

## **Deep Trench Isolation (DTI) is here to stay in the CIS World**

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Deep trench isolation is a technology that was introduced a few years ago into the CMOS image sensor world. Although the technology of introducing deep trenching seems not straight forward, the advantages are enormous. Moreover, recently more and more applications are developed that would not have been possible without the DTI's. The big sensor manufacturers have DTI technology available and the presentation will give an overview of the short history of the DTIs as well as the growing field of DTI possibilities. Think about optical cross-talk, electrical cross-talk, anti-blooming, sub-micron pixels, increasing light sensitivity, global shuttering, photodiodes without implants and recently even energy harvesting.