69	35.00

**N.B.:**

RSIP: Restricted Stock Incentive Plan

The above-mentioned ratios have been recalculated on December 31, 2024.

The grant price has been adjusted due to dividend distribution and the conversion of capital reserves into share capital.

## Stock-Based Compensation

CNY	Fiscal Year	
	December 31, 2024	December 31, 2023
Selling expenses	2,385,585	828,040
G&A expenses	705,080	172,349
R&D expenses	34,570,676	17,737,027
<b>Total stock-based compensation</b>	<b>37,661,342</b>	<b>18,737,416</b>

# Risks and Uncertainties



## Financial Risk

The Company performs periodic credit evaluations of its customers' financial condition and generally requires of its customers no collateral. The Company provides an allowance for expected credit losses, based on the net amount expected to be collected on such receivables. Losses have not been significant for any of the periods presented in this report.



## R&D Risk

Espressif's research and development strategy is focused on leveraging new technologies for the creation of innovative AIoT products. Any delays or changes in the development of these technologies by our industry partners, or a failure of our products to achieve market acceptance, could compromise our competitive position.



## Competitors

As the market for AIoT products grows, we face an increasing antagonism from relatively large competitors, such as Realtek, MediaTek, Infineon, NXP, Qualcomm and others. Intense competition from current players, as well as new entrants, such as Silicon Labs and Nordic, may reduce our product sales and market share.



## Suppliers

A significant portion of the Company's products is fabricated by the Taiwan Semiconductor Manufacturing Company Limited (TSMC). The inability of TSMC to deliver wafers to the Company in a timely manner could impact the production of the Company's products for a certain period of time, which could have an adverse effect on the Company's business, financial condition, results of operations and cash flow.



## Customers

The Company sells directly to end customers, distributors, solution providers and contract manufacturers. Our customers are a mix of several big customers and numerous small customers. The concentration ratio for our top-five customers was 23.91% in 2024.



# Consolidated Financial Statements

## Consolidated Balance Sheet

CNY	December 31, 2024	December 31, 2023
<b>Assets</b>		
<b>Current assets:</b>		
Cash and cash equivalents	673,884,162	464,011,234
Held for trading financial assets		90,315,219
Notes receivable	38,605,565	42,082,006
Accounts receivable, net	318,420,157	251,641,263
Accounts receivable financing		
Prepayments	15,857,596	9,802,407
Other receivables	19,978,007	9,157,910
Including: Interest receivable		
Inventories	485,620,281	242,352,587
Other current assets	233,129,885	106,338,922
<b>Total current assets</b>	<b>1,785,495,653</b>	<b>1,215,701,548</b>
<b>Non-current assets:</b>		
Debt investment	413,542,900	753,024,500
Investment in other equity assets	30,967,840	36,079,840
Other non-current financial assets	34,221,626	34,879,347
Fixed assets	93,949,828	76,401,004
Right-of-use assets	25,169,744	15,937,207
Intangible assets	30,853,579	1,633,298
Goodwill	74,654,024	
Long-term deferred expenses	19,452,629	9,337,814
Deferred income tax assets	101,157,536	60,805,808
Other non-current assets	40,000,000	
<b>Total assets</b>	<b>2,649,465,358</b>	<b>2,203,800,366</b>

# Consolidated Balance Sheet

CNY	December 31, 2024	December 31, 2023
<b>Liabilities &amp; Shareholders' Equity</b>		
<b>Current liabilities:</b>		
Short-term loan	500,333	
Accounts payable	160,741,033	79,841,809
Contract liabilities	20,877,548	13,318,710
Payroll payable	129,439,567	102,238,914
Taxes payable	16,321,501	615,415
Other payable	12,397,576	11,525,208
Including: Interest payable		
Non-current liabilities due within one year	11,705,721	8,591,447
Other current liabilities	1,156,230	501,689
<b>Total current liabilities</b>	<b>353,139,508</b>	<b>216,633,192</b>
<b>Non-current liabilities:</b>		
Lease liabilities	14,802,190	8,454,747
Provisions	620,582	627,089
Deferred income tax liabilities	101,533,858	65,085,110
<b>Total liabilities</b>	<b>470,096,138</b>	<b>290,800,138</b>
<b>Owners' equity (or shareholders' equity):</b>		
Share capital	112,200,431	80,789,724
Capital reserves	1,351,379,589	1,358,508,382
Less: Treasury stock	208,684,568	146,969,563
Other comprehensive income	25,620,966	24,067,306
Surplus reserves	76,858,747	55,460,195
Retained earnings	792,599,518	541,144,184
<b>Total Espressif shareholders' equity</b>	<b>2,149,974,683</b>	<b>1,913,000,228</b>
Non-controlling interests	29,394,537	
<b>Total shareholders' equity</b>	<b>2,179,369,221</b>	<b>1,913,000,228</b>
<b>Total liabilities and shareholders' equity</b>	<b>2,649,465,358</b>	<b>2,203,800,366</b>

# Consolidated Income Statement

CNY	Year Ended	
	December 31, 2024	December 31, 2023
<b>Revenue</b>	2,006,919,687	1,433,064,911
Cost of Revenue	1,125,722,775	851,816,379
<b>Gross Profit</b>	881,196,912	581,248,531
Taxes and surcharges	3,420,283	6,096,400
Selling expenses	62,919,353	52,583,650
General and administrative expenses	69,260,100	61,618,348
Research and development expenses	490,297,747	403,713,557
Financial expenses	-7,802,843	-9,630,438
Including: Interest expenses	964,538	918,131
Interest income	17,019,179	11,687,008
Add: Other income	52,414,543	13,750,216
Investment income (mark "-" for loss)	21,042,124	27,879,002
Income from changes in fair value (mark "-" for loss)		315,219
Credit impairment losses (mark "-" for loss)	-1,293,418	-312,780
Assets impairment losses (mark "-" for loss)	-1,097,156	-3,230,539
Assets disposal income (mark "-" for loss)	-4,355	-9,237
<b>Operating Income</b>	334,164,009	105,258,896
Add: Non-operating revenue		164,572
Less: Non-operating expenses	1,192,230	27,721
<b>Income before income taxes</b>	332,971,779	105,395,747
Provision (benefit) for income taxes	-6,036,536	-30,808,890
<b>Net Income</b>	339,008,315	136,204,637
Net Income attributable to non-controlling interests	-315,612	
<b>Net Income attributable to Espressif</b>	339,323,927	136,204,637
<b>Earnings per share</b>		
Basic	3.0889	1.2151
Diluted	3.0708	1.2092

CNY	Year Ended	
	December 31, 2024	December 31, 2023
<b>Net Income</b>	339,008,315	136,204,637
Other comprehensive income (loss), after tax		
Changes to the fair value of investment in other equity instruments	9,486,000	278,938
Currency translation reserves	3,858,860	6,841,994
<b>Other comprehensive income (loss)</b>	13,344,860	7,120,932
Other comprehensive income (loss) attributable to non-controlling interests		
<b>Comprehensive income</b>	352,353,175	143,325,569
Comprehensive income attributable to non-controlling interests	-315,612	
<b>Comprehensive income attributable to Espressif</b>	352,668,787	143,325,569

# Consolidated Cash Flow Statement

CNY	Year Ended	
	December 31, 2024	December 31, 2023
<b>Operating Activities</b>		
Cash from sales of merchandise and provision of services	2,142,128,785	1,503,910,409
Tax refund	44,635,896	65,278,538
Other received cash related to operational activities	37,342,231	17,610,269
<b>Subtotal of cash inflow from operational activities</b>	<b>2,224,106,912</b>	<b>1,586,799,216</b>
Cash paid for merchandise and services	1,439,436,401	757,071,099
Cash paid to and for employees	425,441,190	363,845,426
Cash paid for taxes and surcharges	20,443,795	69,135,539
Other paid cash related to operational activities	118,312,968	94,149,809
<b>Subtotal of cash outflow from operational activities</b>	<b>2,003,634,355</b>	<b>1,284,201,873</b>
<b>Net cash provided by operating activities</b>	<b>220,472,557</b>	<b>302,597,343</b>
<b>Investing activities</b>		
Cash arising from the disposal of investments	476,534,893	1,838,441,681
Cash arising from investment income	4,986,872	6,953,903
Net cash arising from the disposal of fixed assets, intangible assets and other long-term assets	16,916	29,128
Other received cash relating to investment activities	2,518,600	2,415,500
<b>Subtotal of cash inflow from investment activities</b>	<b>484,057,281</b>	<b>1,847,840,212</b>
Cash paid for the purchase and construction of fixed assets, intangible assets and other long-term assets	97,671,199	49,360,096
Cash paid for investments	145,000,000	1,901,160,000
Net cash paid for acquisition of subsidiaries and other business units	84,632,507	
Other paid cash relating to investment activities	2,780,000	2,100,000
<b>Subtotal of cash outflow from investment activities</b>	<b>330,083,706</b>	<b>1,952,620,096</b>
<b>Net cash provided by investment activities</b>	<b>153,973,575</b>	<b>-104,779,884</b>
<b>Financing activities</b>		
Cash arising from the issuance of common stock	13,680,557	30,263,258
Including: Cash arising from subsidiaries absorbing investments by minority shareholders		
Cash received from borrowings	20,000,000	
<b>Subtotal of cash inflow from financing activities</b>	<b>33,680,557</b>	<b>30,263,258</b>
Cash paid to repay debt	19,500,000	
Cash paid for the distribution of dividends and profits, or payment of interests	78,299,414	
Including: dividends and profits paid to minority shareholders by subsidiaries		
Other paid cash relating to financing activities	104,664,429	120,112,997
<b>Subtotal of cash outflow from financing activities</b>	<b>202,463,843</b>	<b>120,112,997</b>
<b>Net cash provided by financing activities</b>	<b>-168,783,287</b>	<b>-89,849,738</b>
Impact of fluctuation in exchange rates on cash and cash equivalents	2,403,735	920,652
<b>Net increase in cash and cash equivalents</b>	<b>208,066,580</b>	<b>108,888,373</b>
Add: Cash and cash equivalent at the commencement of the period	459,565,727	350,677,354
<b>Cash and cash equivalents at the end of the period</b>	<b>667,632,307</b>	<b>459,565,727</b>

# Consolidated Cash Flow Statement

## - Indirect Method

CNY	Year Ended	
	December 31, 2024	December 31, 2023
<b>Additional information</b>		
<b>Net income</b>	339,008,315	136,204,637
Adjustments to cash provided by operating activities, for the purpose of reconciling net income:		
Add: provision for the impairment of assets	1,097,156	3,230,539
Credit impairment provision	1,293,418	312,780
Depreciation of fixed assets	22,528,716	18,992,639
Depreciation of right-of-use assets	13,854,471	12,623,244
Amortization of intangible assets	2,938,342	779,019
Amortization of long-term prepaid expenses	7,413,149	4,751,710
Losses on disposal of fixed assets, intangible assets and other long-term assets (mark "-" for income)	4,355	9,237
Losses on scrapping of fixed assets (mark "-" for income)	1,002,412	1,391
Losses on fair value changes (mark "-" for income)		-315,219
Financial expenses (mark "-" for income)	8,284,773	1,528,459
Losses on investment (mark "-" for income)	-21,042,124	-27,879,002
Decrease on deferred income tax assets (mark "-" for increase)	-40,376,467	-45,184,664
Increase on deferred income tax liabilities (mark "-" for decrease)	36,855,548	11,526,848
Changes in operating assets and liabilities:		
Decrease in inventories (mark "-" for increase)	-217,732,331	205,787,792
Decrease in operational receivables (mark "-" for increase)	-105,203,719	-66,257,845
Increase in operational payables (mark "-" for decrease)	132,885,201	27,748,362
Others	37,661,342	18,737,416
<b>Net cash flow provided by operating activities</b>	<b>220,472,557</b>	<b>302,597,343</b>

# Consolidated Statement of Changes in Equity

## Equity attributable to Espressif

CNY	Share capital	Capital reserves	Less: Treasury stock	Other comprehensive income	Surplus reserves	Retained earnings	Total Espressif Equity	Non-controlling Interests	Total equity
<b>Balance as of December 31, 2022</b>	80,484,430	1,309,813,001	40,966,012	16,946,374	46,570,910	413,828,832	1,826,677,535		1,826,677,535
Comprehensive income				7,120,932		136,204,637	143,325,569		143,325,569
Capital increase	305,294	39,167,386	106,003,551				-66,530,872		-66,530,872
Stock-based compensation		9,527,995					9,527,995		9,527,995
Surplus reserves					8,889,285	-8,889,285			
Dividends									
<b>Balance as of December 31, 2023</b>	<b>80,789,724</b>	<b>1,358,508,382</b>	<b>146,969,563</b>	<b>24,067,306</b>	<b>55,460,195</b>	<b>541,144,184</b>	<b>1,913,000,228</b>		<b>1,913,000,228</b>

## Equity attributable to Espressif

CNY	Share capital	Capital reserves	Less: Treasury stock	Other comprehensive income	Surplus reserves	Retained earnings	Total Espressif Equity	Non-controlling Interests	Total equity
<b>Balance as of December 31, 2023</b>	80,789,724	1,358,508,382	146,969,563	24,067,306	55,460,195	541,144,184	1,913,000,228		1,913,000,228
Comprehensive income				13,344,860		339,323,927	352,668,787	-315,612	352,353,175
Capital increase	31,410,707	-22,339,823	-27,059,984				36,130,868		36,130,868
Repurchase			88,774,989				-88,774,989		-88,774,989
Stock-based compensation		15,211,030					15,211,030		15,211,030
Surplus reserves					21,398,552	-21,398,552			
Subsidiary Acquisition				-11,791,200		11,791,200		29,710,150	29,710,150
Dividends						-78,261,241	-78,261,241		-78,261,241
<b>Balance as of December 31, 2024</b>	<b>112,200,431</b>	<b>1,351,379,589</b>	<b>208,684,568</b>	<b>25,620,966</b>	<b>76,858,747</b>	<b>792,599,518</b>	<b>2,149,974,683</b>	<b>29,394,537</b>	<b>2,179,369,221</b>



# Further Information

## Terms and Conditions of the Report

### Responsibility Statement

The Board of Directors, the Board of Supervisors and the executive management of the Company warrant that the contents of this report are true, accurate and complete, and do not contain any false information, misleading statements or material omissions, severally and jointly accepting any legal responsibility thereof.

Shanghai, 21 March 2025  
Espressif Systems

#### Board of Directors

##### Teo Swee Ann

Founder and Chairman

##### Ng Pei Chi

Information Technology Officer

##### Wang Jue

Deputy General Manager

##### Teo Teck Leong

Shareholder-elected

##### Chen Myn

Independent Director

##### Lee Kian Soon

Independent Director

##### Leong Foo Leng

Independent Director

#### Board of Supervisors

##### Zhang Hanrui

Employee-elected

##### Wang Lili

Shareholder-elected

##### Zhang Mengyu

Shareholder-elected

#### Executive Management

##### Teo Swee Ann

Founder and CEO

##### Wang Jue

Deputy General Manager

##### Shao Jingbo

Financial Director



### Forward-looking Statements

This report contains forward-looking statements and/or assessments about the business, financial condition, performance and strategy of the Espressif Group. These statements and/or assessments are based on assumptions and management expectations resting upon currently available information and current estimates. These are subject to a multitude of uncertainties and risks, many of which are partially or entirely beyond Espressif's control. Espressif's actual business development, financial condition, performance and strategy may, therefore, differ from what is discussed in this report.

# Independent Auditor's Report

To the Shareholders of  
**Espressif Systems (shanghai) Co., Ltd.**



## Opinion

We have audited the financial statements of Espressif Systems (Shanghai) Co., Ltd. ("the Company"), which comprise the consolidated balance sheet and balance sheet as of December 31, 2024, the consolidated income statement, the income statement, the consolidated cash flow statement, the cash flow statement, the consolidated statement of changes in equity, and the statement of changes in equity for the year then ended, and the notes to the financial statements.

In our opinion, the enclosed financial statements were prepared in accordance with the Accounting Standards for Business Enterprises (the "ASBE") in all material aspects, and present fairly the consolidated and other financial positions of the company as of December 31, 2024, the consolidated and other results of company operations, and the consolidated and other cash flows of the company for the year then ended.

## Basis For the Opinion

We conducted our audit in accordance with China's Standards on Auditing (the "CSA"). Our responsibilities under those standards are further described in the section of our report detailing the "Auditor's responsibilities for the audit of the financial statements". We are independent of the Company, in accordance with the CSA's Code of Ethics for Professional Accountants (the "Code"), and we have fulfilled our other ethical responsibilities, again, in accordance with the Code. We believe that the audit evidence we have obtained is sufficient and appropriate for providing the basis of our opinion.

## Key Audit Matters

Key audit matters are those matters that, in our professional judgement, were of the greatest significance in our auditing of the financial statements for the financial year from January 1, 2023 to December 31, 2023. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, we do not provide a separate opinion on these matters.

## Key Audit Matter

### Revenue Recognition

Espressif's main business includes the sales of chips, modules & devKits, which created a revenue of CNY 2,006,919,686.57 in 2024.

Since the operating revenue is a key performance indicator, there is an inherent management risk when adjusting the time point of revenue recognition, in order for it to coincide with certain goals or expectations. Therefore, we identify revenue recognition, too, as a key auditing matter.

## How our audit addressed the Key Audit Matter

Our main auditing procedures for revenue recognition are as follows:

- > Understanding and evaluating the effectiveness of the internal control design relating to the revenue recognition of product sales, and testing the effectiveness of the critical control point.
- > Evaluating the appropriateness of the sales revenue recognition policy by interviewing the management, reviewing the main terms of the sales contracts and the time point of major control transfers relating to the revenue recognition.
- > Checking the origin of revenue by performing analytical procedures for the operating revenue, including monthly sales analysis, as well as gross profit analysis categorized by customers and products.
- > Checking the authenticity of revenue by sampling supporting documents related to revenue recognition, such as sales contracts, shipping records and customer receipts.
- > Checking commercial information and the transaction prices paid by important customers, in order to determine whether any abnormal transactions were made by the company.
- > Performing a cut-off test to check whether the revenue recognition is recorded within the correct accounting period.

### Inventory

As of December 31, 2024, the inventory balance amounts to CNY 498,621,274.73 with provision for inventory impairment CNY 13,000,993.55, and a net book value amount of CNY 485,620,281.18.

Since most inventories are stored in warehouses entrusted by external processors and third parties, and the determination of provision for inventory impairment involves significant management judgment and estimation, we identify the existence of inventories and the provision for inventory impairments as key matters.

Our main auditing procedures for the inventory are as follows:

- > Evaluating the effectiveness of the internal control design of the inventory management, and testing the effectiveness of the critical control point.
- > Analyzing the rationality of the inventory balance fluctuation at the end of the reporting period by investigating its production cycle and stock policy.
- > Performing a confirmation procedure on the third-party warehouse.
- > Implementing a supervision on the inventory check at the end of the reporting period.
- > Evaluating whether the provision for inventory impairment at the end of the reporting period is fully accrued by conducting storage age analysis and by reviewing the calculation model and the results of provision for inventory impairment.
- > Calculating the inventory turnover and making a comparison to other similar companies.

## Other Information

The management of Espressif Systems (Shanghai) Co., Ltd. (henceforth, “the management”) is responsible for any information on all aspects of the 2024 company report, apart from the financial statements and the auditor’s report on them.

Our opinions on the financial statements and the group management report do not cover the rest of the information provided here, and consequently we do not express an opinion or any other form of assurance conclusion thereof.

In connection with our audit, our responsibility is to read the rest of the information provided and, in so doing, consider whether this information:

- > is materially inconsistent with the consolidated financial statements, with the group management report information audited for content or our knowledge obtained in the audit, or
- > appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. However, we have nothing to report in this regard.

## Management's Responsibilities for the Financial Statements

The management is responsible for the preparation of financial statements that give a true and fair view, in accordance with the ASBE, and for the design, implementation and maintenance of such internal controls as the management deems necessary, to enable the preparation of financial statements that are free from material misstatements, whether due to fraud or error.

In preparing the financial statements, the management is responsible for assessing the Company’s ability to continue its operation, disclosing, as applicable, any matters related to ongoing concerns and using them as the basis of accounting, unless the management either intends to liquidate the Company or cease its operations, having no realistic alternative but to do so.

## Auditor’s Responsibilities for the Auditing of the Financial Statements

Our objectives are to obtain reasonable assurances about whether the financial statements as a whole are free from material misstatements, due to either fraud or errors, and to issue an auditor’s report that includes our true opinion. Reasonable assurances provide a high level of confidence, but are not a guarantee that an audit conducted in accordance with CSAs will always detect a material misstatement when and where it exists.

Misstatements can arise from fraud or errors and are considered substantial if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users, taken on the basis of these financial statements.

As part of an audit in accordance with CSAs, we exercise our professional judgment and maintain professional skepticism throughout the audit. We also:

- > Identify and assess the risks of substantial financial misstatements, due to either fraud or errors; design and perform auditing procedures in response to those risks, and obtain auditing evidence that is sufficient and appropriate for providing a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.
- > Obtain an understanding of internal controls relevant to the audit, in order to design auditing procedures that are appropriate to the circumstances.
- > Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the management.
- > Conclude on the appropriateness of the management's use of a growing concern as the basis of accounting and, according to the auditing evidence obtained, determine whether a substantial uncertainty exists about events or conditions that may cast a significant doubt on the Company's ability to continue its operation. If we conclude that there is substantial uncertainty, we are required to draw users' attention to our auditor's report on the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the auditing evidence obtained up until the date of our auditor's report. However, future events or conditions may force the Company to cease its operation altogether.
- > Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and determine whether the financial statements represent the underlying transactions and events in a manner that achieves a fair presentation.
- > Obtain sufficient and appropriate auditing evidence about the financial information of entities or business activities of the Company, in order to express our auditing opinion on the Company's consolidated financial statements. We are responsible for directing, supervising and executing group audits and assume full responsibility for auditing opinions.

We communicate with those charged with governance, among other matters, on the planned auditing scope, timing and significant audit findings, including any significant deficiencies in internal controls that we may identify during our audit.

We also provide those charged with governance with a statement that we have complied with all relevant ethical requirements regarding our independence, and we also communicate with them all relationships and other matters that may reasonably be thought to bear on our independence and, where applicable, any other related protections.

From the matters communicated to those charged with governance, we determine which matters are of the highest significance in the auditing of the financial statements of the current period and are, therefore, the key auditing findings. We describe these findings in our auditor's report, unless a law or regulation prohibits such public disclosure about those findings, or when -in extremely rare circumstances- we determine that a finding should not be communicated in our report, because the adverse consequences of its disclosure would reasonably be expected to outweigh the benefits of such communication for the public interest.

Beijing, 22 March 2024

Baker Tilly China

Ma Gang

Chinese Certified Public Accountant

Zhang Wuyi

Chinese Certified Public Accountant

## List of abbreviations

<b>AI</b>	Artificial Intelligence
<b>AIoT</b>	Artificial Intelligence and Internet of Things
<b>Bluetooth LE</b>	Bluetooth Low Energy
<b>CEO</b>	Chief Executive Officer
<b>CES</b>	Consumer Electronics Show
<b>EBITDA</b>	Earnings Before Interest, Taxes, Depreciation and Amortization
<b>Espressif</b>	ESPRESSIF SYSTEMS (SHANGHAI) CO., LTD.
<b>G&amp;A</b>	General and Administrative
<b>GM</b>	Gross Margin
<b>HMI</b>	Human-Machine Interaction
<b>IC</b>	Integrated Circuit
<b>IoT</b>	Internet of Things
<b>LLM</b>	Large Language Model
<b>MCU</b>	Microcontroller Unit
<b>OBD</b>	On-Board Diagnostics
<b>R&amp;D</b>	Research and Development
<b>RF</b>	Radio Frequency
<b>RISC-V</b>	Reduced Instruction Set Computer-V
<b>ROE</b>	Return on Earnings
<b>RTOS</b>	Real-Time Operating System
<b>SG&amp;A</b>	Selling, General and Administrative
<b>SH</b>	Shanghai
<b>SoCs</b>	System on Chips
<b>YoY</b>	Year-on-Year



## Investor Relations

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## Official Platforms


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All amounts presented in these condensed Consolidated Financial Statements are shown in CNY unless stated otherwise. Slight discrepancies between the amounts presented may occur due to rounding.