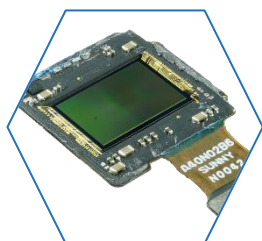
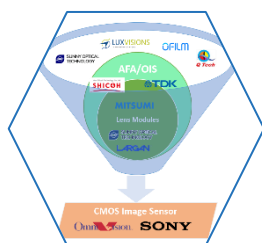
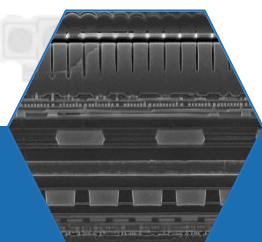




Smartphone Camera Module Comparison 2020 Vol 3: Focus on Huawei

Evolution of Huawei's smartphone camera released since 2016 with detailed technical and cost analyses of the P40 Pro, P30 Pro, P20 Pro, P10 and P9; Mate 30 Pro and Mate 20 Pro.



Huawei is among the top three smartphone-making OEMs today. Each OEM makes its own choices to try and stand out from the crowd, and they may be similar or different from one manufacturer to another. For example, a manufacturer may choose to keep a larger pixel size on one of these cameras to maintain good brightness and allow better photos in a low-light environment. It might put the emphasis on zoom by incorporating a periscope that can multiply the magnification by five or more. It may even use image sensors with higher or lower resolutions depending on the function of the camera.

Huawei was the first to switch to dual cameras on the back in its P9 model and to integrate periscopes for its telephoto camera in the P30 Pro.

Therefore, this full reverse costing study has been conducted to provide insights into technology data, manufacturing cost and selling price of the Huawei P series and Mate series camera modules including P40 Pro, P30 Pro, P20 Pro, P10 & P9, Mate 30 Pro and Mate 20 Pro.

This report also includes a comparison and a study of the evolution of the costs

and technological choices made by Huawei in the smartphones mentioned. Optical imaging and scanning electron microscopy was used to collect very detailed information about the front and rear RGB cameras. At the level of the CMOS Image Sensor, this includes the size of the sensor, the technology node, and the stacking process. At the level of the camera module, this includes the lens module, the prisms if there are any, the housing, and the voice coil motor.

COMPLETE TEARDOWN WITH

- Detailed photos
- Precise measurements
- Module cross-sections
- Sensor measurements
- Material analysis
- Manufacturing process flow
- Supply chain evaluation
- Manufacturing cost analysis
- Physical comparisons
- Manufacturer evolution
- Cost comparisons

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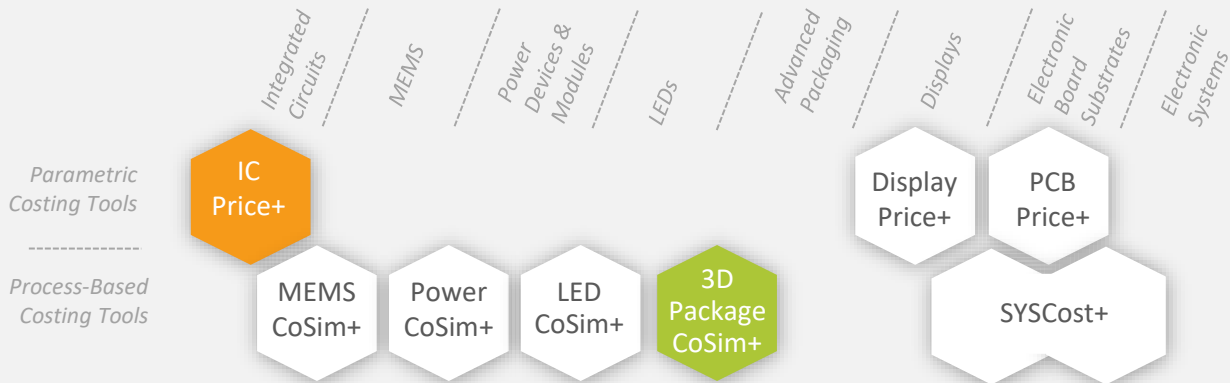
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Reverse Costing® is the process of disassembling a device (or a system) in order to identify its technology and calculate its manufacturing cost, using in-house models and tools.



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