

## Reducing LED flicker for displays

Catalyst Semiconductor, Inc. expanded its family of LED drivers with the CAT3626; a low noise fractional charge pump with an I2C serial bus interface for precise control and programming of up to six white/colour LEDs.

The CAT3626 is designed to easily and efficiently power backlighting for multiple displays, drive RGB "fashion-lighting" and control flash functions in high-performance portable applications, including cell phones, hand-held devices and digital cameras.

Targeted at battery-powered portable applications with supply voltages, the CAT3626 is

designed with a current regulation scheme which minimizes LED flicker during periods of sudden battery fluctuations - a common problem in portable systems experiencing repetitive load bursts,

such as RF or audio power amplifiers.

Available in a 16-lead TQFN 4mm x 4mm package, the device is 100% RoHS-compliant.

For more details, visit: [www.catsemi.com](http://www.catsemi.com)



## Auto LEDs

At the Society of Automotive Engineers (SAE) 2006 World Congress, OSRAM Opto Semiconductors highlighted the industry trend where innovative exterior LED lighting is moving from luxury to mainstream automotive segments. It presented a paper discussing design methodologies leading to lower-cost solutions in rear combination lamps showing common design tradeoffs, design alternatives and innovative solutions.

The paper was entitled "Low-Cost Design Alternatives for LED Rear Combination Lamp Applications" and was given by James D. Loeffler and Michelle Huang.

## Unaxis Optics dichroic filters enhance LED lighting

Unaxis Optics, the manufacturer of thin film optical components, recently announced new dichroics filters/mirrors specifically optimized for LED applications. These LED ColorDichroics efficiently reflect and transmit random polarized light from individual high brightness power LED sources of different colours. Applications of LED ColorDichroics range from Projection Display illumination optics to various uses in solid state lighting and instrumentation.

LEDs used as novel light sources have seen dramatic technical improvements resulting in very high brightness. They have become commercially available in all primary colours of red, green and blue as well as other colours such as cyan and yellow. The principal advantages of these new light sources are their specific and narrow spectral emission

characteristics and their extremely fast switching capabilities. These advantages make them excellent illumination sources for application in projection display systems, enabling much more saturated colours and very high contrast.

The inherently random polarized light characteristics of LEDs make them very suitable

sources for microdisplay devices based on light engine architecture that do not require polarized light (DLP and others). Since most of these light engines are based on single microdisplay chip architectures, the light from the three different primary colour LEDs of red, green and blue has to be merged into

one common beam. LED ColorDichroics provide a very cost effective and versatile solution for reflecting and transmitting the light from the different colour LED sources in order to combine the individual light emissions into one single light beam.

For more details, visit: [www.optics.unaxis.com](http://www.optics.unaxis.com)

