

### **Global and China CMOS Camera Module**

Industry Report, 2011

Sep. 2011



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#### This report

Analyzes the status quo of CMOS Camera Module.

Focuses on CMOS imaging sensor, CMOS camera lens, camera module assembly and Voice Coil Motor.

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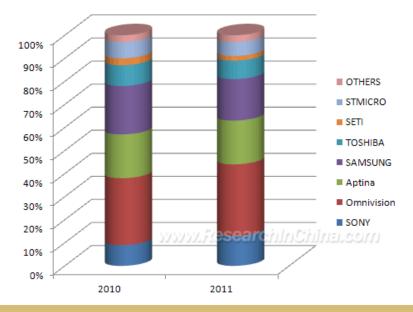
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### Abstract

In 2011, the global shipment of CMOS image sensors is expected to be 1,989 million units, up 24.5% from 1,497 million units in 2010. The application in mobile phone is still the most important market. Most of 3G mobile phones and smart phones are equipped with front and rear cameras, and both of the two types of phones are also the main engines for the growth of mobile phone market.

The industrial chain of CMOS camera module mainly covers the three: CMOS image sensor, lens and module.

In the sector of CMOS image sensors, the proportion of Backside Illumination CMOS Sensors rises significantly in 2011. Backside Illumination CMOS Sensor not only witnesses rapid progress in mobile phone field, but also captures the CCD sensor market in traditional highend DSC field. Currently, only Canon and Sony produce CMOS sensors for high-end DSC; however, Omnivision and Aptina are eyeing this market and trying to enter this sector. Powerfully driven by Apple's high-priced products, the revenue of Omnivision achieved USD956 million in FY2011, up 58.5% from FY2010, so Omnivision saw the highest growth rate among the vendors of CMOS image sensors. Omnivision has also been the world's largest CMOS image sensor producer for successive several years. Other CMOS image sensor vendors except Sony witness sluggish growth.



## CMOS Image Sensor Vendor Market Share (by Revenue), 2010-2011

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In the lens field, rich experience is of extreme importance. Even with the identical equipments, the good yield of products of the vendors differs greatly. For instance, only four (or less four) vendors can mass-produce 8-megapixel cameras in the world. The vendors engaged in low-end products lead a hard life, while the high-end peers obtain handsome profits. In the high-end field, Largan almost monopolizes the market; NOKIA, HTC and Apple all apply Largan's products. Although its products aim at the mid-end market, GSEO's major client Apple has ordered more and more GSEO's products. As expected, GSEO's revenue will grow by nearly 100% in 2011. Honhai also makes increasing investments in lenses. Fu Jing Precision Industry JINCHENG is trying to separate the lens division and let it be a listed company. Other lens manufacturers see slowdown in growth.

In the module field, LG INNOTEK becomes a highlight and endears itself to Apple, with more orders from the latter. The CCM revenue of LG INNOTEK will be USD950 million in 2011, up 63.8% from USD508 million in 2010, the sole vendor with substantial growth in the CCM sector. LITEON carries its internal integration and mergers the CCM businesses of LITEON-SEMI and LITEON. Besides, PRIMAX also has Besides, PRIMAX also has received some orders from Apple, and its revenue presents a 29.3% rise.

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