CMOS Image Sensors for leading flagships sold in 2018, Yole Développement and System Plus Consulting offer two connected reports. This overview will give you a comprehensive technical and cost evaluation of the main OEM choices.

System Plus Consulting has conducted a comprehensive technical and cost evaluation of CMOS Image Sensors in leading flagships sold in 2018. Discover the comparative study that provides insights into the structure and technology of 28 CIS dies in seven flagship smartphones from several major brands: Apple iPhone X; Samsung Galaxy S9 Plus; Huawei P20 Pro; Huawei Mate 20 Pro; Xiaomi Mi8 Explorer Version; Oppo Find X; and Vivo X21UD. This report is connected to the System Plus Consulting’s “Mobile Camera Module Comparison 2019” report, which gives an overview and details about the structure of each camera module.

The report has shown that the four manufacturers of CIS presented in the flagships, Sony, Samsung, Omnivision and STMicroelectronics, have totally different approaches. For example, Sony is the only manufacturer using hybrid bonding in the analyzed devices, having completely dropped fusion bonding with Through-Silicon Vias (TSVs). We have extracted further technical choices from the four players from the analysis and comparisons.

We analyze the CIS dies integrated in rear and front-facing CMOS Camera Modules (CCMs) including main cameras, wide angle, telephoto and near global shutter infrared, from technology node to die size. Additionally, we have studied the costs of the CISs to compare the economic choices of the manufacturers.

Mobile CMOS Image Sensor Comparison 2019

Physical analysis and cost comparison of 28 CMOS Image Sensors found in seven leading flagship smartphone cameras from Apple, Samsung, Huawei, Xiaomi, Oppo and Vivo.

Title: Mobile CIS Comparison 2019
Pages: 300
Date: March 2019
Format: PDF & Excel file
Price: EUR 6,490
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### Linked Report
- Status of the CMOS Image Sensor Industry 2018—Market and Technology Report by Yole Développement

### Related Reports
- Mobile Camera Module Comparison 2019
  - January 2019 - EUR 6,490*
- Mantis Vision’s 3D Depth Sensing System in the Xiaomi Mi8 Explorer Edition
  - December 2018 - EUR 3,990*
- Orbbec’s Front 3D Depth Sensing System in the Oppo Find X
  - November 2018 - EUR 3,990*
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Reverse Costing® is the process of disassembling a device (or a system) in order to identify its technology and calculate its manufacturing cost, using in-house models and tools.

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