



# BRIGHTEK Head-Up Display(HUD) Backlight Module - LED

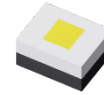
Development of Automotive Head-Up Display (HUD) LED(iCLED) Back Light Unit using TFT LCD Projection Technology



**BKL1001VA (Model A)**  
• 2.0cm



**BKL1001VA (Model B)**  
• 4.5cm with Case



**1519LED**  
for High Power



**2720iCled**  
for Local Dimming

## Overview

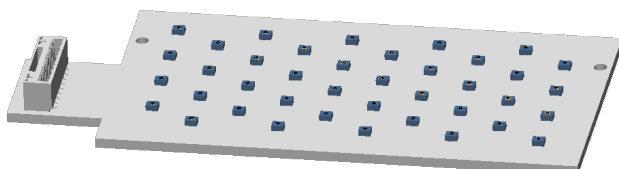
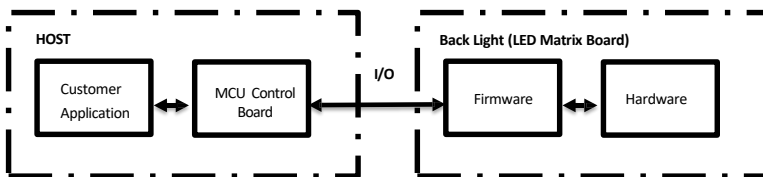
The backlight module of this HUD (Head-Up Display) not only incorporates a high-brightness and high-uniformity light source but also adopts the 1519 High Power LED developed by Brightek Optoelectronics as the primary light source. This LED technology ensures not only a color temperature exceeding 15000K but also outstanding brightness and contrast for the display.

Additionally, the HUD backlight module supports the 2720 iCLED solution, enabling the implementation of the 2720 iCLED solution, independent brightness dimming technology. Through adjustments in different areas can be achieved, enhancing the presentation of image details and improving the visual depth.

Beyond its exceptional hardware capabilities, this product offers robust driving and control programming capabilities. Users can customize programming based on their specific requirements, enabling flexible control of the backlight module to ensure optimal display performance in various environments and application scenarios.

In summary, this HUD Head-Up Display's backlight module integrates advanced 1519 High Power LED and 2720 iCLED solutions, achieving high brightness, uniformity, and color temperature. With the added capability of zone dimming technology and powerful driving and control programming, it excels in both visual experience and application flexibility.

## System Diagram

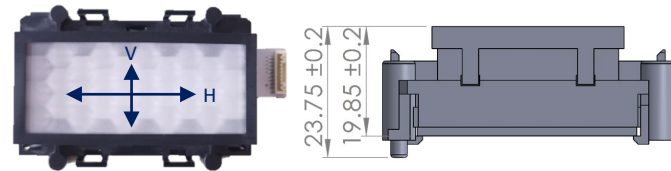


• LED Matrix Back Light Board(Aluminum Substrate)

## Key Features

Feature	BKL1001VA0000
Beam Angle - HFOV & VFOV	H : $\pm 6^\circ$ & V : $\pm 3^\circ$
Uniformity (%)	$\geq 80\%$
Forward Current(mA) (total current for 5 parallel connected strings)	Typical : 500 & Max : 2500
Power consumption	300mA*22.1VDC=6.6W
Luminance (avg., nits)	1,250,000 nits (0°)

## Dimensions and Appearance



• for 3.1" TFT LCD



- Screen (Reference Image)
- Brightness and Current Characteristics Curve

