

CMOS or CCD image sensors for digital still applications?

Albert J.P. Theuwissen
Philips Imaging Technology
Eindhoven, The Netherlands

In this paper an in-depth comparison will be made between the good old Charge-Coupled Devices and the challenging CMOS image sensors as far as the digital still applications are considered. CMOS image sensors have the advantage of being cheaper, consuming less power and containing more electronics on-chip than the CCDs. On the other hand CCDs show superior image quality. What are the trade-offs between both technologies and are there other shortcomings when the devices are applied into a digital still application?