

Apple iPhone 6 & 6 Plus Front Camera Modules from Sony

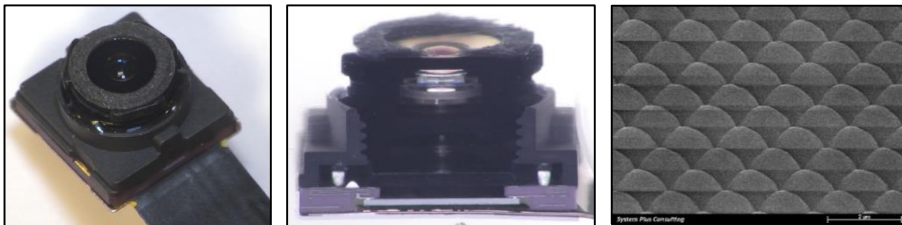
Very Innovative CMOS Image Sensor: new pixel array structure / Stacked ISP circuit based on Exmor-RS process/ manufacturing cost adapted to camera performances

For the iPhone 6 FaceTime camera module, Apple integrate an innovative CMOS Image Sensor constituted of an original structure of 4.8 MPixel sub-microlenses array mediated by the color filters to get the final 1.2 Mpixel resolution. This technical choice has a strong impact on the camera performances and on the device manufacturing cost.

The unique technology from Sony (Exmor-RS) consists in a stacking of a pixel array circuit which uses a Back-Side Illuminated (BSI) technology and a logic ISP circuit processed with a 65nm technology node. The CIS is assembled in flip-chip on a ceramic substrate with a gold stud bumping process. This allows to raise the pixel array size by 15% and to considerably improve the light sensitivity by integrating an innovative grid and lenses design.

The camera module, with dimensions of 6.2 x 6.0 x 3.8mm, is equipped with a 4-elements lens module and a f/2.2 camera aperture which increase light sensitivity.

The report includes a comparison of Apple's technical choices between iPhone6 Rear and Front camera.



REVERSE COSTING ANALYSIS

REPORT BY 

Camera Module
101 pages
November 2014
Pdf file
Xls file

PRICE :

Full report: EUR 2,990
Bundle* report: EUR 6,000

COMPLETE TEARDOWN WITH:

- Detailed Photos
- Precise Measurements
- Material Analysis
- Manufacturing Process Flow
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* Bundle reports = front and rear camera modules of Apple iPhone 6 and iPhone 6plus

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- Camera Module Cost

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