Summary

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CIS (CMOS Image Sensor) is an electric Nano-sensor to detect light such as camera. We designed Shift 0.9 (µm) CIS (CMOS Image Sensor). The incident light is plane wave which oblique by . Therefore, we shift OC&ML (Over Coat & Micro Lens) and Color Filter (CF) each as d1[µm] and d2[µm]. We Simulate the shift CIS by FDTD (Finite-Difference Time Domain) program with 416 CPU Cluster. The optimum setting is d1=? (µm) and d2=? (µm). Also, the shift CIS has better QE (Quantum Efficiency) and X-talk (Crosstalk) than normal CIS.