LED Driver ICs for Displays and Lighting

From Cell-Phones to Street Lights

ABSTRACT

This landmark report provides a comprehensive evaluation of market trends in LED driver ICs for displays and lighting applications.

The report is structured in eight Sections and addresses the market, vendors, products, and technologies.

Section One provides an introductory overview of the report contents and two major lighting systems:

- LED display backlight units (BLU)
- LED light fixtures (luminaires)

Section Two is an executive summary – it provides the key findings and implications for business decision-makers at foundries and IC vendors.

Section Three addresses the market dynamics and trends: market segmentation and segment penetration, and growth and size during the 2008 to 2013 period and beyond. Data tables include total 2008 to 2013 demand for LED driver ICs and wafers for each of the 18 analyzed applications that are covered in Sections 4 and 5.

Section Four focuses on 13 major LED **display** application device types ranging from cell-phones to public displays. Data tables for each of the 13 display applications include:

- Device unit shipments
- LED penetration rate
- Number of LED driver ICs
- Number of transistors in LED driver ICs, their chip area, and pricing
- Wafer demand by technology node

Section Five focuses on 5 major **lighting** application device types ranging from digital camera flash lights to street lights. Data tables contain the same information as listed above for the display application device types.

Section Six covers trends in LED driver IC product types. Trends are analyzed in terms of application requirements, design implementations, and key performance attributes. Data tables provide key LED driver IC and process technology attributes for each of the 18 application device types.

Section Seven addresses technology and manufacturing trends for LED driver ICs. It focuses on the enabling BCD technology, integration trends, and the emerging role of foundries in the analog marketplace.

Section Eight provides a comparative overview of the competitive landscape; it is based on our bottom up analysis of 25 IC vendors. Data tables include vendor comparisons and market share by LED driver IC application segment. In addition, each vendor is covered in terms of its LED IC product portfolio, technologies and manufacturing trends, and business performance.

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