

## TECHNICAL BRIEF

BY: AZD ENGINEERING

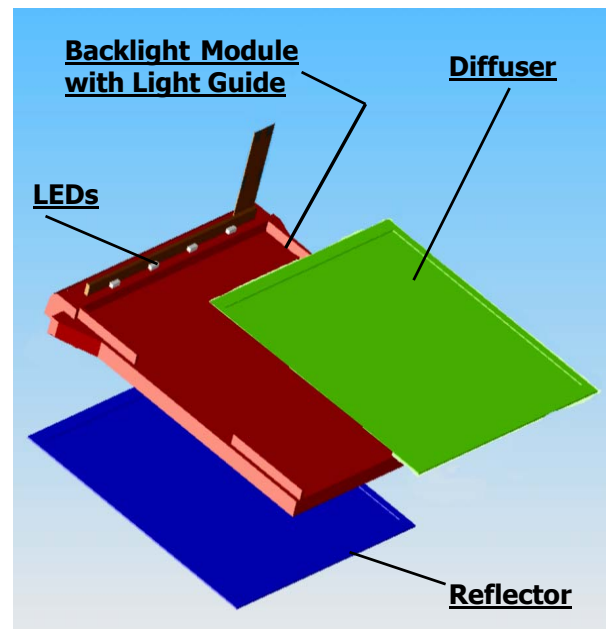
### Unique Color Combinations

To enable customers' products to stand out from their competition and to encourage clients to upgrade from commonly-colored yellow-green and gray to eye-catching LCDs, AZ Displays offers a large variety of monochrome displays in unusual color combinations. Such alternative aesthetics are achieved when we pair a LCD with a backlight of a certain color.



### Backlight Assembly

The basic backlight construction in a display module mainly consists of 4 parts, diffuser, light guide integrated with the backlight module, LEDs with PCB, and reflector. The initial stage for the backlight starts off from the light emitted from the LEDs. The light travels to the light guide and spreads out through this entire surface. The reflector material keeps the light from escaping from behind the module and reflects the light waves back up to the LCD. As light travels upward towards the LCD in many different directions, the diffuser's main purpose is to even out these light patterns by directing the light waves to one direction. The advantage of the diffuser is also to help minimize and reduce any glare and hot/bright spots which might form in the backlight during operation.



**Edge-lit LED backlight Construction**

### New Releases

AZ Displays announces availability of the following parts with an alternative appearance: AGM1232G-FLR-FBH-D of red background (122x32 graphic pictured above, also available with pure white or amber background); ACM2002E-NL-FBH of black background (20x2 character, pictured above, also available with pure blue or white background); AGM2464E-NLW-BBH of blue background (240x64 graphic, pictured above); AGM1264F-FLW-FBH of white background (128x64 graphic, also available with pure blue or black background). Contact AZ Displays for info on other display formats.