

# UNISOC

**UNISOC (Shanghai) Technologies Co., Ltd.** (Chinese: 紫光展锐; pinyin: *Zǐguāng zhǎn rui*), formerly **Spreadtrum Communications, Inc.** (Chinese: 展讯通信有限公司; pinyin: *Zhǎnxùn Tōngxìn Yǒuxiàn Gōngsī*), is a Chinese fabless semiconductor company headquartered in Shanghai which produces chipsets for mobile phones. UNISOC develops its business in two major fields - consumer electronics and industrial electronics. Consumer electronics includes smartphones, feature phones, smart audio systems, smart wearables and other related devices. Industrial electronics cover fields such as LAN IoT, WAN IoT and smart displays.<sup>[1]</sup>

Since 2021, it has been the fourth largest mobile processor manufacturer in the world, after MediaTek, Qualcomm and Apple, with 13% of global market share in 2024.<sup>[2][3]</sup>

## History

Unigroup Spreadtrum and RDA are Chinese fabless semiconductor companies, acquired by Tsinghua Unigroup, merged to form UNISOC in 2018.<sup>[4]</sup>

## Background

Tsinghua Unigroup is the biggest shareholder of the company.<sup>[5]</sup>

## Research and development

UNISOC products support a broad range of wireless communications standards, including GSM, GPRS, EDGE, TD-SCDMA, W-CDMA, HSPA+ and TD-LTE. UNISOC has a global R & D layout, with more than 5,000 employees worldwide, 90% of whom are R&D personnel.

The company originally produced chips for GSM handsets, but most of its resources in the late 2000s were then focused on the Chinese TD-SCDMA 3G standard. In addition to GSM and combined GSM/TD-SCDMA baseband chipsets, they also supplied chips for two Chinese mobile TV standards:

### UNISOC (Shanghai) Technologies Co., Ltd.



<b>Native name</b>	紫光展锐
<b>Industry</b>	<u>Semiconductors</u>
<b>Predecessor</b>	Spreadtrum
<b>Founded</b>	April 2001
<b>Headquarters</b>	<u>Shanghai</u> , China
<b>Key people</b>	Ma Daojie (chairman) Ren Qiwei (CEO)
<b>Products</b>	<u>Central processing units</u> <u>Chipsets</u> <u>Microprocessors</u> <u>Systems-on-chip (SoCs)</u>
<b>Number of employees</b>	5,500+ <sup>[1]</sup>
<b>Parent</b>	<u>Tsinghua Unigroup</u>
<b>Website</b>	<u>unisoc.com</u> ( <a href="http://www.unisoc.com">http://www.unisoc.com</a> )

TD-MBMS and CMMB. UNISOC (then known as Spreadtrum)'s customers accounted for 50% of TD-SCDMA handset sales in China Mobile's round of TD-SCDMA trials in 2008.<sup>[6]</sup>

UNISOC, then still known as Spreadtrum, was formerly a public company listed on NASDAQ, but agreed to an acquisition by Tsinghua Holdings subsidiary Tsinghua Unigroup, in July 2013, for about US\$1.78 billion;<sup>[7]</sup> the deal completed on 23 December 2013.<sup>[8]</sup>

In 2014, Tsinghua Unigroup acquired RDA Microelectronics for US\$907 Million.<sup>[9]</sup> RDA Microelectronics was a fabless semiconductor company that designed, developed and marketed wireless system-on-chip and radio-frequency semiconductors for cellular, connectivity and broadcast applications.

In 2018, the company Spreadtrum Communications and RDA Microelectronics was merged and rebranded to UNISOC, in which Intel agreed to invest \$1.5 billion for a 20 percent stake. The company also began working on a 5G smartphone platform with an Intel 5G modem.<sup>[10][11]</sup> In February 2018, UNISOC introduced high-end smartphone SOCs with augmented reality capabilities.<sup>[12]</sup>

UNISOC released the 5G technology platform Makalu 1.0 and the V510 5G baseband chip in February 2019. A year later, they launched the UNISOC T7520, a 5G SoC that uses of 6nm EUV advanced process technology.<sup>[13]</sup>

In 2021, it beat HiSilicon and ranked third in the Chinese smartphone AP market share.<sup>[14]</sup>

## Main products

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Currently, UNISOC's main products include mobile system-on-chips, baseband chips, AI chips, radio frequency chips, and other communication, computing, and control chips, which are widely used in consumer electronic devices such as smartphones, tablets, and smart wearables.

### Mocor RTOS

Proprietary real-time operating system, developed by Unigroup Spreadtrum (currently part of UNISOC), used in 4G dumb/feature phones. Mocor (supposedly short for Mobile core), does not have its own kernel, and is typically used with a third party kernel such as ThreadX.<sup>[15]</sup>

## See also

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- Semiconductor industry
- Semiconductor industry in China
- Allwinner
- Intel Atom
- HiSilicon
- Freescale i.MX
- Leadcore Technology
- MediaTek
- MStar Semiconductors
- Nufront
- Rockchip
- Qualcomm Snapdragon
- Nvidia Tegra
- Broadcom VideoCore

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