

Masterpieces of 3D technology

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Abstract

This presentation about 3D masterpieces refers to various technologies that are being used to increase the light sensitivity of the CMOS image sensors. Examples of these technologies are double micro-lenses, additional anti-reflection coatings, light pipes above the pixels, back-side illumination, stacked image sensors, tungsten light shield, etc. The presentation contains several cross sections of existing devices and ends with an incredible masterpiece : the 3D stacked image sensor fabricated by Sony and expected to be present in the new S8 of Samsung and in the new iPhone8 of Apple.