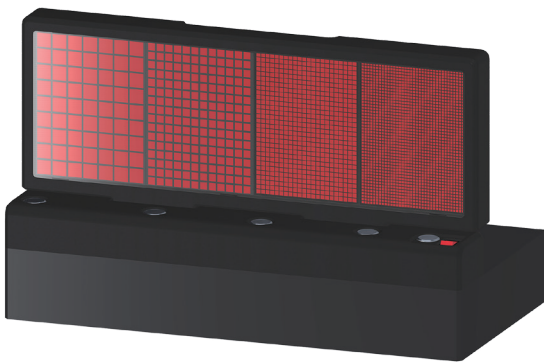




Application demonstrator LPD 2016 LED Series for Low Power Display

Lowest power LED series for high LED count usage



With multiple options in flux levels and colors, the 2016 LED portfolio already offers a wide range of styling possibilities for automotive lighting.

Product Innovation

• Cost-Effective Automotive Display Solution

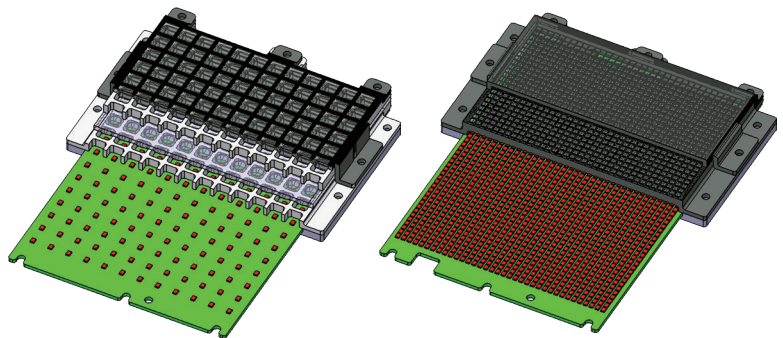
EOI's 2016 LPD LED is a budget-friendly solution for automotive lighting and display applications. It enhances both functionality and aesthetics, making it ideal for OEM and aftermarket use.

• Flexible Display Resolution Support

The 2016 LPD LED enables various display resolutions through adaptable pixel layouts and customized optical designs. This flexibility supports diverse vehicle platforms and brand-specific visual effects.

• Versatile and Dynamic Messaging

When integrated into exterior automotive lighting, the LPD LED supports a wide range of display content—from static symbols to animated graphics. It improves communication between the vehicle and its surroundings, delivering a more intuitive and engaging user experience.



The latest portfolio extension — the low-power LPD 2016 series — brings even greater design flexibility. In addition to standard colors, it offers a variety of options including Green, Blue, and Cyan, which are ideal for indicating autonomous vehicle functions.

The automotive-qualified LPD 2016 package features excellent robustness and supports standard SMT assembly processes, enabling compact and intelligent solutions for the growing low-power display market.

Key Highlights

• Ultra-Low Power LED

Enables high LED count for low-power display applications.

• Multiple Color Options

Multiple Color Options
Standard and specialty colors are available, including Green, Blue and Cyan for autonomous signaling.

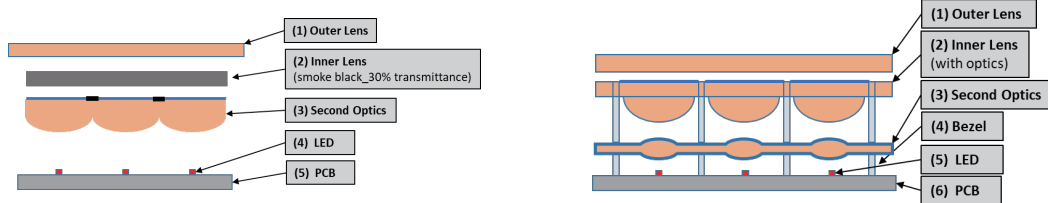
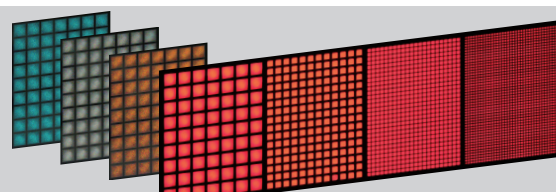
• Automotive-Qualified Package

Proven automotive package for standard SMT assembly.

Flexibility in styling

Choice of pitch and optical system.

Enabling individual look of displayed pictures/animations

Area	Part A	Part B	Part C	Part D
Display Size	6"	6"	6"	6"
Total Pixel	63 (7*9)	192 (12*16)	660 (22*30)	1728 (36*48)
PPI	2	3	6	10
LED Pitch	13.5mm	7.6mm	4mm	2.5mm
Module Structure				
Lit Appearance				

Application Example

Beyond striking visuals, EOI's 6-inch display sample is suitable for Tail and Stop functions. While this sample was primarily designed to demonstrate display effects, we can also provide recommendations — and even customized solutions — should the customer wish to apply it for Tail or Stop use. We provide HV intensity specs and application guidance to meet photometric standards.

	Part A (Red color)	Part B	Part C	Part D
HV Point (Candela)	32cd	44cd	34cd	38cd
LED Driving current (maximum 20mA)	20mA	3.3 mA	2 mA	1.25 mA
Luminance	2600 nits	3200 nits	2600 nits	2700 nits
Power consumption (LED + IC)	6.1W	4.6W	4.8W	7.8W

6 inch panel configuration's reference to stop/tail regulation

Tail	(Part A~D)	Within the 6-inch area, all four configuration parts, each by itself meet Tail function requirements by reducing the current by 70%~80%.
Stop	Part B	- Insufficient for stop light function, unless using 3 Part A 6 inch panels. - Enhancing performance, adjusting the curvature of the secondary optics lens can help meet Stop beam pattern regulations.
	Part C	Meeting stop light function by increasing the LED driving current by 2.5 times can meet regulatory requirements, boosting candela to over 100 cd and luminance to over 7500 nits. Circuit design and IC count need adjustment, and thermal conditions should be reviewed to determine if a heatsink is required.
	Part C/D	- Increasing the LED driving current by 3 times can meet regulatory requirements, boosting candela to over 100 cd and luminance to over 7500 nits. Circuit design and IC count need adjustment, and thermal conditions should be reviewed to determine if a heatsink is required. - Design is based on 30% transmittance, when increased achieving better optical efficiency.

