

## **Liquid Crystals – A Key Component in LCDs**

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TFT-LCDs remain the fastest growing segment in the display industry and will continue to dominate all important applications from notebook, monitor to TV. The LCD-TV market will show the strongest growth with a shift to larger screen sizes. Main areas for improvement are contrast, backlight, and moving picture response time.

Liquid Crystals are the key component in TFT-LCDs to meet the technical requirements, like wide operating temperature range, lower power consumption, lower driving voltage, faster response time and higher reliability. The recent progress and future trend for LCD-monitor and –notebook application will be described using TN-TFT-technology. For LCD-TV application VA- and IPS-technology will allow faster moving picture response times.

Examples for the development of new Liquid Crystals for all important technologies and applications demonstrate the significant and fast progress in the material development.