

FRAUNHOFER INSTITUTE FOR APPLIED OPTICS AND PRECISION ENGINEERING IOF

# **ULTRA-THIN CAMERA FOR SMARTPHONES**





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1 Possible system integration of the Ultra light camera module.

2 Detail of the imaging optics.

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## ULTRA-THIN CAMERA FOR SMARTPHONES

THE NEW CAMERA CONCEPT BY THE FRAUNHOFER WILL ENABLE A NEW ERA OF INDUSTRIAL DESIGN FOR MOBILE DEVICES. WITH ITS ULTRA-COMPACT DIMENSIONS, IT ALLOWS DESIGNERS TO CREATE PHONES WHICH HAVE NEVER BEEN POSSIBLE BEFORE.

The principle of the camera is inspired by an insect's eye, but the optical design has been developed by world leading innovators in the field of precision engineering and applied optics. With this ultra-thin camera module, the thickness of consumer electronics can be dramatically reduced without sacrificing the optical quality of the camera.

#### Features

- Module height: 3.5mm
- Resolution: 20MP (4:3)
- F-number: 2.0
- Pixel size: 1.12µm
- one camera module for both sides: switching between world- and user-facing mode
- autofocus
- optical image stabilization

